

TEACHING ENGLISH IN THE ERA OF ARTIFICIAL INTELLIGENCE

Challenges and Opportunities

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Editors:

Prof. Dr. Sirisha Sangamitra

Dr. K. Venkat Satish

Prof. Dr. Aditi Abhishikta

Somana Sailaja



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Convener's Report

Respected dignitaries, esteemed speakers, dear colleagues, and participants,

It gives me immense pleasure to present the Convener's Report for this International Conference.

The idea for organizing this conference emerged from a very real and pressing need. As a university department, we felt a strong responsibility to respond to the rapid transformation taking place around us. With the advent of Artificial Intelligence, teaching, learning, research, and even everyday communication have undergone a remarkable shift. AI is no longer a distant concept—it has become an integral part of our academic and personal lives.



In this context, we believe it is our duty not only to adapt but also to guide. This conference was envisioned as a platform to bring together teachers, researchers, and scholars to reflect, rethink, and realign their roles in this evolving landscape. Our intention is to provide meaningful inputs to educators—helping them understand, engage with, and effectively integrate AI into their professional practices, while preserving the human essence of education.

This conference is, therefore, not just an event, but a step towards fostering awareness, responsibility, and innovation within the teaching community.

At this juncture, I express my heartfelt gratitude to our Hon'ble Chancellor, Sri Chaitanya Raju garu, for his visionary leadership and constant encouragement.

I sincerely thank the Vice Chairman, Sri Sesi Kiran Varma garu, for his continued support and motivation.

My special thanks to the Executive Director, Madam Lakshmi Raju garu, for her guidance and encouragement in all our academic initiatives.

I extend my deep gratitude to the Hon'ble Vice Chancellor, Pro-Chancellor, Registrar, Dean Academics, Dean School of Sciences, Dean Freshmen, all Deans of various schools, and Principals, GGU for their unwavering support and cooperation.

I would also like to acknowledge the dedicated efforts of the organizing team of GGU, whose teamwork and commitment made this conference a success.

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My sincere thanks to our collaborating partner, Venkat's Time, for their valuable association.

I extend my sincere appreciation to K.R.K.P Srinivas Head, Media and Mr.Sailendra ,Head,Corporate Communications , GGU, for their support in helping us reach a wider audience. I appreciate the teams Mr.Ramana Reddy Head,IT dept for ensuring seamless technical assistance throughout the conference.

I would like to express my heartfelt gratitude to the Hon'ble Vice-Chancellor of Adikavi Nannaya University, Dr. Prasanna Sree; Prof. Kotti Sree Ramesh, Dean of Sciences and Dean, CDC, a Fulbright Scholar from Harvard; and Madam SaJana Raj, Head, Dept of English, for their valuable suggestions, encouragement, and continued support.

I appreciate the Department of English,Godavari Global University, for the excellent work done; their constant support and significant contribution have greatly contributed to the success of this conference.

Finally, I extend my sincere thanks to all the speakers, participants, and contributors whose presence and valuable insights have greatly enriched this academic gathering.

Let us take forward the ideas discussed here and continue to explore, adapt, and grow in this new era of AI with responsibility and wisdom.

“If we ignore AI, we become outdated. If we misuse it, we become dependent. But if we understand it, we become empowered.”

Convener & Head, Department of English
Godavari Global University
Prof. Dr. Sirisha Sangamitra

Message from Co Convener

We are living in an era where Artificial Intelligence is rapidly transforming every sphere of life, and education is no exception. The teaching and learning of English is witnessing a paradigm shift with the integration of AI tools, digital platforms, and innovative pedagogical practices. While these advancements offer immense opportunities to enhance learning experiences, they also present new challenges that require critical reflection and thoughtful adaptation.



Though the conference has been conducted in a virtual mode, it has transcended the physical boundaries and brought together a vibrant community of scholars, educators, and learners from diverse zones. The passion, the intellectual engagement, and the constructive energy that is witnessed throughout these three days have truly made this academic journey profound and remarkable.

The conference has rightly reflected its theme by fostering insightful discussions on the dynamic juncture of Artificial Intelligence and English Language Teaching. The keynote sessions, the paper presentations, and interactive deliberations have enriched our thoughts, perspectives and inspired us to rethink, reimagine, and reshape our pedagogical practices in this evolving era that we call digital era.

The discussions beautifully captured the spirit of innovation and adaptability required in contemporary language teaching. There has been a strong sense of engagement, curiosity, and openness to new ideas, making the sessions both insightful and inspiring.

I extend my heartfelt gratitude to our honourable Chancellor sir and the profound leaders behind, Godavari Global University, the organizing team and the IT support, Venkat's Time, the keynote speakers for all these 3 days, the session chairs, the paper presenters, and participants for their invaluable contributions and unwavering connexion. Their active involvement has been the cornerstone of the success of this conference.

With this proceedings, let us carry forward not only the knowledge that we gained but also the spirit of collaboration and novelty that this platform has nurtured. May this help everyone continuing to explore, adapt, and contribute

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meaningfully to the future of education with a powerful thought:

“The mind is not a vessel to be filled, but a fire to be ignited.” Hope this conference has ignited that fire within all of us to learn, innovate, and inspire.

Dr. Aditi Abhishikta

Professor of English Godavari Global University

Rajahmahendravaram, Andhra Pradesh

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Chapter 1

Beyond the Algorithm: Nurturing Human "Expression" in the Age of Generative AI

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ABSTRACT

As Generative Artificial Intelligence (Gen-AI) continues to reshape the landscape of English Language Teaching (ELT), the distinction between "language generation" and "human expression" has become the central challenge of modern pedagogy. While algorithms can now produce grammatically flawless, sophisticated text in seconds, they lack the live experience, vulnerability, and consciousness inherent in human communication. This paper explores the transition from accuracy-focused instruction to a meaning-driven curriculum. By analysing the limitations of AI-generated "simulations" and contrasting them with raw, sensory-based student narratives-symbolised by the "best bite of a sandwich"-this study argues for a pedagogical shift. We propose moving from "Correctors of Grammar" to "Curators of Consciousness," focusing on process-based grading, radical subjectivity, and the reclamation of oral traditions to protect the "breath" behind the words in the digital era.

Keywords: Generative AI, Human Expression, ELT Pedagogy, Process-Based Grading, Radical Subjectivity, Critical Thinking, Affective Literacy.

FULL PAPER

A machine operates on probability, but a human operates on conviction!

1. INTRODUCTION

The modern era is defined by an unprecedented technological shift, in which technology can reshape tools and algorithms can mimic human voices with astonishing speed. However, as T.S. Eliot (1934) profoundly asked, "Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?" In the context of English Language Teaching (ELT), we face a future where a machine can weave a million words without a single breath. It calculates the perfect phrase yet remains ignorant of life or death. The foundational wisdom of E.M. Forster (1910), "Only connect...", serves as the primary mandate for the current educational landscape. As educators navigate the algorithmic future, the goal must be to ensure that human connection and expression remain at the heart of the classroom. While AI can map syntax and plot rhyme with cold, relentless grace, it cannot feel a nervous pulse or interpret the weight of a tear-stained face. This paper argues that while AI can undoubtedly generate language, only a teacher can awaken true expression.

2. RESEARCH PROBLEM STATEMENT

The primary challenge in "Teaching English in the Era of Artificial Intelligence" is the obsolescence of the traditional accuracy-focused paradigm. For decades, ELT has focused on correcting tenses, prepositions, and structures to achieve "perfection". However, Gen-AI has now commodified perfect grammar. If perfect syntax is free and instantaneous, the unique value of the language learner must be redefined. Furthermore, the traditional essay, viewed purely as a final "product," is effectively dead. If educators only grade the final draft, they are simply grading the AI. Writing is not merely a method of recording a thought; it is the messy, frustrating process of discovering what one thinks. When students use AI to bypass this "cognitive struggle," their critical thinking muscles atrophy, similar to a gym-goer hiring a robot to lift weights. The research problem, therefore, is how to reclaim the "soul" of writing from the efficiency of the algorithm.

3. LITERATURE REVIEW: THE SOUL OF THE WORD

In the age of AI, the English Literature classroom stands on sacred ground. We read not merely for vocabulary, but because the human condition is inherently, beautifully messy.

3.1. The Iceberg Theory and the Void

Ernest Hemingway's (1932) "Iceberg Theory" suggests that the deepest emotional resonance in a story lies in the unspoken weight hidden beneath the words. An algorithm cannot write an "iceberg" because it lacks a subconscious and has no buried secrets to hide. It fills the page with text because it does not know the value of silence. As C.S. Lewis (1961) noted, "We read to know we are not alone". However, when reading AI-generated text, there is no consciousness on the other side; it is a simulation of empathy, not its reality.

3.2. Linguistic Tokens vs. Psychological Truth

A comparative analysis of canonical texts reveals the gap between algorithmic prediction and human experience:

- The Blinding Light of Guilt: In John Webster's (1623) *The Duchess of Malfi*, Ferdinand cries, "Cover her face; mine eyes dazzle: she died young". While AI identifies "dazzle" as a linguistic token for light, it cannot comprehend the psychological blindness of guilt.
- The Weight of the Void: To an AI, the five-fold repetition of "never" in Shakespeare's (1606) *King Lear* is a redundancy. To a human, those "nevers" are the heavy footsteps of despair walking into eternity.
- The Scars of Romance: Romeo (1597) whispers, "He jests at scars that never felt a wound". AI understands the linguistic juxtaposition, but because the machine has no flesh, it is always "jesting" at scars it cannot feel.

4. RESEARCH METHODOLOGY

This study utilises a qualitative, comparative methodology to distinguish between "Algorithmic Perfection" and "Human Expression" through case studies and classroom observations.

4.1. The "Sandwich" Metric

For example, a prompt was given to students and AI: "Describe the exact moment you realised you were in love".

- AI Output: "Like two celestial bodies caught in an inevitable orbital dance..." This represents a "Cliché Trap," where the algorithm defaults to high-probability tropes from its training data.
- Student Output: "I knew I loved him when I realised I was saving the best bite of my sandwich for him..."

The methodology identifies that the human output is grounded in a specific, tiny, and vulnerable action-sharing an experience rather than just generating language.

4.2. Anecdotal Analysis of "Sincere Mistakes"

The study analyses classroom errors as sites of human connection. For example, a student's error-"Teacher, I am very boring"-triggered a spontaneous burst of joy and a bridge of connection. AI would never make this mistake, outputting instead: "I am currently experiencing a lack of stimulation". However, the AI's "perfect" output cannot laugh at itself or create accidental human connections.

5. DISCUSSION

The discussion focuses on how educators can move "Beyond the Algorithm" by prioritising human breath and pulse over processing.

5.1. The Semantics of Punctuation and Biology

Punctuation in the human context is more than a syntactic requirement; it is a physical necessity. A human places a comma because they physically need to take a breath. A human places a period because they understand the "heavy, quiet finality of an ending". The ellipsis (...) is the most significant marker; to a machine, it is a loading screen or a data gap. To a human, it is the hesitation of a breaking voice, the unspoken tension between lovers, or the profound grief that cannot find its vocabulary. AI can generate the ink, but only a human can generate the silence.

5.2. Grammar as an Emotional Toolkit

Grammar must be taught as a toolkit for expression, not just a set of rules.

- The Passive Voice: Humans use it for "evasion" or "hiding"-e.g., "The vase was broken" or "Mistakes were made". An AI can write in the passive voice perfectly but feels no shame about hiding.
- The Third Conditional: This is the structure of "heartbreak, grief, and profound human regret" (e.g., "If I had told my father the truth..."). AI executes the formula but has no past to mourn and no father to lose.

5.3. Affective Pedagogy and "Radical Subjectivity"

To distinguish human work from AI mimicry, we propose Radical Subjectivity. The "Uncle Question"-asking which character in a book reminds a student of their favourite uncle-paralyses the AI. The machine has read the book, but it has never met the student's uncle, doesn't know how he smells of peppermint, or how he

winks when he tells a joke. By forcing the "I" into the writing, we make the algorithm irrelevant.

5.4. From "Correctors" to "Curators of Consciousness"

The research mandate is to change the story. This involves rewarding the "Beauty of the Mess"-grading the ink stains, the frantic crossings-out, and the "three failed sentences that died so the fourth one could live". We must reward the "journey" (process) rather than just the "destination" (product).

6. RESEARCH FINDINGS

The comparative analysis of algorithmic output and human pedagogical interaction yields several critical findings regarding the nature of "expression" in the digital age:

6.1. The Divergence between Simulation and Experience

A primary finding of this study is the qualitative gap between AI-generated "simulations" and human "experience". While the algorithm successfully mimics the aesthetic of romance through grand metaphors like "celestial bodies" and "orbital dance," it operates on word probability rather than lived reality. In contrast, human expression is grounded in specific, unpolished, and sensory-based truths, such as "saving the best bite of a sandwich". This "Sandwich Metric" reveals that human authenticity is defined by vulnerability and specific, relatable actions that an algorithm, lacking a physical existence, cannot replicate.

6.2. The Commodification of Syntax vs. the Preservation of Intent

The research indicates that while Generative AI has commodified perfect grammar-mastering rules, worksheets, and complex structures like the Third Conditional in milliseconds-it lacks the psychological drivers behind these structures.

- **Psychological Evasion:** Human use of the passive voice is often a tool for evasion or an instinct to protect oneself (e.g., "The vase was broken"), whereas an AI employs the structure with "cold, flawless precision" and feels no shame in hiding.
- **The Weight of Regret:** The Third Conditional serves as a linguistic container for human heartbreak and grief (e.g., "If I had told my father the truth..."). Because the algorithm has no "past to mourn" or "father to lose," it produces the formula without the feeling.

6.3. The "Stochastic Parrot" and the Redundancy of Despair

In literary analysis, the findings demonstrate that AI interprets linguistic choices as statistical tokens rather than emotional markers. For example, in *King Lear*, the five-fold repetition of "never" is identified by AI as a redundancy. However, to a human, these repetitions represent the "heavy footsteps of despair walking into eternity". Similarly, AI identifies "dazzle" in Webster's *The Duchess of Malfi* as a light-based token but misses the "psychological blindness of guilt" it signifies.

6.4. The Semiotics of Breath and Silence

The study finds that human expression is defined as much by what is not said as by what is written.

- Biological Punctuation: Humans use commas to take a physical breath and periods to signal the "heavy, quiet finality of an ending".
- The Ellipsis as Heartbeat: While a machine views an ellipsis (...) as a loading screen or a data gap, for a human, it represents the hesitation of a breaking voice or the unspoken tension between lovers.

The research concludes that while AI can generate "the ink," only a human can generate the meaningful "silence" between the words.

6.5. Radical Subjectivity as an Algorithmic Boundary

The research identifies "Radical Subjectivity" as the ultimate defence against algorithmic mimicry. The "Uncle Question" illustrates this: while an AI has read every book, it has never met a student's favourite uncle and cannot describe how he "smells of old tobacco and peppermint". Because AI operates on probability and objective data, it is paralysed by the "I"-the messy, irrational, and deeply personal stories that form the "Logic of the Heart".

6.6. The Pedagogical Shift from Product to Process

Finally, the research finds that the traditional "polished essay" is no longer a reliable metric for student learning. Writing is discovered to be a "messy, frustrating process of discovering what you think," and outsourcing this to AI results in the "atrophy" of critical thinking muscles. Consequently, true learning is found in the "cognitive struggle"-the mind maps, the ink stains, and the "three failed sentences that died so the fourth one could live". The study concludes that the teacher's role must evolve from a "grammar checker" to a "thought facilitator" and a "curator of consciousness".

7. SCOPE FOR FUTURE RESEARCH

Further research should investigate:

1. Prompt Literacy as Critical Interrogation: Bringing AI text into the classroom for a "Linguistic Autopsy" to compare the "Sanitised Robot" with the "Clumsy Human".
2. Reclamation of Oral Traditions: Utilising Socratic Seminars and live debates as anchors for authenticity in a world of Deepfakes.
3. The Ethical Core of AI Integration: Teaching students that clarity and sincerity are better than stolen perfection.

8. CONCLUSION

The future of English Language Teaching (ELT) lies in a delicate balance in which AI serves as a "collaborative assistant," while the human remains the indispensable architect of empathy. We must establish a new hierarchy—one where technology provides the technical scaffolding, but the human spirit provides the substance. We must teach our students that while a machine can suggest a more sophisticated adjective, it can never help them find their own truth in a world flooded with generated text.

As we return to our classrooms, let us not attempt to out-calculate the machine; instead, we must out-love it, out-feel it, and out-live it. The most vital expression in any classroom is not the one that is most grammatically flawless, but the most honest one. While a machine operates on the cold logic of probability, a human operates on the fire of conviction. We must remain the guardians of the "Ellipsis"—protecting that profound silence where the human heart catches its breath. Ultimately, the brain may belong to the machine, but the story's beating heart belongs to us.

REFERENCES

1. Brontë, E. (2003). *Wuthering Heights*. Penguin Classics. (Original work published 1847). <https://www.gutenberg.org/ebooks/768>
2. Eliot, T. S. (1934). *The Rock: A pageant play*. Harcourt, Brace and Company.
3. Forster, E. M. (2000). *Howards End*. Penguin Classics. (Original work published 1910). <https://www.gutenberg.org/ebooks/2891>
4. Hemingway, E. (1932). *Death in the afternoon*. Charles Scribner's Sons.
5. Lewis, C. S. (1961). *An experiment in criticism*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139166942>
6. Shakespeare, W. (2005). *Julius Caesar* (W. Montgomery, Ed.). Oxford University Press. (Original work published 1599). <https://www.gutenberg.org/ebooks/1522>

7. Shakespeare, W. (2008). *King Lear* (J. S. Bratton, Ed.). Oxford University Press. (Original work published 1606). <https://www.gutenberg.org/ebooks/1532>
8. Shakespeare, W. (2008). *Macbeth* (N. Brooke, Ed.). Oxford University Press. (Original work published 1606). <https://www.gutenberg.org/ebooks/1533>
9. Shakespeare, W. (2008). *The Merchant of Venice* (J. L. Halio, Ed.). Oxford University Press. (Original work published 1596). <https://www.gutenberg.org/ebooks/1515>
10. Shakespeare, W. (2008). *Romeo and Juliet* (J. Belman, Ed.). Oxford University Press. (Original work published 1597). <https://www.gutenberg.org/ebooks/1513>
11. Webster, J. (2009). *The Duchess of Malfi*. Penguin Classics. (Original work published 1623). <https://www.gutenberg.org/ebooks/2232>

Chapter 2

Redefining The Role of An English Teacher

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ABSTRACT

The advent of artificial intelligence has challenged the traditional role of an English teacher. Traditionally, a teacher is viewed as the primary source of information, language rules and literary interpretation. The modern English teacher must transmit from the role of a ‘preacher’ to that of a ‘facilitator’ and ‘mentor’. This paper argues that in the 21st century, where information is abundant and readily available everywhere, the teacher’s primary value lies in guiding students’ critical thinking, mediating learning experiences and addressing their socio-economic needs. This is a great challenge to this generation teachers. The English teacher must undergo a fundamental transition: from the transmitter of static knowledge to a strategic facilitator of Human –AI Symbiosis.

Key words: ELT, Facilitator, Digital classrooms, Learner – centered, 21st Century skills, Teacher identity.

INTRODUCTION

Traditionally, the English teacher was viewed as “Sage on the stage” for centuries where the teacher is the primary authority and sole source of linguistic and literary knowledge in the classroom. The teacher’s main responsibility was the transmission of established facts, rules and interpretations to a passive bunch of audience or students. Armed with the metaphorical “red pen” the teacher’s main goal was to eliminate the spelling errors and enforce rigid grammatical rules. In literature lessons, the teacher provided the correct analysis of the text and the children were supposed to memorise the content. Teacher was the main source of

knowledge for the children and he/she was the human encyclopedia. For any kind of clarifications or extra knowledge, children completely depended on the teacher's words or specific books prescribed by the teacher. Success of the student was mostly measured by the marks obtained in the exams. The relationship between the teacher and student was formal and was mostly limited to the subject itself. It had a heavy emphasis on discipline and rote memorization.

With the advent of internet, and now with the artificial intelligence, the role of the English has completely changed. Student has all the information readily available at the finger tips with the help of a smart phone, the dependency on the teacher for the required information has decreased. The English teacher has become an obsolete in the role of only providing information to the students. The classrooms have changed from teacher-centric to student centric and the lecture method of teaching has changed into an interactive classroom where the teacher and the student take part equally sharing their views on the specific topic. Rethinking the role of English teacher in this AI world is not merely an option but a necessity to ensure that students develop the communicative competence and critical thinking skills required for a digitally interconnected world.

Teaching/Learning Processes:

1. The crisis of the red pen:

- For decades, the English teacher was the gatekeeper of the knowledge, who corrected the spelling mistakes and grammatical errors. The Generative AI can now provide grammatically perfect content in seconds. If the teacher's role is only correcting errors, then it has become obsolete.
- The role must shift from transmitting information (how to write a sentence) to facilitating wisdom (why we write and how to obtain the required information from the available tools).

2. From automation to augmentation:

- Teachers should guide children to use AI as a tutor which asks them questions to come to their own literary conclusions rather than depending on AI for answers.
- Teachers now use "Distant reading" tools which help students to analyse number of books at the same time to map emotional arcs or recurring themes that a human eye might miss.

3. From transmitter to Facilitator:

- The most significant change is the transition from teacher-centered to learner centered pedagogy.

- By shifting the focus to the student, the teacher creates a learning laboratory where students discuss through debate, exploration and collaboration.
 - This, in turn, reduces the teacher talk time in the classroom into student talk time, fostering an environment where learners take responsibility of their own progress.
4. Beyond Grammar: Mentorship and life skills:
- The 21st century English teacher is also a mentor and a life coach. Language is the vehicle through which the 4Cs — Critical thinking, Collaboration, Communication and Creativity are developed.
 - The teacher must guide the students in evaluating the credibility and bias of digital resources.
 - Modern educators must provide psychological and motivational support, identifying and addressing the individual barriers to a student's learning.
5. Challenges in the rethinking process:
- This transition is not without hurdles. Any new implementation will face hurdles in the beginning.
 - Many teachers may face infrastructural barriers such as poor internet connectivity or lack of digital devices especially in the rural areas or underfunded contexts. There may be resistance for moving away from traditional mode to the AI mode in few contexts.
 - Overcoming these obstacles need a commitment of lifelong learning from a teacher, who should be a student forever, constantly upgrading their skills through professional trainings and workshops.
6. Why the teacher is indispensable :
- Even in the world of perfect AI, the English teacher holds the keys to few things which a machine cannot replicate.
 - Empathy: AI may know the meaning of grief but it has never felt it. The teacher is the only one who can connect the literature to the student's real life experiences.
 - As we discussed, an impactful classroom is built on cordial relationships, a machine cannot practice empathy or notice what a student is going through in his/her life. It cannot understand if the student is having a bad day. Only a teacher can do this.

CONCLUSION

The role of English teachers has expanded from a narrow focus on linguistic accuracy to a broad mission of fostering global citizenship. By embracing the identities of facilitator, digital mentor and learning engineer, educators can bridge the gap between classroom theory and real world application. The success of the future generations depends on the teachers who are ready to step off the stage and walk beside the students as partners in the journey of discovery.

Chapter 3

A Study of Digital Story Learning and Telling in The Classrooms

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ABSTRACT

Since the main aim of this research is to investigate the impact of digital storytelling on student learning, the outcomes of this research will enable both teachers and students to tap into the power of digital storytelling, leading to more engaged teaching and learning. This study contributes to new understandings of how to create authentic and constructivist learning contexts that can be used in a range of educational settings. The research focuses on how to implement digital storytelling in the classroom, describing the digital story workshop, and explaining teacher roles and student tasks; i.e. this research gives a clear picture of how to integrate digital storytelling into schools. Therefore, it is expected that the new knowledge generated by this research will inform educational policy and practice.

INTRODUCTION

Case study research is a qualitative approach in which the researcher explores a case or multiple cases over time, involving multiple sources of information, for example, observations, interviews, documents and reports Creswell. The research methodology is designed to utilise both quantitative and qualitative methods. As previously mentioned, this research aims to explore the pedagogical benefits of digital storytelling; therefore, this research will focus on the level of the student engagement and the associated educational outcomes using digital storytelling. In order to achieve a complete understanding of these phenomena, both quantitative and qualitative data were collected. To perform this step qualitative data was

collected through teacher interviews. After conducting interviews, the interview data were analyzed to identify the benefits related to the use of digital storytelling as a pedagogical approach, and the teacher's opinion about integrating new technologies in their curricula and classroom. Therefore, three different methods were utilized for data collection: observation, teacher evaluation rubric, and interview. Timed observation and field notes were used as the observation method, while a scoring rubric instrument was used for teacher assessment. Finally, an interview protocol was used for interviewing the participating teachers. The overall conclusions will be extracted by integrating the findings of each method.

FULL PAPER

This study involved five teachers from prioritized curriculum areas (Science, Art, English, Library and Social Studies) to integrate digital storytelling into the primary and secondary school curriculum during third and fourth terms in Table 1 lists the details of each setting including the subject area in which the digital storytelling was implemented, the number of students, and days spent observing the project development, including viewing the digital story.

In recent years the use of new technologies in educational systems has increased worldwide as digital cameras, personal computers, scanners, and easy-to-use software have become available to educators to harness the digital world. The impact of new technologies in educational contexts has been mostly positive as new technologies have given educators the opportunity to enhance their knowledge, skills, and therefore enhance the standard of education. Researchers have found that student engagement, achievement and motivation are enhanced through integration of such technologies. However, education systems still face many challenges: one of these challenges is how to enhance student engagement to provide better educational outcomes. It has become increasingly important to use innovative pedagogical models to engage learners. Digital storytelling is one of the innovative pedagogical approaches that can engage students in deep and meaningful learning. This research project aimed to create a constructivist learning environment with digital storytelling. The research investigated the pedagogical aspects of digital storytelling and the impact of digital storytelling on student learning when teachers and students use digital stories.

A multi-site case study was conducted in one Australian school at primary and secondary levels. In selected classrooms, students and teachers had the opportunity to engage in innovative learning experiences based on digital storytelling. In order to enhance the reliability and validity of the research, multiple methods of data collection and analysis were used. Data was collected with qualitative and quantitative methods. An evaluation rubric was used to collect quantitative data,

while interviews and observation were used to collect qualitative data. Data collection was guided by a mixed methods research design in order to evaluate if and how digital storytelling enhances teaching and learning outcomes.

The findings from this study suggest that digital storytelling is a powerful tool to integrate instructional messages with learning activities to create more engaging and exciting learning environments. It is a meaningful approach for creating a constructivist learning environment based on novel principles of teaching and learning. Thus, this approach has the potential to enhance student engagement and provide better educational outcomes for learners. Digital storytelling emerged at the Center for Digital Storytelling in California in the late 1980s as a method employed by community theatre workers to enable the recording, production, and dissemination of stories. Norman defines digital storytelling as “a short story, only 2–3 minutes long, where the storyteller uses his own voice to tell his own story. The personal element is emphasized, and can be linked to other people, a place, an interest or to anything that will give the story a personal touch. This has developed in a number of ways, shaped by advances in personal computing and recording technology, and by its use in a range of academic and non-academic contexts.

Digital storytelling is defined by The Digital Storytelling Association, as a “modern expression of the ancient art of storytelling” (The Digital Storytelling Association. Although there is not a single digital storytelling definition, the majority emphasize the use of multimedia tools including graphics, audio, video, and animation to tell a story. Ben mayor’s digital storytelling definition is: “a short multimedia story that combines voice, image, and music”. According to Kajder, Bull & Laugh, a group of still images, combined with a narrated soundtrack, constitutes a digital story as long as they relate a story. Focusing on its presentation on screen, Alan Davis offers another definition of digital story as “a form of short narrative, usually a personal narrative told in the first person, presented as a short movie for display on a television or computer monitor or projected onto a screen.

Meadows offers a more technology-focused definition, where digital storytelling makes use of low-cost digital cameras, non-linear authoring tools and computers to create short multimedia stories to accomplish social endeavors of storytelling. It is a technology application which takes advantage of user-contributed content and assists teachers in utilizing technology in their classrooms.

Consequently, as the literature review has revealed, digital storytelling is a powerful model for creating constructivist e-Learning environments. Digital storytelling has the potential to engage learners in integrated approaches to learning with digital media. Furthermore, digital storytelling enhances learners’ motivation, and helps teachers in building constructivist learning environments. To facilitate

the harnessing of these pedagogical benefits we need an overarching framework for creating digital stories. This framework should be cognizant of the needs and capabilities of learners at their various stages of learning (i.e. catering for learners from primary school to university level, and even professional e-Learning content creators).

This research presented a new e-Learning Digital Storytelling, framework to be able to use digital storytelling as a pedagogical model for constructivist learning. This framework was developed for application of digital storytelling at various stages of learning. The e-Learning Digital Storytelling (eLDiSt) framework also articulates how storytelling can be used at different levels of education. The eLDiSt framework is designed primarily as a tool to help story creators in producing engaging digital stories, the framework is based on thirteen storytelling aspects and five levels, and each aspect advances in complexity as the learner's level advances from level one to five. It considers the needs and abilities of learners at different stages of learning, including learners from primary school to university, and even professional e-Learning content creators.

This research project investigated impact of digital storytelling on student engagement and outcomes. It focused on exploring the potential of digital storytelling as an innovative teaching and learning approach and its potential to enhance student engagement and student outcomes. This research involves a multi-site case study of an Australian P-12 school, and explores the use of digital storytelling within the primary and secondary curriculum. In the selected classrooms students and teachers had the opportunity to engage in innovative learning experiences based on digital storytelling. In order to enhance the reliability and validity of the research, both qualitative and quantitative methods of data collection and analysis were used. A rubric was used to collect quantitative data, while interviews and observation were used to collect qualitative data. Data collection and analysis of the feedback provided by teachers was based on mixed methods research to thoroughly evaluate the benefits of digital storytelling vis-à-vis teaching and learning.

Since the main aim of this research was to investigate the impact of digital storytelling on student learning, the outcomes of this research will enable both teachers and students to tap into the power of digital storytelling and more engaged teaching and learning. This study contributes to new understandings of how to create authentic and constructivist learning contexts that can be used in a range of educational settings. The research focused on how to implement digital storytelling in the classroom, describing the digital story workshop, and explaining teacher roles and student tasks; therefore, this research gives a clear picture of how to integrate digital storytelling into schools. Consequently, the new knowledge generated by this research can inform future educational policy.

Furthermore, a number of story development models have been created in the past to help educators achieve better learning outcomes with digital storytelling; however, none of these models provide a holistic pedagogical framework for engaging students with digital storytelling during various stages of learning. This research presented a new e-Learning Digital Storytelling (eLDiSt) framework for using digital storytelling as a pedagogical model for constructivist learning.

In addition, even though the findings of this research are important and have the potential to inform policy, practice and theory, generalizations could not be derived due to the following reasons. The research only included participants from one school (even though there were two levels: primary and secondary) and limitations related to the participant sample used, since unequal numbers of students from primary and secondary schools took part in this research. In future research this limitation could be overcome by using multiple sites instead of one school, and the same participant sample, if possible. Another issue is related to the limited access to technology in the school; the students faced some technical problems while creating their digital stories, also there was some shortage of computers in the labs.

CONCLUSION

The results of this research indicate that digital storytelling can provide support to students with special needs, such as ESL and VCAL students. In addition, digital storytelling can help students to improve their confidence, and can contribute to better social and psychological skills.

REFERENCES

1. T Anderson, *The theory and practice of online learning* (Athabasca University Press, 2008)
2. T Anderson, *The theory and practice of online learning* (Athabasca University Press, 2008)
3. T Banaszewski, *Digital storytelling: Supporting digital literacy in grades 4–12* (Citeseer, 2005)
4. T Banaszewski, *Digital storytelling: Supporting digital literacy in grades 4–12* (Citeseer, 2005)
5. Behmer S: *Literature Review Digital storytelling: Examining the process with middle school students*. 2005.
6. H Daniels, *Vygotsky and pedagogy* (Psychology Press, 2001) H Daniels, *Vygotsky and pedagogy* (Psychology Press, 2001)

Chapter 4

From Algorithms to Articulation: AI-driven CLIL for Engineering Communication

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ABSTRACT

This paper examines the integration of Artificial Intelligence (AI) and Machine Learning (ML) into Content and Language Integrated Learning (CLIL) frameworks for enhancing communication proficiency among engineering students. Conducted at a NAAC A+ accredited engineering college in Vidyut Nagar, Kakinada, Andhra Pradesh, the study focuses on CLIL inspired speaking activities, such as JAM (Just a Minute) sessions, where third year students explained engineering concepts in soft skill communication classes. Classroom observations indicated notable improvements in learner participation, spontaneous speaking, confidence in technical expression, and the ability to translate algorithmic thinking into accessible verbal communication. The findings suggest that AI-supported CLIL significantly enhanced students' communicative competence, collaborative learning behaviour, and readiness for placement-oriented speaking tasks.

Keywords: AI-driven CLIL, engineering communication, JAM sessions, technical articulation, soft skills, engineering education, communication pedagogy.

1. INTRODUCTION

The increasing convergence of engineering education, artificial intelligence, and communication pedagogy has transformed the landscape of higher education. In contemporary engineering institutions, students are no longer evaluated solely on technical proficiency; rather, they are increasingly expected to demonstrate the ability to articulate complex engineering concepts in clear, professional, and audience-sensitive language. This demand has elevated communication skills from a supplementary competency to a core graduate attribute.

Content and Language Integrated Learning (CLIL) provides a highly relevant pedagogical framework for addressing this challenge because it enables the simultaneous teaching of disciplinary content and language skills. Defined as learning subject matter through an additional language, CLIL fosters dual-focused educational outcomes in which students acquire both content knowledge and communicative competence. In engineering communication classrooms, this approach is especially useful because students can engage with familiar technical concepts while developing the linguistic resources needed for professional interaction.

The present study explores an innovative classroom intervention titled ***From Algorithms to Articulation***, implemented with third-year engineering students in soft skills communication classes. The intervention centred on CLIL-inspired Just A Minute (JAM) speaking sessions, where students were required to explain engineering concepts such as algorithms, data structures, circuit systems, machine learning models, thermodynamic principles, and communication protocols within a one-minute speaking format. AI-enabled tools were integrated into the pedagogy to support topic selection, vocabulary enrichment, pronunciation correction, discourse structuring, and performance reflection.

The study was conducted in a NAAC A+ accredited engineering college situated in Vidyut Nagar, Kakinada, Andhra Pradesh. The institutional context is significant because outcome-based education, NBA-aligned graduate attributes, and placement readiness are central curricular priorities. Within this context, the communication classroom serves as a strategic space for bridging technical cognition and linguistic performance.

This paper argues that AI-driven CLIL transforms conventional soft skills instruction into a discipline-responsive, cognitively engaging, and professionally relevant pedagogical ecosystem. By situating engineering concepts within oral communication tasks, the study demonstrates how technical knowledge can become the driver of authentic language production.

2. LITERATURE REVIEW

CLIL has emerged as one of the most influential pedagogical models in multilingual and higher education contexts. Its foundational principle lies in integrating subject learning with language learning through meaningful disciplinary engagement. Research indicates that CLIL enhances learner motivation, improves content retention, facilitates vocabulary acquisition, and promotes higher-order thinking. In tertiary settings, CLIL has been increasingly adapted for STEM and engineering disciplines where language use is inseparable from conceptual explanation.

Recent developments in technology-enhanced CLIL further demonstrate the value of digital and AI tools in supporting content-language integration. Studies report that AI-supported environments improve personalised feedback, learner autonomy, speaking confidence, and disciplinary discourse practices. For engineering students, AI can assist in technical vocabulary mapping, pronunciation analysis, summarisation, and rehearsal-based speaking support.

The JAM format, as previously referred to, is particularly aligned with communicative language teaching because it requires fluency, immediacy, coherence, and content control under time constraints. When adapted to engineering classrooms, JAM moves beyond generic speaking tasks and becomes a cognitively rich performance activity where technical knowledge is reorganised into concise oral discourse.

The novelty of this study lies in combining AI tools, CLIL principles, and JAM-based speaking pedagogy in engineering communication classes. Existing literature has not sufficiently explored how AI-mediated CLIL can support micro-speaking formats for technical articulation among engineering undergraduates.

3. RESEARCH OBJECTIVES

1. To examine the effectiveness of AI-driven CLIL in improving engineering students' communication skills.
2. To propose a replicable pedagogical framework for engineering communication classrooms.

4. METHODOLOGY

The study employed a **classroom-based action research methodology** with qualitative and descriptive quantitative dimensions. The participants included **third-year B.Tech students** from multiple engineering streams including CSE, ECE and Mechanical Engineering.

4.1 Context

The intervention was carried out during regular soft skills communication classes over two weeks.

4.2 Pedagogical Design

Each session followed a CLIL sequence:

- Concept selection: engineering topic identification
- AI scaffolding: concept prompts, vocabulary support, speech rehearsal
- JAM performance: one-minute explanation
- Peer reflection: content and language feedback
- AI reflection: pronunciation and coherence analysis

4.3 AI Tools Used

AI speech analysis software, ML based vocabulary apps, grammar correction platforms.

- generating engineering prompts (ChatGPT-4, Copilot)
- pronunciation modelling, speech timing and pacing analysis (trial versions of icspeech.com, ELSA, evernote.com)
- vocabulary enrichment (Chatgpt, Gemini, Perplexity)

4.4 Data Collection

Data sources included:

- classroom observation notes
- participation records
- student performance rubrics

5. RESULTS AND FINDINGS

The intervention revealed strong positive outcomes.

5.1 Increased Participation

Students who were initially reluctant speakers demonstrated active participation when technical topics aligned with their disciplinary identity. Familiar engineering content reduced speaking anxiety and improved willingness to communicate.

5.2 Improved Technical Vocabulary

Students increasingly used domain-specific lexical items such as *neural networks*, *impedance*, *recursion*, *cloud architecture*, and *signal modulation* with improved contextual accuracy.

5.3 Better Fluency and Coherence

Repeated AI-assisted rehearsal helped learners organise explanations into logical stages: definition, working principle, application, and conclusion.

5.4 Confidence in Placement-Oriented Speaking

Students reported that the JAM sessions helped them during:
GD rounds , Project reviews , Seminar presentations .

5.5 Positive CLIL Impact

The most significant finding was the dual gain in **content mastery and communication competence**, validating the effectiveness of CLIL in technical communication contexts.

6. DISCUSSION

The findings confirm that AI-driven CLIL enables engineering students to move from computational thinking to verbal precision. The phrase *from algorithms to articulation* captures the pedagogical shift from silent problem-solving to explicit conceptual communication.

The CLIL-inspired JAM model worked because:

- content familiarity reduced linguistic hesitation
- AI scaffolds personalised speaking support
- timed speaking improved spontaneous discourse
- technical ownership enhanced confidence
- peer evaluation promoted collaborative learning

7. PEDAGOGICAL IMPLICATIONS

This model has direct implications for:

1. engineering soft skills curriculum
2. placement training modules
3. AI-assisted language labs
4. CLIL-based STEM communication

5. outcome-based education frameworks

8. CONCLUSION

This study demonstrates that AI-driven CLIL offers a transformative pedagogical pathway for teaching communication skills to engineering students. By embedding CLIL-inspired communication activities into soft skills classrooms, the intervention successfully connected engineering cognition with oral articulation. The positive participation patterns, enhanced technical vocabulary, improved fluency, and increased speaking confidence collectively affirm the pedagogical value of discipline-integrated communication teaching.

The classroom evidence from the NAAC A+ accredited engineering college in Vidyut Nagar, Kakinada, shows that students learn best when language tasks emerge from meaningful disciplinary content. AI further strengthens this model through adaptive scaffolding and reflective feedback.

The study recommends the institutionalisation of AI-supported CLIL speaking tasks across engineering curricula to foster technically articulate, globally employable graduates.

REFERENCES

1. Abolle Okoyeagu, C. J., Mahon, R., Okpu, A., & Fernando, W. (2024). Investigating AI driven assessment tools in engineering education.
2. AI and engineering communication studies. www.arxiv.org
3. Chen, X., Liu, Y., & Zhang, H. (2023). Effects of AI timed speaking tasks on L2 fluency and anxiety. *Language Learning & Technology*, 27(1), 88–109.
4. Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.
5. Dalton Puffer, C. (2011). Content and language integrated learning: From practice to principles.
6. Fitria, F. (2023). Using AI chatbots to enhance speaking fluency through improvisational tasks.
7. Kumar, P. V. (2025). Ai driven language learning for Indian engineering students: A study on effectiveness and perceptions.
8. Marsh, D. (2002). CLIL/EMILE.
9. Sharma, R. (2023). Employability Skills in Indian Engineering Colleges. *International Journal of Higher Education*.
10. TECLIL systematic review literature. www.sciencedirect.com
11. Villanueva, M., & Collado, M. (2021). AI supported collaborative speaking tasks in a CLIL context. *Language Learning & Technology*, 25(3), 120–143. <https://doi.org/10.1234/llt.2021.6>
12. Wang, L. (2024). Enhancing group discussions in engineering classrooms through AI driven feedback.

Chapter 5

AI Facilitated Tools Turn into the Alma Mater in Language Acquisition Process: A Study from Infancy to Toddlerhood

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ABSTRACT

In today's early childhood education environment, AI is an essential component in helping infants to toddlers acquire new languages. The purpose of this paper will be to focus on how we can use AI based tools to assist in early language development by creating interactive, adaptive and multilingual environments for children to learn language. The research examines how AI based applications, smart devices, speech recognition technology, and digital media platforms can provide children with greater access to vocabulary development; listening comprehension; pronunciation; and communication.

The target audience is age appropriate digital content delivered via YouTube; Amazon; Netflix; and Info-bells cartoons to provide children with a way to learn languages while also being connected to cultural identities. In particular, through the use of regional or mother tongue languages like Telugu; Tamil; Kannada; and Hindi through these same platforms; provides children with additional connections to their identity and heritage when learning a language.

The research outlines how AI can provide advantages and disadvantages to educators working with young children. Important factors including cognitive development theory, language learning and communication principles will be discussed in relation to the use of AI in education. Although AI may provide many types of personalized instruction including repetition, instant feedback, and multiple modes of engagement; concerns exist about overuse of screens, privacy issues,

inequitable access, ethical concerns, or inequitable access. The research supports the idea that AI can assist in developing a first language if it used efficiently and managed responsibly by a parent (or responsible adult).

Keywords: Artificial Intelligence, Language Acquisition, Toddlers, Early Childhood Education, Digital Learning

INTRODUCTION

The rapidly growing Field of AI has influenced a number of aspects of human life, and this has begun to occur specifically in relation to the provision of education. In addition, there have been notable advances over the past few years in respect of the influence of AI on Early Childhood Education and Language Acquisition. Language development is one of the critical aspects of a child's cognitive and social growth as it provides the basis for how a child expresses and learns, as well as how they develop a sense of self-identity; the early childhood experience of a child will typically determine their future success to develop these attributes. Traditionally, language development has relied on human to human interaction in the immediate environment and home environment. However, with the introduction of AI-Based Applications and Digital Platforms, major changes now exist in early learning through these AI enabled tools.

There are now some AI Applications that are supporting children with language learning from very young ages due to the means of access, adaptability and interaction with these digital tools that provide children with opportunities to develop language skills and emerge as competent and confident individuals. AI Applications such as iPlayer, YouTube, Amazon, Netflix and Infobells introduce language vocabulary (basic words) and sound structure through content appropriate for children of that age by using multi-modal (audio-visual) formats, repetition, and engaging storytelling to enable children to learn to identify and imitate language forms. Through the use of multi-lingual resources, children have the opportunity to learn and interact with both their mother tongue and the regional language of the region which further supports the development of a child's linguistic and cultural capabilities.

The application of AI also raises big issues for early childhood education. For example, AI technology can provide young children with personalized opportunities to learn and can provide immediate feedback to children; however, this also raises concerns about too much exposure to screens, the security of data collected by these systems, and the reduction of one-on-one human interaction. Therefore, it is essential to look at both the pros and cons of using AI for learning at this pivotal moment.

This study will specifically examine the use of AI-based products as a form of language learning in order to critically evaluate whether or not these products effectively address the needs of caregivers and educators.

REVIEW OF LITERATURE

The advent of artificial intelligence (AI) to the field of early childhood education has led to increasing interest in the role of language acquisition. The evolution of language learning can be better understood by examining language development from a scientific perspective. For instance, Noam Chomsky proposes that children are born with an innate ability to learn a language simply because they have an innate component that allows them to do so. Conversely, Lev Vygotsky believes that social experiences and the environment provide children with the experience they need to learn how to speak and communicate using language. Products that use AI-based interactive technology can provide children with an opportunity to develop their vocabulary and pronunciation as a result of the feedback they receive when using interactive tools to engage in interactive exchanges with robots through AI-based technology.

Additionally, the use of AI for language acquisition may also be beneficial because it utilizes phonetics as an effective means of teaching children vocabulary, which means that the AI product will use speech-recognition technology to assist in the acquisition of a child's vocabulary. In addition, Patricia Kuhl states that AI-based language acquisition support will allow children to learn through multiple methods such as audio-visual content in multiple languages and, therefore, be able to acquire vocabulary faster than if they did not have access to such tools (Kuhl 2004). According to Seymour Papert, technology can enhance children's learning experiences by creating a greater degree of engagement in learning and through experiential-based opportunities for children to explore their world, (1993)

Experts have analysed the impact of digital media on early learning. According to Ellen Wartella, educational media can enhance the language development of toddlers by providing them with appropriate representation. (Wartella et al 2013). Children can engage with various languages in familiar settings thanks to culturally rich and linguistically varied content on platforms like YouTube and Amazon. However, screen time exposure and its effects on cognitive and social development have also been a source of concern. The American Academy of Pediatrics recommends supervised and restricted screen use for young children (AAP 2016). Data privacy and unequal access to technology remain major challenges in the widespread use of AI tools in early education. Despite the potential of AI-aided tools for early language acquisition, their effectiveness depends on careful use and parental involvement, as suggested by literature.

RESEARCH METHODOLOGY

This study employs a qualitative and exploratory research approach to investigate how AI-facilitated tools serve as ‘alma maters’ in early language acquisition from childhood through adulthood. Observing patterns in how children learn language is the primary goal of the design, while not measuring the outcomes numerically. This means it will give us a deeper understanding of how children interact with digital technologies.

Secondary data will be captured from studies and articles in academic journals, books and reports about early childhood and language development. (In addition, the observation of some of the videos posted on sites such as YouTube, Amazon, Netflix and Infobells will be used to assess the reading of language by infants.) In addition, as discussed in some of the existing case studies, the results from this study may also include parental reporting.

To select the appropriate AI tools and digital content for young children, purposively sampling is the method of choice. The resources will be multilingual and/or culturally contextualized for the purposes of developing the child’s language acquisition skills within an Indian context.

ANALYSIS TOOLS

In this article we analyze various aspects of using artificial intelligence in the teaching and acquisition of languages to children. We utilize a thematic approach to identify common themes regarding the child’s learning outcomes, engagement levels, and challenges they face when acquiring a new language through content analysis. as a result of this process, we provide a systematic and meaningful explanation of how artificial intelligence supports children in acquiring their first language at an early age.

FRAMEWORK FOR THEORETICAL MODEL

The framework for this theoretical synthesis uses major ideas around language development and acquisition from authors in the areas of language learning, cognitive development, and educational technology.’’. Our framework is primarily based upon Chomsky’s theory of how children learn their first languages through their use of a Language Acquisition Device (LAD), and Vygotsky’s theory of Social Interaction in relation to the acquisition of language through social interaction between children and adults. In addition, we utilize Piaget’s theory of cognitive development to provide a more comprehensive account of how children actively create their understanding of and knowledge about the world around them. By

using artificial intelligence as an interceding tool, the framework provides enhanced interaction and feedback along with increased opportunities for increased levels of engagement, and aligns technology with early childhood language acquisition

The use of artificial intelligence (AI) in early childhood education:

The concept of AI refers to the use of new technologies to understand, adapt, and respond to the learning styles of infants and toddlers. Infants learn how to speak primarily through their environment and are taught language by repeating words and interacting with their caretakers during this phase. Learning with AI-powered tools promotes a child's learning abilities by providing individualized and fun experiences designed for a child's skill level and rate of learning.

Some examples of how AI systems can provide children with the ability to communicate in a human-like manner include speech recognition software, apps, and smart devices. The ability of an app, smart device, or program to identify a child's voice, respond to simple words, and reinforce the repeated sound is essential for developing a larger vocabulary and more precise pronunciation. In addition, through its ability to offer ongoing, non-judgmental feedback, AI technologies provide children with the means for trial and error in a safe environment while they develop their learning skills.

Adaptability is an essential aspect of utilizing AI for the purpose of early childhood education. AI can provide adaptive content through analyzing user behaviour in order to help children learn by repeating or simplifying words or sounds that they are having difficulty with. An individualized program improves self-esteem and is also helpful when working with children who experience slow language development.

Another critical facet of learning is engaged multi-modal learning. The use of audio, visuals, and tactile elements through the use of AI can create an enhanced learning experience through the increased use of multisensory experiences (e.g. nursery rhymes, animation clips, and storytelling platforms) that result in better recall and understanding of what has been learned. The use of AI technology for learning multiple languages also serves to promote cultural identity.

Lastly, the responsible use of AI in early childhood education cannot be overstated. While AI can provide many advantages and opportunities for children to learn, they cannot replace the importance of face-to-face interaction, which provides the primary means for developing emotional and social competence. In addition, parents or caregivers must also be actively involved with their children, to ensure both meaningful connections and equal exposure during their child's screen time.

Language Development in Infants and Toddlers (0–3 Years):

The process of developing language develops between birth and age 3 years old. It is an evolving and gradual one that takes place through interaction with the environment and also through readiness to learn biologically. The first stage of developing language is prelinguistic communication which includes different way to communicate before actually talking (i.e., crying, cooing, babbling, etc.). The first sounds that children make (or cry) are not done by chance, but rather they show children their first experiences of sounds and patterns that they find in their environment. By the end of their first year, infants will know how to respond to simple commands. They also recognize a few meaningful words (e.g., Kaama, Paapa, Bow, and Booboo) before they can verbally use them.

As toddlers continue to develop they will develop more advanced language skills. They usually produce their first word in this stage of development and then move onto combining two words together in a meaningful way, which indicates they have developed more complex grammar and syntax. There is considerable and rapid vocabulary expansion during this stage of development. The vocabulary that a toddler develops is usually developed through repetition, imitation of other people, and through interaction with caregivers.

Developing a language involves listening, watching and taking part in conversations throughout the day; therefore, social interaction is crucial during early language development.

1. AI in the modern-day provides children with even more opportunities for rich experiences through hearing and interacting with other children while participating in everyday learning and playtime.
2. The main component is human connection; therefore, it is through building an emotional connection with and communicating with other children that infants develop their language skills. These are key ingredients to developing language skills at the earliest stages of an infant's development.

AI-Facilitated Tools for Language Learning:

AI-powered tools are a key component of early childhood language development, such as for babies and toddlers. Language learning through AI tools allows children to participate in interactive activities related to hearing, seeing, and responding by integrating multiple sensory components, which is similar to experiences in face-to-face conversations.

Types of AI Tools:

There are several types of AI tools that are employed in early language acquisition. Common game types offered in mobile applications geared toward

toddlers utilizing rhyme and storytelling. Voice assistants and other smart devices process the speech of young children, making verbal communication possible. Young children can practice their pronunciation through AI-powered speech recognition technology that evaluates and helps them correct their pronunciation.

In what way do these tools accomplish this goal? Video-based platforms also provide animated and rhyming-based content that teaches vocabulary and sentence form in a fun way. These tools are also used to assist children in learning multiple languages; thus, a child can learn his or her native language and more than one additional language at the same time without having to spend much time developing skills in any of them.

Features and Functionality

AI tools provide a means of making learning fun and effective. Personalization is a key portion of the AI system design, whereby the AI system changes how it provides assistance based on the amount of time it takes for each child to make progression and the rate at which they learn. Children remember and reinforce words and sequences through early repetition in a multimodal approach to learning through sound, images, and animation. Many different types of interactive features (e.g., quizzes, voice prompts and tactile experiences) keep children engaged while using different tools.

Examples: Early language development can be supported by various AI-based applications and platforms. Rhymes, stories, and vocabulary lessons in local languages are available on various educational video platforms. Among the interactive apps are those that offer game modes with matching words, colouring, sequencing, and storytelling capabilities. Assistants with speech recognition encourage children to inquire and recite phrases.’ The digital cartoon platforms are for toddlers and provide culturally relevant content to help children link language learning with everyday experiences. A supportive and enriching environment for early language acquisition can be created by using these applications with parental guidance.

LANGUAGE DEVELOPMENT UNDER THE INFLUENCE OF AI

Today’s term for “Alma Mater” is Artificial Intelligence while AI tools serve as companions who introduce language (as well as other forms of communication) in meaningful ways from infancy through adulthood. As children explore the sounds, words, and expressions associated with language in a positive and supportive learning environment provided by AI tools, they develop an increased level of comfort using those languages to express them. AI systems do not remain locked

into one set of patterns or methods; instead, they change over time based on the developmental level of the child so that not only do they learn but also have plenty of opportunities to learn through repetition.

One of the biggest benefits of adapting content with AI is that it offers a personalized approach to learning. With the use of AI tools, the app can monitor a child's responses, pace, and preferences. If a child has difficulty pronouncing some words, the app will provide alternatives that are simpler and more familiar multiple times throughout the process. This individualized learning experience allows a child to learn in an environment that is based upon their cognitive abilities, which results in more confident and retained memory.

Interactive Learning Model: The use of AI to create an interactive learning atmosphere allows for more interactive learning experiences that include visual, auditory and tactile stimuli. Incorporating elements such as children's anime videos, children's songs via the play app, or children's story-telling provide children opportunities to engage, rather than merely listen as a bystander. Providing children opportunities to visualize and act with the worlds they are learning allows them to connect vocabulary to meaning, which makes it easier and more fun for them to learn a new language.

Speech recognition&Feedback: Children are able to utilize speech recognition technology to practice pronouncing words and receive instantaneous feedback on their pronunciation. In other words, artificial intelligence can identify mistakes when a child is pronouncing a word and provide feedback to improve a child's speech so it is correct. The continuous feedback loop creates constant improvement for listening and speaking skills that are critical in the development of language acquisition during early childhood development.

Cognitive and social development: is supported by AI tools, which can help improve problem-solving, memory retention, and basic conversational skills. Through guided experiences, children are taught how to interpret turns, express their emotions effectively, and comprehend social norms. Early childhood development is also encouraged and language development aided by AI.

BENEFITS OF AI IN EARLY LANGUAGE ACQUISITION

AI can give children lots of help learning language when they are young (under 3). When a child learns through AI, they can use a personalised learning experience that considers their own learning pace and ability to learn and also uses things like repetition, images, and sound to help with word development (e.g., building vocabulary, producing words, and developing listening skills). Additionally, interactivity (e.g., using voice recognition to give feedback) promotes involvement

in the learning process and makes it fun to learn. AI helps the child develop his/her linguistic skills as well as keep his/her cultural identity alive by providing access to many different languages, including the child's first language. AI also provides parents with structured, user-friendly ways to help their children's learning at home.

Challenges and Limitations

Teaching languages to young children using AI has benefits and also many issues that need to be addressed; therefore, there are a number of points those teachers and parents should pay attention to regarding the use of AI to help enhance children's language acquisition. Here are some of the most significant concerns:

Ethical Concerns - There is concern regarding how technology could impact children's minds and whether or not it will take the place of human interactions during the learning process.

Screen Time Issues - The increasing amount of time children spend in front of a computer or other digital devices could potentially harm their physical health causes lack of focus and could negatively affect social skills development as well.

Data Privacy - Many AI applications collect user data, which raises concerns related to the safety and potential misuse of children's personal information.

Accessibility - Limited access to digital devices or unreliable internet connections can create unequal opportunities for children to take advantage of the benefits provided by AI-based learning tools, as well as hinder their access to these tools.

DATA ANALYSIS & INTERPRETATION

In this study, qualitative and descriptive approaches were used to investigate the data based on patterns identified while examining how toddlers interacted with AI-assisted devices. Data from different digital platforms (YouTube, Amazon, Netflix and Infobells cartoons) was analysed to find out how they also contributed to language exposure of children prior to their entering school. The analysis indicates that children develop new vocabulary and pronounce correctly due to repeated viewing of visual/audio content, as well as through listening/interaction with the AI (both through voice recognition and interactivity).

In examining the differences among the responses of infants and toddlers based on age, infants primarily responded to audio and visual stimuli while toddlers began imitating words and beginning to form simple phrases. Patterns identified in the data show that the children that had been exposed to multiple languages

in AI form had a greater ability to recognize a regional language. However, limitations of the research also include the effects of passive learning through the use of screens and reduced parental participation.

FINDINGS AND DISCUSSION

The research demonstrates that tools that use AI enhance children's first language learning through creative, personalized interactive environments. When toddlers are presented with structured digital content, they develop their vocabulary, pronunciation, and listening comprehension skills. Platforms that provide nursery rhymes, stories and interactive videos significantly help children develop their communication skills.

The study discusses that AI tools serve as "digital teachers" that help toddlers learn to speak; however, these tools cannot replace the quality of human relationships and interactions when children are learning to communicate. Children still need to learn to communicate through emotional attachment and the application of language within real-world events. Although AI customizes the learner's experience by providing opportunities for practice and reinforcement, excessive use can cause the child to have less social interaction and suffer from overloaded cognitive processes. Therefore, the success of using AI for teaching children to speak depends upon the amount of usage balance.

Implications for Education and Parental Guidance with Appropriate Guidelines

Researchers have found that AI tools are beneficial for integrating into early childhood education as long as thoughtful application occurs. By utilizing AI-based applications, educators can use these types of technology for literacy and language development through storytelling, phonics practice, and interactive communication activities. The use of these types of tools also serves as a means to circumvent barriers to multilingual education while exposing children to both the world's languages and their region's languages.

For parents, the best method for helping children is through co-viewing. Co-viewing is when parents watch, listen to, and experience media with a child. Doing so benefits the child the most if a parent encourages them to repeat what they watched or heard, talk about what they watched or heard, and relate the content to everyday life.

Recommendations

According to the research, AI tools should not be the main way to teach young

children language development, but they can be used to help them learn. Schools need to have structured methods of teaching students using computer-based or artificial intelligence with personal relationships. Developers of educational materials must create their materials in a way that is culturally appropriate, multilingual, and interactive for babies and toddlers.

Parents are responsible for monitoring how much time their children spend using technology and ensuring that the digital experiences for their children are age-appropriate and educational. Governments and educational agencies also need to support the use of computers by establishing guidelines to limit screen time for children and protect their safety from cyberbullying and/or exposure to inappropriate images, as well as to increase access to computers for low-income children so that all students have equal access to AI tools for language development. Using a balance of AI and face-to-face interaction will result in successful language acquisition and maintain the emotional and social components of early learning in children.

CONCLUSION

The purpose of this report is to describe how AI is becoming more common as an “Alma Mater” for children when they first learn or develop their first language; that is, when a child begins learning their first language from birth until about age 3 years. Some of the key aspects of AI that help promote the acquisition of a child’s first language are: 1) The use of AI to interact with children (through apps); 2) The ability of children to interact with digital media platforms, such as TV and video games, and to use other forms of interactive media to develop their language, pronunciation, and listening abilities; and 3) AI-produced or associated tools are commonly used and can provide additional exposure to multiple languages while helping to make connections to the child’s culture through language learning.

However, while AI serves as a way of supporting child language acquisition and development, it cannot replace opportunities for children to have interactions with people in their environment, such as parents, caregivers and family members. In order to develop and acquire their language holistically, children need social interactions with others, as well as physical and emotional connections with others. Therefore, AI should be viewed as an educational tool that assists in the acquisition and development of a child’s language and not as a replacement for parents, caregivers or family members.

Empirical studies will provide a basis for assessing language development outcomes by studying the interaction between children and artificial intelligence

(AI) within real-time environments. When comparing various socioeconomic and cultural groups, researchers will gain additional insights into the accessibility and efficacy of these tools. Additional research may also examine the ethical implications associated with AI, long-term cognitive effects, and the role of AI as a tool for assisting in special education. A guide for safe, balanced use of AI tools in early childhood settings would also be a beneficial direction for future research.

REFERENCES

1. Jean Piaget. *The Language and Thought of the Child*. Routledge, 2001.
2. Lev Vygotsky. *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press, 1978.
3. Noam Chomsky. *Aspects of the Theory of Syntax*. MIT Press, 1965.
4. Jerome Bruner. *Child's Talk: Learning to Use Language*. Oxford University Press, 1983.
5. UNESCO. *Artificial Intelligence in Education: Challenges and Opportunities*. UNESCO, 2019.
6. UNICEF. *Policy Guidance on AI for Children*. UNICEF, 2020.
7. Patricia Kuhl. "Early Language Acquisition: Cracking the Speech Code." *Nature Reviews Neuroscience*, vol. 5, 2004, pp. 831–843.
8. Catherine Snow. "Input to Interaction to Language Acquisition." *Handbook of Child Psychology*, Wiley, 2006.
9. Daniel Goleman. *Social Intelligence: The New Science of Human Relationships*. Bantam Books, 2006.
10. Sherry Turkle. *Reclaiming Conversation: The Power of Talk in a Digital Age*. Penguin, 2015.
11. Neil Postman. *Amusing Ourselves to Death*. Penguin Books, 1985.
12. Seymour Papert. *Mindstorms: Children, Computers, and Powerful Ideas*. Basic Books, 1980.
13. American Academy of Pediatrics. *Media and Young Minds*. Pediatrics, 2016.
14. OECD. *AI in Education: Promises and Implications for Teaching and Learning*. OECD Publishing, 2021.
15. Kathy Hirsh-Pasek, and Roberta Golinkoff. *Becoming Brilliant*. American Psychological Association, 2016.
16. Allison Druin. "The Role of Children in the Design of New Technology." *Behaviour and Information Technology*, 2002.
17. Mitchel Resnick. *Lifelong Kindergarten*. MIT Press, 2017.
18. Barron Bransford et al. *How People Learn: Brain, Mind, Experience, and School*. National Academy Press, 2000.
19. Ellen Wartella et al. *Media and Young Children's Learning*. Routledge, 2014.
20. YouTube. *YouTube Kids and Early Learning Content*. Google, 2022.

21. Amazon. Alexa and AI-Based Learning Tools for Children. Amazon Reports, 2021.
22. Netflix. Children's Educational Programming and Language Exposure. Netflix Media Center, 2020.
23. Infobells. Infobells Educational Videos for Early Learning. Infobells India, 2022.
24. Stephen Krashen. Principles and Practice in Second Language Acquisition. Pergamon, 1982.
25. Albert Bandura. Social Learning Theory. Prentice Hall, 1977.
26. Howard Gardner. Frames of Mind: The Theory of Multiple Intelligences. Basic Books, 1983.

Chapter 6

Digital Era English Education: Teaching and Learning

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ABSTRACT

This paper examines the opportunities, challenges, and perspectives associated with teaching and learning English in the digital era. With the rapid advancement of technology and its integration into educational environments, English language instruction has undergone significant transformation. The study explores the benefits of digital tools and platforms in enhancing language learning while addressing the challenges encountered in digital classrooms. Based on a review of previous studies and comprehensive analysis, the paper discusses the evolving roles of teachers and learners in this technology-driven landscape. It also presents strategies for effective implementation and utilization of digital tools in English language education. The findings aim to share expertise, disseminate lessons learned, and recommend best practices derived from scholarly research. Sustainable solutions to emerging challenges and future perspectives are proposed, highlighting systems such as Computer-Assisted Language Learning (CALL), Mobile Phone-Assisted Language Learning (MPALL), and other advanced tools.

Keywords: Digital Learning, English Education, CALL, MPALL, Technology Integration, Language Teaching

INTRODUCTION

The digital era is marked by a rapid transformation of the field of education thanks to the significant advancements of technology that have revolutionized teaching and learning practices. Such an innovation in English language education

has facilitated the integration of digital tools and platforms and opened up new possibilities. This breakthrough accounts for the enthralling growth of English in many areas and the zeal of practitioners notably professionals in the domain of educational technology as well as teachers to make the language fascinate more and more people. It becomes, therefore, not only imperative but also attractive to explore the impact of digital technology on the teaching and learning process and identify the challenges and perspectives that arise from one context to another.

FULL PAPER

The advent of e-learning platforms has significantly changed how languages are taught and learned, providing more accessible, flexible, and engaging approaches to language education. These platforms harness digital technologies, offering a variety of learning tools that promote language acquisition through visual, auditory, and interactive experiences. This article explores the impact of e-learning platforms on language education, highlighting their benefits, challenges, and their potential to shape the future of language learning.

Accessibility and Flexibility E-learning platforms provide unprecedented access to language learning materials anytime and anywhere. This eliminates traditional barriers related to location and time, allowing learners from diverse backgrounds to participate in language education. The flexibility of e-learning platforms enables learners to progress at their own pace, accommodating various schedules, particularly for working adults or students in remote areas. Platforms like Duo lingo and Babbel allow learners to access language courses on mobile devices or computers, making language learning more accessible than ever before. This flexibility supports lifelong learning and makes it easier for individuals with time constraints to incorporate language study into their daily routines.

Personalized Learning One of the key advantages of e-learning platforms is their ability to tailor learning experiences to individual needs. Many platforms use adaptive learning algorithms that adjust the difficulty of lessons based on the learner's progress and performance. This personalized approach ensures that learners focus on areas they struggle with, enhancing their language proficiency over time. Personalized learning increases the effectiveness of language acquisition by catering to the specific learning pace and style of each individual. Platforms like Rosetta Stone use these adaptive tools to create customized language lessons that improve user engagement and retention.

Engagement Through Interactive Content E-learning platforms often include multimedia elements such as videos, interactive quizzes, games, and audio exercises to make language learning more engaging. Gamification, in particular, has been

widely adopted by platforms like Duo lingo, which rewards learners with points, badges, and progress streaks, fostering a sense of achievement and motivating continuous practice. Interactive content helps maintain learner engagement, especially in online environments where learners might struggle with motivation. By making language exercises enjoyable, platforms can enhance both retention and mastery of the language.

Real-Time Feedback and Assessments Instant feedback is a critical feature of e-learning platforms. Learners benefit from immediate corrections in pronunciation, grammar, and vocabulary. Platforms like Babbel and Busuu provide real-time feedback, often using speech recognition technology to help learners refine their spoken language skills. Real-time feedback enables learners to identify and correct errors instantly, reinforcing learning and helping students avoid the fossilization of mistakes.

Collaborative Learning and Social Interaction Many e-learning platforms incorporate social features such as forums, discussion boards, and language exchange tools. Platforms like italki connect learners with native speakers, allowing for real-time conversations and cultural exchanges. This social interaction is essential for practicing language in authentic contexts and developing conversational fluency. By facilitating real-time language exchanges, e-learning platforms promote cultural immersion and conversational skills, which are often lacking in traditional classroom environments.

Autonomy and Self-Paced Learning E-learning platforms empower learners to take control of their own education. Students can decide when, where, and how they study, providing autonomy that is crucial for adult learners and those managing busy schedules. This self-directed approach fosters motivation and accountability in the learning process. The ability to learn at one's own pace encourages a more thorough understanding of language concepts and leads to higher retention rates. As one can observe the momentum of educational technology development, the benefits of digital tools in the English language learning are manifold. Interactive and engaging learning experiences can be created through multimedia resources.

Gasification and virtual simulations facilitate active participation and deeper understanding. In addition to that, personalized and adaptive learning approaches can be employed to accommodate the diverse needs and learning styles of individuals. Accordingly, access to authentic language resources, such as online articles, videos, and social media platforms enriches the learning process by exposing students to real-world language usage. Despite the above-mentioned benefits, stakeholders face challenges in teaching English in the digital era. There are many technical issues and infrastructure limitations that impede the integration of technology into

the language classroom, particularly in resource-constrained settings. Moreover, both teachers and learners need training and support in developing digital literacy skills to effectively navigate and utilize the plethora of digital tools available. Sustaining learner motivation and engagement in an increasingly digital environment also poses challenges as the novelty of technology may wear off over time. Equally important, ensuring equitable access to technology and bridging the digital divide among students from different socioeconomic backgrounds remains a pressing concern.

CONCLUSION

E-learning platforms have redefined language education by making it more accessible, personalized, and engaging. With real-time feedback, interactive tools, and opportunities for social interaction, these platforms cater to a wide range of learning preferences and needs. As e-learning continues to evolve, its role in language education is likely to expand, offering even more innovative approaches to mastering new languages.

REFERENCES

1. Godwin-Jones. R. (2011). *Emerging Technologies: Autonomous Language Learning*. Language Learning & Technology.
2. Vesselinov. R., Grego, J. (2012). *Duolingo Effectiveness Study*. City University of New York.
3. Kapp. K. M. (2012). *The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education*. Pfeiffer.
4. Blake. R. J. (2013). *Brave New Digital Classroom: Technology and Foreign Language Learning*. Georgetown University Press.
5. Benson. P. (2011). *Teaching and Researching Autonomy in Language Learning*. Pearson Education.

Chapter 7

Role of Artificial Intelligence in Enhancing English Communication Skills Among Physical Education Students

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ABSTRACT

Artificial Intelligence (AI) has emerged as one of the most influential technological innovations transforming modern education systems. AI-based tools have significantly improved teaching and learning methods, particularly in language education. English communication skills have become increasingly important for students in various professional fields, including sports and physical education. Physical education students often focus primarily on physical training, coaching techniques and sports performance, which sometimes results in limited development of language and communication skills. However, effective communication in English has become essential for sports professionals due to globalization, international sports competitions, coaching certifications, sports journalism and sports management.

The purpose of this study is to examine the role of Artificial Intelligence in enhancing English communication skills among physical education students. The study investigates how AI-powered tools such as language learning applications, speech recognition systems, and writing assistants contribute to the improvement of vocabulary, pronunciation, writing skills and speaking confidence.

The study adopted a descriptive research design. Data were collected from 100 undergraduate and postgraduate physical education students through questionnaires and structured surveys. The findings of the study reveal that AI-powered learning tools significantly improve students' engagement, communication

confidence, and language proficiency. The results also indicate that students who frequently use AI-based learning tools demonstrate better communication abilities compared to those who rely only on traditional classroom methods.

The study concludes that integrating AI technologies into physical education programs can significantly enhance communication skills and prepare students for professional careers in the global sports industry.

Keywords: Artificial Intelligence, English Communication Skills, Physical Education Students, AI-Based Learning Tools, Sports Education, Digital Learning

INTRODUCTION

The development of digital technologies has significantly transformed the global education system. Artificial Intelligence has become an important tool for enhancing teaching and learning experiences in educational institutions. AI technologies allow educators to create personalized learning environments that improve student engagement and academic outcomes.

In language education, AI-powered systems provide innovative solutions such as intelligent tutoring systems, speech recognition technology, automated grammar correction tools and virtual learning assistants. These technologies enable students to learn independently while receiving real-time feedback on their performance.

Physical education programs traditionally focus on sports training, physical fitness development, coaching strategies, and sports science. As a result, communication skills especially English language proficiency often receives less emphasis within these programs. However, the sports industry has become increasingly globalized and communication skills have become essential for sports professionals.

Athletes, coaches, sports managers, and physical education teachers frequently interact with international sports organizations, media agencies and athletes from different countries. English has become the primary language used in international sports communication, coaching certifications, and research publications.

Artificial Intelligence offers effective tools to support language learning among physical education students. AI-powered applications allow learners to practice pronunciation, vocabulary, writing and conversation skills at their own pace. These technologies provide personalized learning experiences that improve students' communication abilities.

Therefore, integrating Artificial Intelligence into physical education programs can help students develop the communication competencies required for professional success in the sports industry.

OBJECTIVES OF THE STUDY

1. To examine the role of Artificial Intelligence in improving English communication skills among physical education students.
2. To identify the AI-based tools used for language learning by physical education students.
3. To analyze the impact of AI-powered learning tools on students' communication confidence.
4. To suggest strategies for integrating AI technologies into physical education curricula.

SIGNIFICANCE OF THE STUDY

This study highlights the importance of Artificial Intelligence in modern education and emphasizes its potential role in improving communication skills among physical education students. The study is significant because communication skills are essential for sports professionals who interact with international athletes, sports organizations and media platforms.

The findings of this research can help educational institutions design innovative learning strategies that combine sports training with digital language learning technologies.

REVIEW OF LITERATURE

Previous research studies have emphasized the importance of Artificial Intelligence in transforming educational practices. AI technologies provide adaptive learning environments that improve student engagement and learning efficiency.

Smith (2020) found that AI-based language learning applications significantly improve vocabulary acquisition and pronunciation accuracy among university students.

Johnson and Brown (2021) reported that AI-powered tutoring systems provide personalized learning experiences that support independent language learning.

According to Kumar and Singh (2022), digital learning tools increase student motivation and participation in higher education environments.

Williams (2019) emphasized that communication skills are critical for sports professionals working in international sports organizations and competitions.

UNESCO (2023) highlighted that Artificial Intelligence has the potential to revolutionize education by providing personalized learning opportunities and improving accessibility.

Despite these developments, limited research has focused specifically on the role of Artificial Intelligence in enhancing communication skills among physical education students.

RESEARCH METHODOLOGY

Research Design

The study used a descriptive research design.

Sample

The sample consisted of 100 undergraduate and postgraduate physical education students.

Data Collection Methods

- Questionnaire survey
- Student feedback forms
- Observation of AI learning tool usage

Data Analysis

The collected data were analyzed using percentage analysis and comparative interpretation methods.

Table 1: Awareness of AI Tools among Physical Education Students

Category	Percentage
Highly Aware	45%
Moderately Aware	35%
Low Awareness	20%

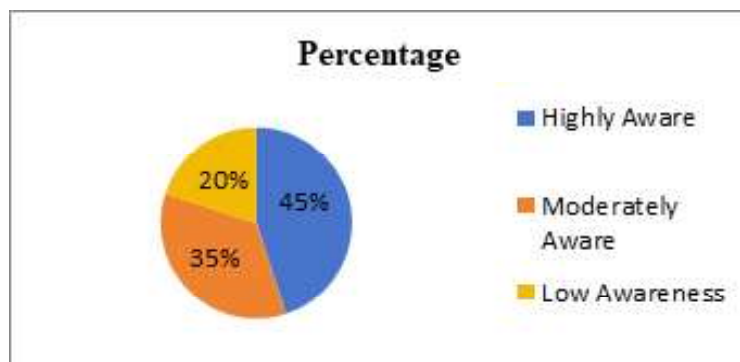


Figure 1: Awareness of AI Tools among Physical Education Students

Table 2: Types of AI Tools Used by Physical Education Students

AI Tool	Percentage
Language Learning Applications	38%
AI Writing Assistants	27%
Speech Recognition Tools	20%
AI Chat-Based Learning	15%

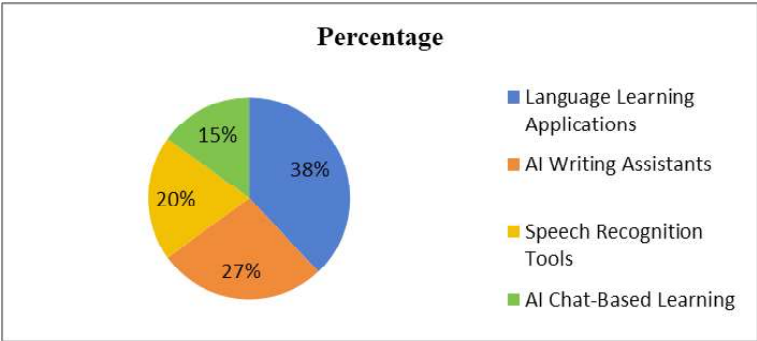


Figure 2: Types of AI Tools Used by Physical Education Students

Table 3: Improvement in Communication Skills Using AI Tools

Skill Area	Improvement
Vocabulary Development	34%
Pronunciation Skills	26%
Writing Skills	20%
Speaking Confidence	20%

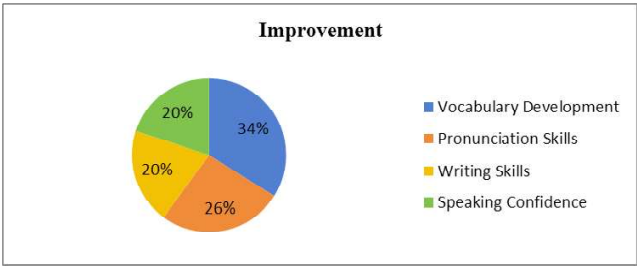


Figure 3: Improvement in Communication Skills Using AI Tools

ROLE OF ARTIFICIAL INTELLIGENCE IN SPORTS EDUCATION

Artificial Intelligence has introduced new opportunities for improving communication skills among sports students. AI-powered technologies enable

students to practice language skills effectively through interactive digital platforms.

AI tools assist students in developing various communication competencies including vocabulary, pronunciation, grammar, and writing skills.

For example:

- Speech recognition systems help students improve pronunciation while delivering sports commentary.
- AI writing assistants help students write sports reports, research papers, and academic assignments.
- Language learning applications improve sports-related vocabulary and conversation skills.

PRACTICAL APPLICATIONS IN SPORTS EDUCATION

AI technologies can be used in several sports communication activities such as:

- Writing match reports
- Sports journalism practice
- Coaching instructions in English
- Sports presentations and seminars
- Athlete interviews and media communication training

These activities help physical education students develop professional communication skills required in sports careers.

Discussion

The findings of this study indicate that Artificial Intelligence significantly enhances English communication skills among physical education students. AI-based learning tools provide personalized learning experiences and immediate feedback on language performance.

Students reported increased confidence in speaking English and improved vocabulary knowledge after using AI-based learning tools. AI technologies also enable flexible learning, allowing students to practice language skills at their convenience.

However, effective implementation of AI technologies requires proper digital infrastructure, teacher training, and awareness among students.

Recommendations

1. Physical education institutions should integrate AI-based language learning

tools into their academic curriculum.

2. Workshops should be organized to train students in AI-assisted communication skills development.
3. Teachers should encourage students to use AI tools for academic writing and presentations.
4. Sports institutions should promote digital literacy among physical education students.

CONCLUSION

Artificial Intelligence has emerged as a powerful educational technology capable of transforming language learning processes. The findings of this study demonstrate that AI-powered tools significantly improve English communication skills among physical education students.

Integrating Artificial Intelligence into physical education programs can enhance students' professional competencies and prepare them for global sports careers. Effective communication skills will enable sports professionals to participate successfully in international sports competitions, coaching programs, and academic research.

REFERENCES

1. Brown, K., & Johnson, L. (2021). Artificial Intelligence in Language Education. *Educational Technology Journal*.
2. Chen, X. (2022). Artificial Intelligence and Language Learning.
3. Godwin-Jones, R. (2018). Using AI in Language Learning.
4. Johnson, L., & Brown, K. (2021). AI-Based Virtual Tutors in Higher Education.
5. Kumar, R., & Singh, P. (2022). Digital Learning Tools in Higher Education.
6. Luckin, R. (2018). Machine Learning and Human Intelligence.
7. Russell, S., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach.
8. Smith, A. (2020). AI-Based Language Learning Applications.
9. UNESCO (2023). Artificial Intelligence in Education.
10. Woolf, B. (2020). Building Intelligent Interactive Tutors.
11. Williams, J. (2019). Communication Skills in Sports Management.
12. Zawacki-Richter, O. (2019). AI Applications in Higher Education.
13. Zhang, Y. (2021). AI-Driven Language Learning Systems.
14. Garcia, M. (2022). AI Tools for Enhancing Academic Writing Skills.

Chapter 8

Rethinking the Role of the English Teacher in the Era of Artificial Intelligence

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ABSTRACT

The rapid integration of artificial intelligence into educational landscapes is fundamentally altering the architecture of language pedagogy. This paper examines how AI tools—ranging from generative language models and automated essay scoring systems to intelligent tutoring platforms and speech recognition software—are reshaping what it means to be an English teacher. Rather than viewing these technologies as threats to professional identity, this study argues for a reconceptualisation of the teacher's role: from primary knowledge transmitter to adaptive learning facilitator, critical AI mediator, and ethical guide. Drawing on recent empirical studies, theoretical frameworks in posthumanist pedagogy, and discourse analysis of policy documents, this paper explores five major dimensions of role transformation: instructional design, formative assessment, affective scaffolding, cultural-critical literacy, and professional development. The findings suggest that while AI can enhance personalisation, efficiency, and accessibility in English language education, the irreplaceable human competencies of empathy, ethical reasoning, cultural sensitivity, and relational trust remain central to effective teaching. The paper concludes with a framework for hybrid pedagogical practice that equips English teachers to work alongside—not against—artificial intelligence.

Keywords: Artificial Intelligence, English language teaching, pedagogy, teacher identity, human–AI collaboration, posthumanist education

1. INTRODUCTION

The classroom has always been a site of technological negotiation. From the printing press that democratised literacy to the language laboratory that industrialised pronunciation drills, each wave of technological innovation has compelled educators to rethink their professional roles. The emergence of artificial intelligence—and more specifically, of large language models (LLMs) such as ChatGPT, Google Gemini, and Claude—represents perhaps the most profound disruption yet, one that strikes at the very epistemological core of English language teaching (ELT). When a student can generate a grammatically flawless essay, receive instant personalised feedback, practise conversational English with a patient interlocutor, and access annotated literary analysis at any hour without engaging a human teacher, the fundamental question arises: what, precisely, is the teacher for?

This question is not rhetorical. Enrolments in AI-mediated language learning platforms have surged globally, with Duolingo reporting over five hundred million registered users by 2023, and institutional deployments of automated essay scoring tools expanding in universities across Asia, Europe, and North America (Godwin-Jones 14). Simultaneously, educational policy documents in countries including the United Kingdom, Singapore, India, and the United States have begun to mandate digital and AI competencies for teachers, often without providing substantive guidance on what these competencies mean in practice (Holmes et al. 45). The English teacher, caught between administrative imperatives to “embrace AI” and the lived experience of a classroom that still hinges on human connection, trust, and contextual judgement, occupies an increasingly precarious yet pivotal position.

This paper does not argue that AI will replace English teachers, nor does it dismiss the transformative potential of intelligent educational technologies. Instead, it proposes a nuanced reconceptualisation: the English teacher in the era of AI must evolve from being the primary source of language knowledge and correction to serving as a critical mediator of AI-generated content, an architect of meaningful human interaction, a culturally grounded interpreter of literary and communicative meaning, and an ethical steward of technology in learning environments. Such a reconceptualisation demands not merely new skills, but a revised ontology of teaching itself—one that embraces collaboration with machines while insisting on the irreducible value of human pedagogical presence.

The paper is structured as follows. Section two reviews the theoretical landscape informing AI and education, with particular attention to posthumanist pedagogy and sociocultural learning theory. Section three examines five key dimensions of role transformation. Section four addresses the risks and ethical implications of

AI integration. Section five proposes a framework for hybrid pedagogical practice, and section six offers conclusions and directions for future research.

2. THEORETICAL FRAMEWORK: SITUATING THE TEACHER IN A POSTHUMANIST PEDAGOGICAL TURN

To understand what AI does to teacher identity, it is necessary to begin with what theory tells us about how teaching has been understood. The dominant paradigm in twentieth-century ELT drew heavily from behaviourist and cognitivist traditions: the teacher as expert, the student as learner, the interaction as a transfer of information. Communicative Language Teaching (CLT) and its successors partially disrupted this model by emphasising interaction, task-based learning, and learner autonomy (Richards and Rodgers 153). Yet even CLT retained a fundamentally humanist conception of the teacher as the chief architect of the communicative event.

Posthumanism—as theorised by Braidotti, Hayles, and their interlocutors—challenges this anthropocentric model by foregrounding the distributed, entangled nature of human agency in a world increasingly mediated by non-human actors (Braidotti 4). In educational contexts, posthumanist scholarship, particularly as developed by Knox and colleagues in the field of “postdigital” education, argues that the boundary between human and machine cognition has become productively porous (Knox 2). The teacher is no longer the sole cognitive agent in the room; AI tools think, generate, and respond in ways that are consequential for learning. To refuse this reality is, from the posthumanist perspective, to maintain a nostalgic fiction.

Sociocultural learning theory, deriving from Vygotsky’s zone of proximal development (ZPD) and extended by scholars such as Lantolf and Thorne, offers a complementary lens (Lantolf and Thorne 79). In this framework, learning occurs through mediated interaction with tools—both psychological and material. AI, on this reading, is the most sophisticated mediational tool yet available to language teachers: it can model language production, scaffold student writing, provide targeted feedback, and simulate authentic communicative contexts. The teacher’s role, in Vygotskian terms, becomes one of orchestrating the learner’s engagement with these tools rather than being the tool itself.

Critical pedagogy, associated with Freire and later with feminist and postcolonial scholars, adds an essential counter-weight (Freire 72). Any uncritical adoption of AI risks reproducing existing inequalities: the training datasets of most commercial LLMs are skewed toward Western, Anglophone, and educated-class norms, embedding particular ideological assumptions about what “good English” looks like (Bender et al. 610). The critical English teacher must therefore not only deploy

AI tools but interrogate them—asking whose language they model, which voices they marginalise, and what values they quietly encode.

The convergence of these theoretical traditions suggests a multidimensional model of the AI-era English teacher: one who is simultaneously a technological agent, a relational practitioner, a critical intellectual, and an ethical steward. The following sections examine each of these dimensions in turn through the lens of five key areas of role transformation.

3. FIVE DIMENSIONS OF ROLE TRANSFORMATION

3.1 From Knowledge Transmitter to Instructional Designer

The most immediately visible transformation concerns instruction. For decades, the English teacher's authority was grounded in superior knowledge: of grammar, vocabulary, rhetorical convention, literary history, and pronunciation. AI has substantially democratised access to this knowledge. Any student with a smartphone can now query an LLM for a grammatical explanation, a vocabulary synonym, a paraphrase of a difficult text, or even a model essay on a given topic. The teacher who continues to function primarily as an information provider is, in the AI era, performing a role that a more patient, more available, and in some respects more consistent entity can perform at scale (Luckin 52).

This does not mean that knowledge is irrelevant to teaching. Rather, it means that the teacher's knowledge must be deployed differently—not in the delivery of information that AI can provide, but in the design of learning experiences that AI cannot fully engineer. Instructional design in this sense involves curating tasks that require complex judgement, authentic communication, and the kind of meaning-making that emerges only from genuine human engagement with ideas. The teacher who asks students to compare an AI-generated poem with one by Seamus Heaney and to articulate, in discussion, what is missing from the former is exercising a kind of pedagogical wisdom that no language model has yet been programmed to enact.

Research supports this reorientation. Warschauer and Grimes found that when teachers moved from information delivery to facilitating higher-order inquiry tasks, student engagement and language acquisition outcomes improved significantly (Warschauer and Grimes 181). More recently, Kessler documented how EFL teachers who redesigned their syllabi around AI-assisted projects—in which students used AI tools as research and drafting aids while the teacher focused on metacognitive discussion of the AI's outputs—reported greater learner motivation and more sophisticated critical thinking than in traditional lecture-based courses (Kessler 312).

The instructional designer role also demands new forms of curriculum literacy. Teachers must understand not only what AI tools can do, but what they do poorly: hallucinate facts, reproduce bias, flatten cultural nuance, and fail to understand pragmatic intent. Designing tasks that exploit AI strengths while exposing its limitations becomes a core pedagogical skill. A writing task that asks students to “improve” an AI-generated draft by adding cultural specificity, emotional register, and authorial voice is precisely the kind of higher-order activity that positions both teacher and student as critical agents rather than passive consumers of machine-generated text.

3.2 From Error Corrector to Formative Assessment Architect

Assessment is the second major site of transformation. Automated Essay Scoring (AES) systems—now deployed in high-stakes examinations including the TOEFL and GRE—can evaluate writing for syntactic complexity, lexical diversity, coherence, and task completion with a reliability that frequently matches that of trained human raters (Weigle 203). AI-powered grammar checkers provide instantaneous, comprehensive feedback on student writing at a granularity that no individual teacher could replicate for every student in a class of thirty. In this context, the teacher who positions themselves primarily as a corrector of errors is ceding ground to machines that are faster, less fatigued, and incapable of the implicit biases that have been documented in human scoring (Perelman 75).

The response to this challenge is not to abandon assessment but to reconceive its purpose. Formative assessment—the ongoing, dialogic process by which teachers come to understand what students know, what confusions they harbour, and what next steps will advance their learning—cannot be fully automated. The teacher who reads a student’s essay not merely to identify surface errors but to discern the conceptual struggle behind an awkward sentence, the cultural assumption embedded in an argument, or the emotional weight carried by a particular word choice, is performing a hermeneutic act of profound pedagogical importance. AES systems, however sophisticated, do not read for this kind of meaning (Deane 216).

The English teacher’s formative assessment role thus becomes one of interpretation and response rather than mere identification and correction. This requires what Sadler termed “evaluative expertise”: the capacity to make and justify nuanced judgements about quality in the absence of algorithmic certainty (Sadler 121). It also requires the interpersonal skill to communicate such judgements in ways that motivate rather than demoralise—a skill that is quintessentially human and deeply relational. Studies by Hattie and Timperley demonstrated that the most effective feedback is specific, forward-looking, and relationally calibrated to the

learner's emotional state and developmental stage: none of these characteristics can be reliably generated by current AI systems (Hattie and Timperley 81).

The formative assessment architect also plays a critical role in calibrating students' self-assessment in relation to AI feedback. Students who over-rely on AI corrections risk developing a surface-level understanding of language conventions without internalising the deeper communicative principles at stake. Teachers who build reflective activities around AI feedback—asking students why a change was suggested, whether they agree, and how the revised version alters meaning—transform automated correction from a passive crutch into an active cognitive tool.

3.3 From Subject Expert to Affective Scaffold

Language learning is not a purely cognitive enterprise. It is also profoundly affective: it involves identity negotiation, vulnerability, risk-taking, and the management of anxiety, shame, and pride (Arnold 11). The English teacher has always played a role in managing the emotional climate of learning, but this role becomes more, not less, important as AI takes over more of the cognitive scaffolding that teachers once provided. When an AI platform can correct grammar, model pronunciation, and generate writing prompts, the most distinctive contribution of a human teacher may be their capacity to create a psychologically safe space in which learners feel seen, supported, and willing to take linguistic risks.

The affective dimension of English teaching is particularly salient in second and foreign language contexts, where learners bring complex histories of language socialisation, cultural identity, and prior educational experience. Research by Dornyei on motivational strategies in the language classroom established that teacher enthusiasm, care, and the ability to establish a positive group dynamic are among the strongest predictors of sustained engagement and achievement (Dornyei 98). These qualities are not simulated by AI. The most technically sophisticated chatbot cannot perceive that a student is unusually quiet today because of a difficult experience at home, nor can it modulate its communicative approach in response to the non-verbal cues that an experienced teacher reads continuously throughout a lesson.

This is not to idealise human teaching or to ignore the documented ways in which teacher affect can be negative—biased, inconsistent, or culturally insensitive. Rather, it is to insist that the solution to these problems lies in better human preparation and critical self-reflection, not in the substitution of affective labour by machines. The English teacher who has developed cultural humility, emotional intelligence, and trauma-informed practice brings to the classroom something that no present or foreseeable AI can replicate: a genuine interpersonal relationship, shaped by shared presence and mutual recognition.

Emerging research on students' experiences of AI tutors further underlines this point. While learners frequently appreciate the non-judgemental consistency of AI feedback platforms, they consistently identify the absence of genuine interest in their experience as a significant limitation. In a study of Chinese university EFL learners, participants described AI writing assistants as “useful but cold,” contrasting them with teachers who remembered their earlier work, recognised their improvement, and responded to them as whole people rather than as collections of linguistic behaviours (Li 44). The affective scaffold—the felt sense that one is known and cared for by a pedagogical other—remains a distinctively human contribution to learning.

3.4 From Literature Teacher to Cultural-Critical Literacy Facilitator

The teaching of literature and critical reading occupies a special place in the English curriculum, one that foregrounds precisely the capacities most at risk of marginalisation in an AI-saturated environment. Literary texts are sites of cultural memory, ethical imagination, and aesthetic experience; they ask readers not for efficient comprehension but for sustained engagement, emotional response, and interpretive dialogue (Eagleton 1). The teacher who facilitates a class discussion of a poem by Langston Hughes or a novel by Chimamanda Ngozi Adichie is not primarily imparting information but cultivating a mode of reading that is attentive, questioning, and responsive to the complexities of human experience.

AI poses particular challenges to literary pedagogy. LLMs can generate literary analysis of considerable technical sophistication—identifying themes, locating symbols, citing critical consensus—but they do so by pattern-matching across their training data rather than by genuinely engaging with the text as a meaningful object. The analysis they produce tends toward the canonical, the consensual, and the de-contextualised: it reproduces received interpretive frameworks without subjecting them to the kind of creative disruption that characterises genuine critical reading (Dobson 117). Students who rely primarily on AI for literary interpretation risk developing what might be called a “second-hand reading”—fluent, plausible, and hollow.

The English teacher's role as cultural-critical literacy facilitator is thus to insist on the primacy of the text as encountered in all its strangeness, difficulty, and particularity. This means designing reading activities that foreground students' own responses—confusion, discomfort, pleasure, resistance—rather than positioning them as seekers of pre-existing correct interpretations that AI can supply. It means bringing historical and cultural context into the discussion in ways that illuminate the text's situatedness without reducing it to a mere symptom of its context. And

it means modelling a kind of critical reading that is willing to sit with uncertainty, to revise one's interpretation in light of dialogue, and to recognise that the meaning of a literary text is never fully foreclosed.

Moreover, the rise of AI-generated content in public discourse demands a new form of critical literacy that English teachers are uniquely positioned to cultivate: the ability to identify the rhetorical strategies, ideological assumptions, and aesthetic limitations of machine-produced language. When students learn to analyse an AI-generated news article alongside a human-authored one—attending to the differences in voice, specificity, evidential reasoning, and ethical positioning—they are developing competencies that are both pedagogically rigorous and socially essential (Selwyn 19).

3.5 From Classroom Practitioner to Lifelong Professional Learner

The final dimension of role transformation concerns the teacher's own professional identity and development. The rate of change in AI technology is such that any specific technical skill acquired today is likely to be superseded within a few years. The English teacher who responds to AI by mastering one particular platform or tool is engaged in a losing race; the more productive response is to cultivate the dispositions and metacognitive capacities that will enable continuous adaptation to an evolving technological landscape.

This involves, first and foremost, a stance of critical enquiry toward educational technology: the willingness to experiment with new tools, to evaluate their effects on learning empirically rather than ideologically, and to share findings with professional communities. Research on teachers' professional learning in AI-rich environments suggests that collaborative, practice-based modes of development—lesson study groups, action research partnerships, inter-institutional networks—are more effective than individual skill training (Voogt et al. 134). The English teacher who participates in such communities not only develops their own practice but contributes to the collective professional knowledge base that the field urgently needs.

Second, the professional learner orientation demands engagement with the policy and ethical dimensions of AI in education. Decisions about which AI tools are deployed in schools and universities, whose data they collect, how their outputs are assessed, and who bears the consequences of their errors are not merely technical decisions: they are political and ethical ones that require the informed participation of teachers, not merely administrators and technology vendors (Williamson 156). English teachers, trained in the analysis of language, discourse, and power, are particularly well equipped to engage in this policy conversation—if they choose to do so.

Third, the reconceptualisation of professional development implies a rethinking of initial teacher education. Programmes that continue to train English teachers primarily in traditional methods while treating AI as an add-on module are failing to prepare graduates for the realities of contemporary classrooms. A new model of initial education would integrate critical AI literacy throughout the curriculum, preparing teachers not merely to use AI tools but to interrogate their pedagogical and ethical implications from their first placement onwards.

4. RISKS AND ETHICAL CONSIDERATIONS

The case for reconceptualising the English teacher's role in relation to AI must be accompanied by an honest account of the risks and ethical problems that AI integration poses. These risks operate at multiple levels: the individual learner, the classroom community, the institution, and the broader society.

At the level of the individual learner, the most significant risk is cognitive and developmental. Language acquisition research consistently demonstrates that the effortful processing involved in struggling with a difficult writing task, negotiating meaning in conversation, and revising in response to feedback is central to deep learning (Swain 474). AI tools that remove this effort—by generating text, supplying vocabulary, or correcting errors before the learner has processed them—may produce the appearance of competence while impeding the underlying acquisition process. Teachers who deploy AI uncritically risk creating what Carr described as “intellectual dependency”: the atrophying of cognitive capacities through habitual reliance on technological substitution (Carr 116).

At the level of the classroom community, AI introduces new forms of inequality. Access to the most sophisticated AI tools—whether language models, speech recognition platforms, or personalised tutoring systems—is unevenly distributed, tracking patterns of socioeconomic disadvantage that characterise educational inequality more broadly (Selwyn 45). A student in an under-resourced school in rural India or sub-Saharan Africa does not have the same access to AI-enhanced language learning as their counterpart in a private school in Singapore or London. The English teacher who advocates for equitable technology provision, who designs activities that do not presuppose high-end device access, and who remains attentive to the differential experiences of students in AI-rich and AI-poor environments is performing a crucial social justice function.

The issue of academic integrity presents a particularly acute challenge. The capacity of LLMs to generate plausible, even polished, academic writing raises fundamental questions about the nature and purpose of written assessment in English education. Responses have ranged from the prohibitionist—banning AI

tools from assessed tasks—to the integrationist, which redesigns assessment to incorporate AI use as a legitimate component. Neither extreme is adequate. Prohibition is largely unenforceable and ignores the reality that students will encounter AI tools in their professional and academic lives; uncritical integration risks rendering assessment meaningless as a measure of individual learning (Perkins 102). The English teacher who engages critically with assessment design—asking what specific competencies a given task is meant to evidence and how its design can render AI assistance insufficient without simply forbidding it—is contributing to a necessary and difficult institutional conversation.

At the level of broader society, the deployment of AI in English language education raises issues of linguistic imperialism and cultural homogenisation. The dominant commercial LLMs are trained predominantly on English-language data from Western, educated, and middle-class sources, and their implicit model of “good English” reflects this provenance (Pennycook 1). Their widespread deployment in EFL contexts risks further marginalising non-native varieties of English, delegitimising the linguistic resources that learners bring from their home languages and cultures, and reinforcing the association of correctness with proximity to a prestige standard that serves particular social interests. English teachers who are aware of World Englishes scholarship—who celebrate the linguistic creativity and cultural richness of Hinglish, Singlish, Nigerian English, and their counterparts—have both the motivation and the conceptual tools to push back against AI-driven standardisation.

Data privacy constitutes another ethical dimension that English teachers must actively address. AI language platforms collect extensive data about learners’ linguistic behaviours, errors, response times, and preferences. This data is of considerable commercial value and is increasingly being used to train future models. Students and their families frequently do not understand what data is being collected, how it is stored, or who has access to it (Holmes et al. 89). The teacher who helps students understand the data economy of the platforms they use—and who advocates for institutional policies that prioritise learner data sovereignty—is exercising a form of digital citizenship education that is essential in the contemporary landscape.

5. A FRAMEWORK FOR HYBRID PEDAGOGICAL PRACTICE

The foregoing analysis suggests the outlines of a framework for what this paper terms hybrid pedagogical practice: an approach to English teaching that integrates AI tools thoughtfully and critically while insisting on the irreducible value of human pedagogical presence, relational trust, and ethical judgement.

The framework comprises five interlocking principles. The first is critical AI literacy, which requires that teachers develop both the technical understanding and the analytical disposition to evaluate AI tools as they would any other pedagogical resource—attending to their design assumptions, their evidence base, their differential effects on different learners, and their broader social implications. This principle positions the teacher not as a technician who implements tools but as a critical intellectual who assesses them.

The second principle is purposeful integration: the deployment of AI tools in service of clearly articulated learning goals, with deliberate attention to the question of when AI adds value and when it detracts from the kind of productive struggle that deep learning requires. Purposeful integration means resisting institutional pressure to adopt AI tools for their own sake—or for the sake of appearing innovative—and insisting on pedagogical warrant as the condition of adoption.

The third principle is relational prioritisation. In an AI-rich environment, the scarcest and most valuable resource in the English classroom is genuine human relationship: the quality of attention, care, and mutual recognition that a teacher extends to learners as full human beings with complex inner lives. The hybrid pedagogue actively protects time and space for this relational dimension—through discussion, one-to-one conferencing, creative collaboration, and the cultivation of a classroom culture in which vulnerability is honoured and risk-taking is celebrated.

The fourth principle is ethical stewardship: the ongoing practice of asking not only “Can we use this AI tool?” but “Should we? For whom is it beneficial? Who might it harm? Whose values does it embody?” This principle requires that teachers engage with the policy and data governance frameworks that shape AI deployment in their institutions, and that they model for students the ethical reasoning that responsible technology use demands.

The fifth principle is adaptive professional learning: the commitment to continuous reflection, experimentation, and collaboration in response to an evolving technological landscape. This means participating in professional communities that share practice honestly—including failures and unintended consequences, not only successes—and contributing to the growing body of empirical and theoretical knowledge about AI in English language education.

These five principles do not constitute a recipe or a checklist. They are dispositions—orientations toward practice that must be enacted differently in different contexts, with different learners, at different stages of development. Their unifying commitment is to the proposition that the English teacher in the era of AI is more necessary, not less: more necessary because the human capacities that

teaching embodies—empathy, cultural wisdom, ethical judgement, and genuine care for the learner—are precisely those that AI cannot provide, and precisely those that learners in an AI-saturated world most urgently need.

6. IMPLICATIONS FOR TEACHER EDUCATION AND POLICY

The reconceptualised teacher described in this paper is not produced by current teacher education programmes or supported by current educational policy frameworks. Realising the potential of hybrid pedagogical practice requires substantial reform at both levels.

In teacher education, the most immediate implication is the integration of critical AI literacy as a foundational competency rather than an elective add-on. Trainee English teachers need sustained engagement with the theoretical frameworks that enable them to understand AI as a sociotechnical phenomenon—not merely a set of tools to be mastered but a set of choices to be evaluated. They need practicum experiences in which AI tools are present in classrooms and in which mentors model the critical, reflective stance toward those tools that the framework described above requires.

Teacher education programmes also need to address the affective and identity dimensions of teaching in AI-rich environments. Research suggests that many early-career teachers experience AI integration as threatening to their professional identity—as evidence that they are replaceable—rather than as an opportunity for role evolution (Tondeur et al. 79). Preparation programmes that address these anxieties directly, that support trainees in developing a secure and flexible sense of professional identity, and that provide conceptual tools for understanding the distinctive value of human teaching are better equipped to produce the adaptive professionals that the field needs.

At the policy level, several priorities emerge from the analysis. First, AI deployment in educational settings should be subject to rigorous independent evaluation, with results made publicly available—not merely to administrators and vendors but to teachers, parents, and learners. The current landscape, in which AI tools are frequently adopted on the basis of marketing claims or administrative convenience rather than pedagogical evidence, is professionally and ethically unacceptable (Luckin and Holmes 34).

Second, policies governing AI in education should be developed with the active participation of teachers, not merely imposed upon them. Professional bodies representing English teachers—such as IATEFL, TESOL International, and their national equivalents—should be involved in the formulation of guidelines for AI use in examinations, curricula, and assessment. Their members have both the

practical wisdom and the disciplinary expertise to contribute perspectives that purely technical or administrative framings are likely to miss.

Third, equitable access to high-quality AI tools for language learning should be treated as an educational right, not a market outcome. This requires public investment in the development of openly licensed, transparently designed AI tools for English language education that prioritise the pedagogical needs of diverse learners over the commercial interests of technology corporations. It also requires attention to the infrastructure—reliable internet access, adequate devices, appropriate digital literacy support—without which even the best AI tools are inaccessible to the learners who might benefit most from them.

7. CONCLUSION

The era of artificial intelligence does not signal the obsolescence of the English teacher. It signals the obsolescence of a particular, narrow conception of what English teaching is—one that locates the teacher's value primarily in their superior access to linguistic knowledge and their capacity for efficient error correction. That conception was always inadequate to the full complexity of what language teaching involves. AI has made its inadequacy undeniable.

What emerges from the analysis presented in this paper is a richer and more demanding account of the English teacher's role: one that encompasses instructional design, formative assessment, affective scaffolding, cultural-critical literacy facilitation, and adaptive professional learning. These dimensions are not entirely new—skilled English teachers have always done more than correct errors and deliver grammar explanations. What is new is the urgency of articulating and defending this fuller conception in contexts where institutional, technological, and economic pressures may push toward a narrower and ultimately dehumanising vision of language education.

The framework for hybrid pedagogical practice proposed here is offered not as a final answer but as a starting point for the professional conversation that the field urgently needs. That conversation must involve teachers, researchers, teacher educators, policy-makers, learners, and—with appropriate critical scrutiny—the developers of the AI tools that are transforming the educational landscape. It must be conducted with intellectual honesty about what AI can and cannot do, with ethical seriousness about the values at stake, and with genuine commitment to the learners whose linguistic development, cultural formation, and human flourishing are the ultimate purpose of English education.

The English teacher who enters a classroom in the era of AI carries a responsibility that is at once more technical and more humanistic than any previous

generation has faced. Meeting that responsibility requires not the anxious defence of professional territory but the confident, critical, and compassionate embrace of a transformed and transforming role. The machines are here. The teachers are still needed—more than ever, and for reasons that matter most.

REFERENCES

1. Arnold, Jane. *Affect in Language Learning*. Cambridge University Press, 1999.
2. Braidotti, Rosi. *The Posthuman*. Polity Press, 2013.
3. Carr, Nicholas. *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton, 2010.
4. Dornyei, Zoltan. *Motivational Strategies in the Language Classroom*. Cambridge University Press, 2001.
5. Eagleton, Terry. *How to Read Literature*. Yale University Press, 2013.
6. Freire, Paulo. *Pedagogy of the Oppressed*. Translated by Myra Bergman Ramos, Herder and Herder, 1970.
7. Holmes, Wayne, et al. *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign, 2019.
8. Knox, Jeremy. *Artificial Intelligence and Education: A Critical View through the Lens of Human Rights, Democracy and the Rule of Law*. Council of Europe, 2023.
9. Lantolf, James P., and Steve L. Thorne. *Sociocultural Theory and the Genesis of Second Language Development*. Oxford University Press, 2006.
10. Luckin, Rose. *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. UCL Institute of Education Press, 2018.
11. Luckin, Rose, and Wayne Holmes. *Intelligence Unleashed: An Argument for AI in Education*. Pearson, 2016.
12. Pennycook, Alastair. *The Cultural Politics of English as an International Language*. Longman, 1994.
13. Richards, Jack C., and Theodore S. Rodgers. *Approaches and Methods in Language Teaching*. 3rd ed., Cambridge University Press, 2014.
14. Selwyn, Neil. *Should Robots Replace Teachers? AI and the Future of Education*. Polity Press, 2019.
15. Weigle, Sara Cushing. *Assessing Writing*. Cambridge University Press, 2002.
16. Williamson, Ben. *Big Data in Education: The Digital Future of Learning, Policy and Practice*. SAGE, 2017.
17. Perelman, Les. "Construct Validity, Length, Score, and Time in Holistically Graded Writing Assessments." *Handbook of Automated Essay Evaluation*, edited by Mark D. Shermis and Jill Burstein, Routledge, 2013, pp. 68–82.
18. Swain, Merrill. "The Output Hypothesis: Theory and Research." *Handbook of Research in Second Language Teaching and Learning*, edited by Eli Hinkel, Erlbaum, 2005, pp. 471–83.
19. Bender, Emily M., et al. "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?" *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency*, 2021, pp. 610–23. (Conference Proceedings)

20. Deane, Paul. "The Challenges of Writing Assessment in the Age of Artificial Intelligence." *Educational Measurement: Issues and Practice*, vol. 42, no. 1, 2023, pp. 214–22.
21. Dobson, James. "Literary Reading in the Age of Language Models." *Interdisciplinary Literary Studies*, vol. 25, no. 2, 2023, pp. 115–30.
22. Godwin-Jones, Robert. "Evolving Technologies for Language Learning." *Language Learning and Technology*, vol. 27, no. 1, 2023, pp. 1–22.
23. Hattie, John, and Helen Timperley. "The Power of Feedback." *Review of Educational Research*, vol. 77, no. 1, 2007, pp. 81–112.
24. Kessler, Greg. "Technology and the Future of Language Teaching." *Foreign Language Annals*, vol. 54, no. 2, 2021, pp. 301–18.
25. Li, Liang. "AI Writing Tools and Chinese EFL Learners: Perceptions, Practices, and Challenges." *TESOL Quarterly*, vol. 57, no. 3, 2023, pp. 38–58.
26. Perkins, Mike. "Academic Integrity Considerations of AI Large Language Models in the Post-Pandemic Era: ChatGPT and Beyond." *Journal of University Teaching and Learning Practice*, vol. 20, no. 2, 2023, pp. 97–115.
27. Sadler, D. Royce. "Formative Assessment and the Design of Instructional Systems." *Instructional Science*, vol. 18, no. 2, 1989, pp. 119–44.
28. Tondeur, Jo, et al. "Preparing Pre-Service Teachers to Integrate Technology in Education: A Synthesis of Qualitative Evidence." *Computers and Education*, vol. 59, no. 1, 2012, pp. 134–44.
29. Voogt, Joke, et al. "Teacher Learning in Collaborative Curriculum Design." *Teaching and Teacher Education*, vol. 27, no. 8, 2011, pp. 1235–44.
30. Warschauer, Mark, and Diane Grimes. "Audience, Authorship, and Artifact: The Emergent Semiotics of Web 2.0." *Annual Review of Applied Linguistics*, vol. 27, 2007, pp. 1–23.

Chapter 9

Rethinking The Role of The English Teacher in The Era of Artificial Intelligence: Challenges and Opportunities

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ABSTRACT

The rapid advancement of Artificial Intelligence (AI) has significantly transformed the landscape of education, particularly in English Language Teaching (ELT). This paper critically examines the evolving role of the English teacher in the AI-driven educational environment. Traditionally positioned as the primary source of knowledge, teachers are now required to adapt to a technologically mediated classroom where AI tools provide instant feedback, personalized learning experiences, and automated content generation. Drawing upon recent research, this study explores the opportunities AI offers, such as enhanced accessibility, learner autonomy, and instructional efficiency, alongside challenges including academic integrity concerns, over-reliance on technology, and the erosion of critical thinking skills. The paper argues that rather than rendering teachers obsolete, AI necessitates a redefinition of their roles as facilitators, ethical guides, and designers of meaningful learning experiences. Ultimately, the study proposes a human-AI collaborative framework that emphasizes the irreplaceable value of human interaction, creativity, and critical pedagogy in English education.

Keywords: Artificial Intelligence, English Language Teaching, Teacher Role, AI Literacy, Pedagogy, Educational Technology, Critical Thinking, Digital Learning

INTRODUCTION

The integration of Artificial Intelligence (AI) into education represents one of the most transformative developments of the twenty-first century. In the field

of English Language Teaching (ELT), AI technologies such as intelligent tutoring systems, automated writing evaluation tools, and conversational agents have reshaped traditional pedagogical practices. English, as a global lingua franca, plays a central role in communication, education, and professional advancement, making its teaching particularly susceptible to technological innovation (Tang).

Historically, the English teacher has functioned as the central authority in the classroom, responsible for delivering content, assessing student performance, and guiding language acquisition. However, AI has disrupted this traditional model by enabling students to access information, receive feedback, and practice language skills independently. As a result, the role of the teacher is undergoing a profound transformation.

This paper seeks to address a critical question: What does it mean to be an English teacher in the era of AI? By examining recent research on AI in ELT, this study explores both the opportunities and challenges presented by AI and argues for a redefinition of the teacher's role within a human-AI collaborative framework.

LITERATURE REVIEW

The growing body of research on AI in ELT highlights both its transformative potential and its inherent limitations. AI technologies have been shown to enhance language learning by providing personalized instruction, immediate feedback, and interactive learning environments (Hassan). These tools enable learners to progress at their own pace and receive targeted support based on their individual needs.

Karki and Karki emphasize that AI has introduced innovative teaching methods that make learning more efficient and accessible, while also reducing the workload of teachers (Karki and Karki). Similarly, Tang notes that AI technologies improve teaching effectiveness by automating repetitive tasks such as grading and error correction, allowing teachers to focus on more meaningful aspects of instruction (Tang).

However, the literature also identifies significant challenges associated with AI integration. One major concern is the potential decline in students' critical thinking and writing skills due to over-reliance on AI-generated content. Recent findings suggest that excessive dependence on AI tools may undermine essential cognitive abilities and reduce students' engagement in active learning processes (The Guardian).

Moreover, researchers argue that AI cannot replicate the human elements of teaching, such as empathy, emotional intelligence, and the ability to foster meaningful classroom interactions. Tolstykh and Oshchepkova highlight that while AI can assist in language learning, it lacks the capacity to engage students in deep interpretative and critical discussions.

Another important theme in the literature is the need for AI literacy among teachers. Educators must develop the skills required to effectively integrate AI into their teaching practices while addressing ethical concerns such as data privacy, bias, and academic integrity (Crompton et al.).

Overall, the literature suggests that AI should be viewed not as a replacement for teachers but as a tool that complements and enhances their role.

Theoretical Framework: Human-AI Collaboration in Education

The integration of AI into ELT can be understood through the lens of constructivist and socio-cultural learning theories, which emphasize the importance of interaction, collaboration, and contextual learning. AI technologies align with constructivist principles by enabling personalized and self-directed learning experiences. However, they also challenge socio-cultural perspectives that highlight the importance of human interaction in language acquisition.

Recent theoretical models propose a human-AI collaborative framework, where teachers and AI systems work together to enhance learning outcomes. In this framework, AI handles routine tasks such as assessment and feedback, while teachers focus on higher-order functions such as critical thinking, creativity, and emotional support.

This collaborative approach underscores the idea that the future of education lies not in replacing teachers but in redefining their roles.

Rethinking the Role of the English Teacher

1. From Knowledge Provider to Learning Facilitator

One of the most significant shifts in the role of the English teacher is the transition from knowledge provider to learning facilitator. With AI tools providing instant access to information, teachers are no longer the sole source of knowledge. Instead, they guide students in navigating and critically evaluating information.

This shift requires teachers to adopt a more student-centered approach, focusing on facilitating learning rather than delivering content. Teachers help students develop skills such as information literacy, critical analysis, and independent learning.

2. Teacher as a Critical Thinking Enabler

AI technologies can generate essays, summaries, and even literary analyses, but they often lack depth and originality. Therefore, the role of the teacher in fostering critical thinking becomes increasingly important.

Teachers encourage students to question AI-generated content, identify biases, and engage in deeper analysis. By promoting critical thinking, teachers help students develop the skills necessary to navigate an information-rich environment.

3. Teacher as an Ethical Guide

The use of AI in education raises several ethical concerns, including plagiarism, data privacy, and algorithmic bias. Teachers play a crucial role in addressing these issues by promoting responsible AI use.

They must educate students about academic integrity and develop assessment strategies that emphasize process over product. This includes designing assignments that require original thought and personal reflection.

4. Teacher as a Designer of Learning Experiences

AI automates many routine teaching tasks, allowing teachers to focus on designing engaging and meaningful learning experiences. This includes incorporating project-based learning, collaborative activities, and multimodal assignments.

By creating interactive and dynamic learning environments, teachers can enhance student engagement and promote deeper learning.

5. Teacher as a Lifelong Learner

The rapid evolution of AI technologies requires teachers to continuously update their skills and knowledge. Professional development in AI literacy is essential for effective integration.

Teachers must stay informed about emerging technologies and adapt their teaching practices accordingly. This ongoing learning process is crucial for maintaining relevance in the digital age.

Opportunities of AI in English Language Teaching

1. Personalized Learning

AI enables personalized learning experiences by adapting content and feedback to individual student needs. This improves learning outcomes and increases student engagement (Hassan).

2. Immediate Feedback

AI tools provide instant feedback on grammar, pronunciation, and writing, allowing students to learn from their mistakes in real time (Tang).

3. Increased Accessibility

AI technologies make language learning more accessible to diverse learners, including those with disabilities or limited access to traditional education (Karki and Karki).

4. Enhanced Teacher Efficiency

By automating administrative tasks, AI allows teachers to focus on more meaningful aspects of teaching, such as mentoring and interaction (Hassan).

Challenges of AI in English Language Teaching

1. Decline in Critical Thinking Skills

Over-reliance on AI may reduce students' ability to think critically and independently, as they become dependent on automated solutions (The Guardian).

2. Academic Integrity Issues

AI-generated content poses challenges in assessing student originality and authenticity. Teachers must develop new strategies to address these issues.

3. Digital Divide

Not all students have equal access to AI technologies, leading to disparities in learning opportunities (Crompton et al.).

4. Teacher Preparedness

Many teachers lack the training required to effectively integrate AI into their teaching practices. This highlights the need for professional development programs.

5. Loss of Human Interaction

AI cannot replicate the emotional and social aspects of teaching, which are essential for language learning and student development.

DISCUSSION

The integration of AI into ELT necessitates a fundamental rethinking of the role of the English teacher. While AI offers numerous benefits, it also presents significant challenges that require careful consideration.

The key to successful integration lies in achieving a balance between technology and human interaction. Teachers must embrace AI as a tool that enhances their teaching while maintaining the human elements that are essential for effective learning.

A human-AI collaborative framework provides a viable solution by leveraging the strengths of both teachers and AI systems. In this model, AI supports teachers by handling routine tasks, while teachers focus on higher-order functions.

CONCLUSION

The rise of Artificial Intelligence in education represents both a challenge and an opportunity for English teachers. While AI has the potential to transform

teaching and learning, it cannot replace the human elements that are central to education.

English teachers must adapt to this changing landscape by redefining their roles as facilitators, critical thinkers, ethical guides, and lifelong learners. By embracing AI while maintaining the core values of teaching, educators can create a balanced and effective learning environment.

Ultimately, the future of English Language Teaching lies in the synergy between human intelligence and artificial intelligence.

REFERENCES

1. Crompton, Helen, et al. "AI and English Language Teaching: Affordances and Challenges." *British Journal of Educational Technology*, 2024.
2. Hassan, Abdulkhaleq Q. A. "The Role of Artificial Intelligence in Enhancing English Language Teaching (ELT)." *Forum for Linguistic Studies*, 2025.
3. Karki, Bishal, and Tek Mani Karki. "Integrating AI in English Language Teaching: Challenges and Opportunities." *Dristikon*, 2025. (Nepal Journals Online)
4. Tang, Zhihao. "Using Artificial Intelligence in English Language Teaching: Benefits and Challenges." *Journal of Education and Educational Research*, 2025. (Darcy & Roy Press)
5. Tolstykh, Olesya M., and Tamara Oshchepkova. "Beyond ChatGPT: Roles that Artificial Intelligence Tools Can Play in an English Language Classroom." *Discover Artificial Intelligence*, 2024. (Springer)
6. "The Impact of AI on Students' Thinking Skills." *The Guardian*, 2026. (The Guardian)

Chapter 10

Understanding Ecocriticism Through The Lens of AI: An Ecocritical Survey of Amitav Ghosh's Selected Fictions

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ABSTRACT

Artificial Intelligence (AI) is transforming the field of English Literature by changing how texts are analyzed, created, and understood. It can quickly process large volumes of literary works to identify themes, patterns, and writing styles, which helps in deeper critical analysis. In addition, AI enhances critical thinking by allowing students to explore multiple interpretations of a text. Instead of relying on a single viewpoint, learners can compare different analyses and develop their own perspectives. AI also supports creative writing by suggesting ideas, improving grammar, and refining sentence structure. Tools like Grammarly help students produce clear and effective essays. AI plays a significant role in modern English literature studies. It enhances understanding, encourages creativity, and supports both teaching and learning, but it should be used carefully alongside human interpretation and critical analysis. Top of Form Bottom of Form Ecocriticism is a branch of Literary Criticism. It examines how literature represents nature and environmental issues, while AI introduces new tools and perspectives to expand this analysis. From an ecocritical perspective, AI itself has an environmental impact due to high energy consumption and data processing demands. This creates a paradox. While AI helps study environmental issues, it may also contribute to them. Ultimately, AI enhances ecocriticism by offering new analytical tools and creative possibilities, but it also challenges scholars to consider the environmental cost of technology itself. AI and the ecocritical fiction of Amitav Ghosh come

together through their shared engagement with climate change, environmental crises, and storytelling. AI tools like ChatGPT can support and extend Ghosh's concerns in several ways. This paper highlights the role of AI in analyzing climate issues in the works of Amitav Ghosh.

Keywords: Artificial Intelligence, ecocriticism, environmental issues, climate and technology

1. INTRODUCTION

Artificial Intelligence (AI) is increasingly being used in the teaching and learning of English literature to make the subject more engaging and accessible. It helps both teachers and students in understanding complex literary texts more effectively. AI tools such as ChatGPT assist students by providing summaries, explanations of themes, characters, and difficult passages from texts. This makes it easier to understand works of literature that use complex language. Similarly, tools like Grammarly help students improve their writing skills by correcting grammar and enhancing sentence structure. Teachers also benefit from AI as it helps them prepare lesson plans, generate questions, and create study materials quickly. AI can personalize learning by adapting content according to the student's level, ensuring that every learner can grasp the subject comfortably. Moreover, AI enables interactive learning through virtual discussions and creative activities. Students can ask questions, explore different interpretations, and even practice writing essays and stories with AI support. It also provides instant feedback, helping students identify and improve their mistakes. In conclusion, AI is a valuable tool in English literature education. It enhances understanding, saves time, and promotes interactive learning, but it should be used wisely along with traditional teaching methods. For teachers, AI reduces workload by generating lesson plans, question papers, and study materials quickly. It also enables personalized learning, where students receive content suited to their individual abilities and pace of learning. This makes literature more inclusive and engaging for diverse learners.

Artificial Intelligence (AI) and **ecocriticism** intersect in meaningful ways. They are showing the relationship between humans, technology, and the environment. Artificial Intelligence (AI) is transforming the study and teaching of English literature by making it more accessible, interactive, and engaging. It acts as a supportive tool for both students and teachers, helping them understand complex texts and improve learning outcomes. AI-powered tools such as ChatGPT assist students in analyzing literary works by providing summaries, explanations of themes, character sketches, and interpretations of difficult passages. This is especially helpful when studying classical texts with complex language, as AI can simplify

content into easy-to-understand forms. However, the use of AI in English literature has some limitations. Overdependence on AI may reduce independent thinking, and AI may sometimes fail to capture the emotional depth and cultural nuances of literary works.

AI and Ecocriticism intersect in the study of how technology influences our understanding of nature and environmental narratives. Ecocriticism examines representations of the environment in literature and culture, while AI tools like ChatGPT can analyze large bodies of texts to identify ecological themes, track climate discourse, and even generate environmental storytelling. At the same time, ecocritical perspectives question the environmental cost of AI (such as energy use) and its tendency to reflect human-centered views. Together, they reveal how digital technologies both shape and challenge our relationship with the natural world. AI can assist ecocriticism by analysing large collections of literary texts to identify environmental themes such as climate change, deforestation, and human–nature relationships. In addition, AI contributes to the rise of **environmental storytelling**. It can generate narratives, poems, or speculative fiction about ecological futures. It is encouraging readers to imagine the consequences of environmental crisis and sustainable alternatives. This aligns with ecocriticism’s goal of fostering environmental consciousness through literature.

Ecocriticism is the study of how literature and culture represent nature, the environment, and human relationships with the nonhuman world.

It examines questions like:

- How is nature portrayed in literature?
- Do texts reinforce environmental exploitation or sustainability?
- How do narratives shape our attitudes toward climate and ecology?

Artificial Intelligence (AI) plays an important role in monitoring and managing climatic disasters in India. With the increasing occurrence of floods, cyclones, and heatwaves, AI acts like a smart system that observes environmental changes and provides early warnings. AI analyzes large amounts of data from satellites, weather stations, and sensors to predict disasters in advance. It helps in forecasting cyclones, heavy rainfall, and heatwaves more accurately, allowing authorities to take preventive measures. AI is also used to monitor river levels and rainfall patterns, which helps in flood prediction and timely evacuation of people.

In addition, AI helps in identifying high-risk areas by mapping climate patterns. It tracks temperature changes and detects regions that are more vulnerable to extreme weather conditions. During disasters, AI supports rescue and relief operations by assessing damage quickly and improving coordination. Moreover, AI-powered

alert systems and mobile applications provide real-time warnings to people, helping them stay safe and prepared. This reduces the loss of life and property. However, AI also has some limitations such as high cost, need for advanced technology, and limited accessibility in rural areas. It cannot fully replace human judgment in disaster management. AI acts as a powerful “eye” on climatic disasters in India. It enhances prediction, preparedness, and response, but it should be used along with human efforts for effective disaster management.

Active role of AI for teaching :



1.1. AI and Ecocriticism:

Artificial Intelligence (AI), especially tools like ChatGPT or machine learning systems, can analyze, generate, and interpret large amounts of text and data. AI can process massive corpora of literature to identify recurring environmental themes. Track how climate discourse evolves over time. Compare representations of nature across cultures. AI could analyze thousands of novels to see how forests are portrayed—as sacred, exploitable, endangered. AI can generate eco-fiction or assist writers in creating narratives about climate change, biodiversity loss, sustainable futures. Ecocriticism often critiques human-centered (anthropocentric) thinking.

AI systems can reinforce human-centered narratives or be used to explore non-human perspectives. AI contributes to what some scholars call *digital ecologies*: data centers, energy use, and environmental cost of AI, the “material footprint” of supposedly virtual systems. This raises ecocritical questions about sustainability in technology. AI is also used in real-world ecology: climate modeling, wildlife tracking and deforestation detection. Ecocriticism can interpret how these technologies shape our understanding of “nature.”

Key Advantages of using AI:

<i>Opportunity</i>	<i>Concern</i>
New ways to study literature	AI energy consumption
Expanded environmental storytelling	Bias toward human viewpoints
Better ecological data analysis	Tech-driven environmental control

AI doesn't just *analyze* environmental narratives. It becomes part of the ecological conversation itself. It changes of how we talk about nature ,How we study it and even how we impact it. AI-generated eco-literature suggests theorists in ecocriticism Or helps us write an essay on this topic. AI tools such as ChatGPT are increasingly used to analyze climatic disasters and support environmentally focused writing. They can process large datasets—like climate reports, satellite data, and news archives—to identify patterns in events such as floods, heatwaves, and cyclones. This helps researchers and writers understand causes, impacts, and trends in climate change more clearly.

For writers, AI can highlight key environmental themes, suggest relevant data, and even generate ideas for essays, stories, or climate fiction. It can also analyze existing literature to show how nature and disasters are represented, aligning with the goals of Ecocriticism. By making complex climate information more accessible and offering creative support, AI encourages writers to focus more deeply on environmental issues and produce informed, impactful work.

AI plays an important role in understanding cyclones in India from an ecocritical perspective by combining environmental data analysis with cultural interpretation. In India, agencies like the India Meteorological Department use AI and machine learning to track and predict cyclones such as Cyclone Fani and Cyclone Amphan. These systems analyze satellite images, ocean temperatures, and wind patterns to improve early warnings, reduce damage, and save lives.

From the perspective of Ecocriticism, AI does more than just predict disasters—it also shapes how cyclones are understood and represented. By analyzing news reports, social media, and literature about cyclones, AI can reveal patterns in how these events are narrated—whether they are seen as natural phenomena, human-influenced climate crises, or socio-economic disasters affecting vulnerable communities.

For writers and scholars, AI provides insights into the human–nature relationship during such disasters. It helps highlight themes like climate change, environmental vulnerability, and resilience, encouraging more informed and impactful environmental writing. At the same time, ecocriticism raises questions about the environmental cost of AI technologies and how digital systems influence our perception of nature.

1.2. AI and Amitav Ghosh's Ecocritical fictions such as *The Hungry Tide*, *Gun Island* and *Jungle Nama*:

Thus, AI and cyclones in India together show how technology can both analyze environment. AI and the ecocritical ideas of writers like Amitav Ghosh can be meaningfully connected through their shared focus on climate change, storytelling, and human–nature relationships. In works such as *The Great Derangement*, Ghosh argues that modern literature has failed to adequately represent climate change and environmental crises. He suggests that conventional storytelling often ignores large-scale ecological disruptions like cyclones, floods, and rising seas, even though they are central to our reality. His views are a key part of Ecocriticism, which critiques how culture and literature engage with the environment.

AI tools like ChatGPT can support and extend Ghosh's concerns in several ways. They can analyze vast amounts of climate-related texts, uncovering patterns in how environmental disasters are represented or neglected in literature. This helps scholars better understand the “derangement” Ghosh describes. AI can also assist writers by generating ideas, integrating climate data into narratives, and encouraging stories that foreground ecological crises—something Ghosh calls for. At the same time, AI enables new forms of storytelling that include climate realities, making it easier for contemporary writers to depict events like cyclones and environmental displacement in India. However, from an ecocritical perspective, there is also a tension: while AI helps produce and analyze environmental narratives, it also consumes energy and reflects human-centered biases, which Ghosh himself critiques in modern systems of thought.

In this way, AI complements Amitav Ghosh's ecocritical views by helping writers and researchers engage more deeply with environmental issues, while also raising new questions about technology's role in the ecological crisis. AI and the ecocritical fiction of Amitav Ghosh come together through their shared engagement with climate change, environmental crises, and storytelling. In novels like *The Hungry Tide* and *Gun Island*, Ghosh portrays fragile ecosystems such as the Sundarbans, rising sea levels, cyclones, and human displacement. His fiction reflects key concerns of Ecocriticism by emphasizing the interconnectedness of humans, animals, and the environment, and by showing how climate change disrupts both nature and society.

AI tools like ChatGPT can deepen the study and creation of such ecocritical fiction in several ways. They can analyze Ghosh's texts to identify recurring themes—such as environmental vulnerability, migration, and non-human agency—helping scholars better understand his ecological vision. AI can also compare his works with other climate fiction to trace broader literary trends. For writers, AI can

serve as a creative aid inspired by Ghosh's approach. It can suggest plot ideas involving climate disasters, integrate real climate data into storytelling, and help construct narratives that foreground ecological crises—addressing the gap Ghosh highlights in modern literature.

At the same time, an ecocritical reading reminds us that while AI supports environmental storytelling, it also raises questions about technology's environmental footprint and its tendency to prioritize human perspectives. Thus, AI not only helps interpret Amitav Ghosh's ecocritical fiction but also extends his project by enabling richer, more climate-aware narratives in contemporary literature. AI can be meaningfully connected to the depiction of climate disaster in the Sundarbans in *The Hungry Tide* by Amitav Ghosh, especially from the perspective of Ecocriticism.

In *The Hungry Tide*, the Sundarbans is portrayed as a fragile and unpredictable ecosystem shaped by tides, cyclones, and rising waters. The novel highlights how local communities live under constant threat from environmental disasters, showing the deep interconnection between humans, animals, and nature.

AI tools like ChatGPT can help analyze such representations by identifying key themes like vulnerability, displacement, and ecological instability across the text. By comparing this novel with climate data or other disaster narratives, AI can reveal how accurately fiction reflects real environmental risks in regions like the Sundarbans. AI also supports writers and scholars by bringing attention to patterns of climate disaster—such as increasing cyclone intensity in the Bay of Bengal—which echoes the dangers depicted in the novel. This aligns with ecocriticism's aim to understand how literature responds to environmental crises.

However, from an ecocritical viewpoint, there is a contrast: while Ghosh's fiction emphasizes the raw, lived experience of climate disaster, AI offers a data-driven, analytical perspective. Together, they complement each other—fiction humanizes environmental crises, while AI helps interpret and expand their significance. Thus, AI enhances our understanding of the Sundarbans' climate disasters in *The Hungry Tide*, while reinforcing the novel's central message about ecology. *The Hungry Tide* is a significant novel that presents a deep analysis of the relationship between humans, nature, and society. Set in the Sundarbans, the novel portrays nature as both nurturing and destructive, highlighting the constant struggle of human beings to survive in a hostile environment. It shows that despite human efforts, nature often remains unpredictable and powerful.

The novel also explores the conflict between humans and wildlife, particularly the danger posed by tigers. It raises important questions about environmental conservation and whether the protection of animals should come at the cost of human lives. Through this, the author brings out the moral dilemma between ecological balance and human survival.

Another important aspect is the portrayal of marginalized communities. Characters like Fokir represent the poor and voiceless people who depend entirely on nature for their livelihood. Their struggles reveal issues of poverty, displacement, and social injustice. The reference to the Morichjhapi massacre further highlights the political neglect and suffering of refugees.

The novel also touches upon human relationships, especially the bond between Piya and Fokir, which goes beyond language and cultural barriers, showing the universality of human emotions.

In conclusion, *The Hungry Tide* offers an analytical understanding of ecological concerns along with social and political realities. It emphasizes the need for a balance between human life, wildlife conservation, and environmental sustainability.

AI can be closely linked with *Gun Island* by Amitav Ghosh through its engagement with climate change, migration, and ecological uncertainty—key concerns of Ecocriticism. In *Gun Island*, Ghosh blends myth, history, and contemporary climate realities, showing how rising sea levels, extreme weather, and ecological disruption connect places like the Sundarbans and Venice. The novel presents climate change not just as a scientific issue but as a lived, cultural, and even supernatural experience.

AI tools like ChatGPT can help analyze the novel by identifying patterns such as environmental displacement, the recurrence of natural disasters, and the blending of myth with ecological crisis. AI can also compare *Gun Island* with other climate fiction to trace how global warming is reshaping literary narratives. For writers, AI can extend Ghosh's vision by helping create stories that integrate real climate data—such as sea-level rise or cyclone frequency—with imaginative storytelling. This supports Ghosh's broader argument that literature must better engage with planetary crises.

At the same time, an ecocritical reading highlights a tension: while AI helps interpret and generate climate narratives, it represents modern technological systems that are themselves part of the environmental crisis Ghosh critiques. Thus, AI complements *Gun Island* by deepening analysis and encouraging new forms of climate storytelling, while also raising important questions about technology's role in shaping our understanding of ecological change.

AI can be connected to *Jungle Nama* by Amitav Ghosh through its role in interpreting and expanding ecocritical storytelling. *Jungle Nama* retells the Sundarbans legend of Bon Bibi in a lyrical, oral style, emphasizing the delicate balance between humans, animals, and the forest. Set in the Sundarbans, the text reflects key ideas of Ecocriticism—especially respect for non-human life, coexistence, and the moral limits of human greed. The forest is not just a setting but a living, powerful entity.

Gun Island is a thought-provoking novel that presents a deep analysis of climate change, migration, and the interconnectedness of the modern world. Through a blend of myth and reality, the novel shows how ancient stories remain relevant in understanding present-day crises.

A major theme of the novel is the impact of climate change. The story highlights rising sea levels, extreme weather, and ecological imbalance, showing how environmental changes are forcing both humans and animals to migrate. It suggests that climate change is not a distant threat but a present reality affecting everyday life.

The novel also focuses on migration and displacement. Characters move across countries like India, Italy, and the United States, reflecting the global nature of migration caused by environmental and economic pressures. It emphasizes the struggles of refugees and the uncertainties they face in foreign lands.

Another important aspect is the blending of myth and reality. The legend of Bonduki Sadagar is used to connect past and present, suggesting that folklore can offer insights into modern environmental issues. This fusion creates a sense of continuity between history and contemporary challenges.

Additionally, the novel explores the role of technology and globalization. It shows how the modern world is interconnected, yet vulnerable to ecological crises. Human actions, driven by industrialization and greed, are shown as major causes of environmental destruction.

In conclusion, *Gun Island* provides an analytical understanding of climate change, migration, and cultural connections. It highlights the urgent need for global awareness and collective responsibility to protect the environment and ensure a sustainable future.

Gun Island offers a profound analytical exploration of climate change, migration, and the relevance of myth in the contemporary world. The novel shows how environmental crises are not isolated events but part of a global pattern affecting both human and non-human life.

One of the key outcomes of the novel is its critique of climate change. Ghosh presents ecological disasters such as cyclones, wildfires, and rising sea levels as immediate realities rather than distant threats. These changes disrupt natural habitats and force both animals and humans to migrate, highlighting the fragile balance of the ecosystem.

The novel also provides a critical perspective on migration and displacement. Through the journeys of characters across India and Europe, it reflects the harsh realities faced by climate refugees. Migration is shown not merely as a social issue but as a direct consequence of environmental degradation and global inequality.

Another significant aspect is the blending of myth and modernity. The legend of Bonduki Sadagar runs parallel to the present narrative, suggesting that ancient myths hold hidden meanings that resonate with today's ecological crises. This connection implies that human history and environmental patterns are deeply intertwined.

Furthermore, the novel critiques the role of globalization and technology. While the modern world appears interconnected, it also exposes vulnerabilities created by unchecked industrialization and consumerism. Ghosh suggests that human greed and exploitation of nature are central causes of the ongoing crisis.

The narrative also reflects a shift in human perception—from disbelief in climate change to gradual acceptance. Characters who initially rely on rational explanations begin to recognize the limits of human understanding in the face of ecological transformations.

In conclusion, *Gun Island* delivers an analytical message about the urgent need for environmental awareness, ethical responsibility, and global cooperation. It emphasizes that the future of humanity depends on restoring harmony between nature, culture, and human actions.

AI tools like ChatGPT can help analyze *Jungle Nama* by identifying its ecological themes, such as harmony with nature, indigenous knowledge, and environmental ethics. AI can also trace how traditional myths like Bon Bibi's story function as ecological warnings, teaching sustainable ways of living in fragile environments.

At the same time, from an ecocritical perspective, *Jungle Nama* contrasts sharply with AI: Ghosh's work draws on low-impact, traditional storytelling rooted in nature, while AI represents modern digital systems with environmental costs. This contrast deepens the discussion about sustainability and cultural memory. Thus, AI helps interpret and extend the ecological message of *Jungle Nama*, while the text itself reminds us of older, more harmonious ways of relating to the natural world.

Jungle Nama is a unique and powerful retelling of a traditional legend from the Sundarbans, drawn from the story of Bon Bibi and the conflict between humans and the forest. Written in verse, the text combines folklore, ecology, and cultural memory to deliver a strong analytical message about environmental ethics and human responsibility. The work is not just a narrative poem but a reflection on the fragile balance between nature and human survival in an age of ecological crisis.

At its core, *Jungle Nama* explores the relationship between humans and nature. The Sundarbans, with its dense mangrove forests and dangerous wildlife,

is portrayed as a space where human beings must learn to coexist with natural forces rather than attempt to dominate them. The story emphasizes that nature has its own rules and boundaries. When humans respect these limits, harmony is possible; when they violate them, destruction follows. This idea is embodied in the character of Bon Bibi, the guardian spirit of the forest, who represents justice, balance, and protection for those who enter the जंगल with humility and respect.

The conflict between greed and survival is another major theme. The character of Dukkhe, a poor boy, is taken into the forest by a greedy merchant who seeks profit without regard for the dangers or moral boundaries of the environment. This merchant symbolizes human greed and exploitation, while Dukkhe represents innocence and vulnerability. The narrative shows how the desire for wealth leads to reckless actions that disturb the natural balance. In contrast, Bon Bibi stands as a moral force that punishes greed and protects the weak, suggesting that ethical behavior is essential for survival in a world governed by natural laws.

A significant analytical outcome of the text is its critique of anthropocentrism—the belief that humans are superior to nature and have the right to exploit it. *Jungle Nama* challenges this idea by presenting the forest as a living, powerful entity that demands respect. The tiger, often feared as a dangerous predator, is not simply an enemy but a part of the ecological system. The story suggests that animals are not villains; rather, they act according to the laws of nature. Human suffering arises when these laws are ignored. This perspective encourages readers to rethink their attitudes toward wildlife and the environment.

The use of folklore and oral tradition is another important aspect of the work. By retelling a traditional story in a modern poetic form, Ghosh connects past and present, showing that ancient wisdom still holds relevance in today's world. The rhythmic and performative style of *Jungle Nama* reflects its roots in oral storytelling, making it accessible and engaging. At the same time, it carries a serious message about contemporary ecological crises such as climate change, deforestation, and loss of biodiversity. The blending of myth and modern concerns highlights the continuity of human experience and the enduring importance of cultural narratives.

Furthermore, *Jungle Nama* can be seen as a commentary on social justice. The people who depend on the forest for their livelihood are often poor and marginalized. They face the greatest risks from both natural dangers and environmental degradation. The story of Dukkhe reflects the vulnerability of such communities, who are frequently exploited by those in positions of power. Through this, Ghosh draws attention to the unequal distribution of resources and risks in society. Environmental issues are shown not only as ecological problems but also as social and economic ones.

The text also emphasizes the idea of coexistence rather than conflict. Unlike many modern narratives that depict nature as something to be conquered, *Jungle Nama* advocates a respectful and balanced relationship. Bon Bibi's role is not to eliminate danger but to maintain order and fairness. She allows humans to enter the forest and use its resources, but only within limits. This principle of sustainable use is highly relevant in the context of current environmental challenges. It suggests that development should not come at the cost of ecological destruction.

Another important analytical dimension is the spiritual aspect of the narrative. The presence of divine figures like Bon Bibi and the moral structure of the story reflect a worldview in which nature, ethics, and spirituality are interconnected. This contrasts with the modern, scientific approach that often separates humans from the natural world. Ghosh's work invites readers to reconsider this separation and to recognize the deeper connections that bind all forms of life. The spiritual dimension also reinforces the idea that respect for nature is not just a practical necessity but a moral duty.

In addition, *Jungle Nama* serves as a warning about the consequences of environmental neglect. The dangers of the forest—symbolized by the tiger and the unpredictable landscape—mirror the larger threats facing the planet today. Climate change, rising sea levels, and habitat destruction are modern equivalents of these dangers. By presenting these issues through a traditional story, Ghosh makes them more relatable and emotionally impactful. The narrative suggests that if humanity continues to ignore the limits of nature, the consequences will be severe and unavoidable.

The poetic form of the text enhances its impact. The use of rhythm, repetition, and vivid imagery creates a sense of immediacy and emotional engagement. It also reflects the oral traditions of the region, preserving cultural heritage while addressing contemporary issues. This combination of form and content makes *Jungle Nama* both an artistic and a political work. It demonstrates how literature can be used as a tool for environmental awareness and social change.

The analytical outcome of *Jungle Nama* lies in its powerful message about the need for harmony between humans and nature. Through its exploration of themes such as greed, survival, justice, and coexistence, the text challenges dominant attitudes toward the environment and calls for a more ethical and sustainable way of living. By blending folklore with modern concerns, Amitav Ghosh creates a work that is both timeless and urgently relevant. *Jungle Nama* ultimately reminds us that the future of humanity depends on our ability to respect and protect the natural world.

CONCLUSION

AI and ecocritical fiction are closely connected in how they shape, analyze, and expand environmental storytelling within Ecocriticism. Ecocritical fictions—such as works by Amitav Ghosh—focus on climate change, environmental disasters, and the relationship between humans and the nonhuman world. These narratives highlight issues like rising sea levels, cyclones, species extinction, and ecological imbalance, encouraging readers to rethink human dominance over nature. AI tools like ChatGPT play a significant role in this field in three major ways. AI can study large numbers of literary texts to identify recurring ecological themes—such as disaster, displacement, and sustainability. It helps scholars trace how climate change is represented across different authors, cultures, and time periods.

AI can assist writers in producing ecocritical fiction by: Suggesting climate-based plots (floods, cyclones, droughts), Integrating real environmental data into storytelling and Generating ideas for “climatefiction” (cli-fi). By simplifying complex climate data and turning it into narratives, AI helps make environmental issues more accessible and engaging for readers.

While AI supports environmental storytelling, ecocriticism also questions. AI systems consume energy and have environmental impacts. They may reinforce human-centered (anthropocentric) perspectives. They reflect technological approaches to problems that may require ecological sensitivity. AI and ecocritical fiction work together to deepen our understanding of environmental crises. AI enhances the study and creation of climate narratives, while ecocritical fiction ensures that these narratives remain ethically grounded, imaginative, and attentive to the fragile balance between humans and nature. The intersection of Artificial Intelligence (AI) and the ecocritical fiction of Amitav Ghosh offers a new way of understanding environmental issues in literature. Ghosh’s works—such as *The Hungry Tide*, *Gun Island*, and *Jungle Nama*—focus on climate change, human–nature relationships, and ecological imbalance. AI can deepen the analysis and interpretation of these themes in meaningful ways.

AI helps in analyzing large volumes of literary text quickly and efficiently. Through tools like ChatGPT, readers can explore themes such as climate migration, environmental justice, and the conflict between humans and nature. AI can identify recurring patterns, symbols, and motifs across Ghosh’s works, revealing how consistently he addresses ecological concerns. Another important contribution of AI is in comparative analysis. It allows students and researchers to connect Ghosh’s fiction with global climate discourse. For example, AI can link the environmental crises depicted in *Gun Island* with real-world issues such as rising sea levels and extreme weather. This helps readers understand that Ghosh’s fiction is not imaginary but rooted in reality.

AI also supports ecocritical studies by offering multiple interpretations of texts. It encourages readers to think beyond traditional literary analysis and consider scientific, social, and political dimensions of environmental issues. In works like *The Hungry Tide*, AI can help examine the balance between conservation and human survival, while in *Jungle Nama*, it can highlight the role of folklore in promoting ecological ethics.

However, AI has its limitations. It may not fully capture the emotional depth, cultural context, and symbolic richness of Ghosh's writing. Ecocritical fiction often requires human sensitivity and ethical understanding, which AI alone cannot provide. AI serves as a valuable tool in studying Ghosh's ecocritical fiction. It enhances textual analysis, broadens perspectives, and connects literature with real-world environmental concerns, but it should complement, not replace, human interpretation.

REFERENCES

1. Afshan, Syeda. *Fiction in the Age of Floods: Environmental Consciousness in Amitav Ghosh's Narratives*. International Journal of English Studies, 2020, <https://theaspd.com/index.php/ijes/article/view/3810>.
2. Das, Dipmani. *Ecocriticism in the Novels of Amitav Ghosh*. AJASRA: Asian Journal of Arts, 2019, <https://ajasra.in/index.php/about/article/view/222>.
3. Bhushan, Vishwa. "An Ecology and Eco-Criticism in Amitav Ghosh's The Hungry Tide." *ResearchGate*, 2022, https://www.researchgate.net/publication/363061231_An_Ecology_and_Eco-Criticism_in_Amitav_Ghosh%27s_The_Hungry_Tide.
4. Hossain, Mosharaf. "Climate Change and Environmental Justice: An Ecocritical Trajectory into Amitav Ghosh's *Gun Island*." *Creative Saplings*, 2021, <https://www.creativesaplings.in/index.php/1/article/view/819>.
5. Fayeze, Ramesh. *Climate Change, Literature and the Non-Human Agency. Literary Hermeneutics*, 2020, <https://literaryherm.org/index.php/ojs/article/view/146>.
6. Glotfelty, Cheryl, and Harold Fromm, editors. *The Ecocriticism Reader: Landmarks in Literary Ecology*. University of Georgia Press, 1996.
7. Buell, Lawrence. *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. Harvard University Press, 1995.
8. Garrard, Greg. *Ecocriticism*. Routledge, 2012.
9. Vega, Julio. "Rethinking AI in the Age of Climate Collapse: Ethics, Power, and Responsibility." *arXiv*, 2026, <https://arxiv.org/abs/2601.18462>.
10. Schön, Julian, et al. "Expert Assessment: The Systemic Environmental Risks of Artificial Intelligence." *arXiv*, 2025, <https://arxiv.org/abs/2512.11863>.

Chapter 11

Teaching English in The Age of AI and Without AI: Strategies For Human-centered Classrooms

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ABSTRACT

The emergence of Artificial Intelligence (AI) has significantly reshaped English language teaching by introducing adaptive learning systems, automated feedback, and personalized instruction. However, excessive reliance on AI risks diminishing human agency, critical engagement, and contextual pedagogy. This paper explores how English can be effectively taught in the age of AI without employing AI tools by integrating AI-inspired strategies within a human-centered pedagogical framework. Drawing on Postmethod Pedagogy and Constructivist theory, the study argues that principles such as adaptability, learner autonomy, and interaction can be achieved through teacher-driven practices. By emphasizing experiential learning, socio-cultural interaction, and critical consciousness, the paper demonstrates that meaningful language acquisition remains rooted in human intelligence rather than technological mediation. The study highlights the continued relevance of low-tech classrooms and asserts that pedagogy, not technology, determines the success of language learning.

Keywords: Artificial Intelligence, Human-Centered Pedagogy, Postmethod Pedagogy, Constructivism, English Language Teaching.

INTRODUCTION

The growing presence of Artificial Intelligence in education has led to a paradigm shift in English language teaching, where efficiency and automation are

often prioritized over interaction and critical engagement. AI-based platforms promise individualized instruction and immediate feedback, creating an impression that technology is indispensable to modern pedagogy. However, as Neil Selwyn argues, “education is not merely a technical process but a deeply social and political practice” (Selwyn 22). This observation calls for a critical re-evaluation of the role of AI in teaching.

Teaching English in the age of AI without AI is not a regression but a pedagogical reorientation. It involves adopting the functional strengths of AI, such as adaptability and responsiveness, within a human-centered framework grounded in interaction, reflection, and contextual understanding. The theoretical foundations of this approach can be located in Constructivism and Postmethod Pedagogy, both of which emphasize learner agency, social interaction, and the importance of context in knowledge construction.

This paper seeks to demonstrate that AI-inspired teaching does not require AI tools. Instead, it can be effectively implemented through innovative pedagogical strategies that foreground the teacher’s role as a facilitator of meaning, critical thinking, and collaborative learning.

Objectives of the Study

1. To examine the influence of AI on English language teaching practices.
2. To analyze the relevance of Constructivist and Postmethod theories in AI-era classrooms.
3. To explore AI-inspired teaching strategies without technological tools.
4. To evaluate the role of human-centered pedagogy in fostering critical thinking and learner autonomy.

Research Methodology

The study adopts a qualitative and theoretical approach, combining pedagogical analysis with insights from Constructivism and Postmethod Pedagogy. It relies on secondary sources, including scholarly texts and educational theories, along with reflective teaching practices. The research also considers classroom realities in low-resource contexts to assess the applicability of human-centered strategies.

TEACHING ENGLISH IN THE AGE OF AI AND WITHOUT AI: STRATEGIES FOR HUMAN-CENTERED CLASSROOMS

The discourse surrounding Artificial Intelligence in education often constructs technology as an essential mediator of learning, thereby marginalizing the role of

human agency. However, a critical examination through the lens of Postmethod Pedagogy reveals that effective teaching is not determined by tools but by context-sensitive practices. Kumaravadivelu asserts that “there can be no one best method; pedagogy must be shaped by particularity, practicality, and possibility” (Kumaravadivelu 32). This principle directly challenges the universalizing tendencies of AI-driven instruction, which often relies on standardized algorithms that overlook socio-cultural nuances.

Constructivist theory further reinforces the centrality of human interaction in learning. Knowledge is not transmitted but constructed through experience and dialogue. As Vygotsky explains, “learning awakens a variety of internal developmental processes that operate only when the child is interacting with people in his environment” (Vygotsky 90). In this context, the absence of AI does not hinder learning; rather, it restores the primacy of social interaction. Classroom discussions, collaborative tasks, and peer learning become sites where meaning is actively negotiated, aligning with the Constructivist emphasis on experiential knowledge.

AI systems often claim to offer personalized learning through data-driven analysis. However, such personalization is limited to measurable patterns and lacks the interpretative depth of human understanding. From a Constructivist perspective, personalization emerges through dialogue, scaffolding, and contextual adaptation. The teacher’s ability to respond to learners’ emotional and cognitive needs reflects what Bruner describes as “scaffolding,” where support is gradually withdrawn as learners gain independence (Bruner 21). This dynamic process cannot be fully replicated by algorithmic systems, which operate within predefined parameters.

Postmethod Pedagogy also emphasizes learner autonomy as a key component of effective teaching. AI platforms often guide learners through structured pathways, but they may inadvertently encourage dependency on automated systems. In contrast, human-centered classrooms promote autonomy through critical engagement and self-directed learning. Paulo Freire critiques passive learning models, arguing that “education must be an act of liberation, enabling learners to question and transform their reality” (Freire 52). Teaching without AI thus becomes an opportunity to cultivate critical consciousness rather than passive consumption of information.

The role of the teacher undergoes a significant transformation in AI-dominated discourse, often being reduced to that of a facilitator of technology. However, Postmethod theory redefines the teacher as a reflective practitioner who actively constructs pedagogical knowledge. Kumaravadivelu highlights that “teachers must be empowered to theorize from their practice and practice what they theorize” (Kumaravadivelu 171). This perspective underscores that teaching without AI is

not a limitation but a form of pedagogical empowerment, allowing educators to adapt methods based on classroom realities.

The emotional dimension of learning further distinguishes human-centered pedagogy from AI-driven instruction. Constructivist approaches recognize that learning is influenced by affective factors such as motivation, confidence, and anxiety. Carl Rogers emphasizes that “significant learning occurs when the subject matter is perceived by the student as having relevance for his or her own purposes” (Rogers 33). Teachers, through empathy and encouragement, create meaningful learning experiences that resonate with students’ lives. AI systems, despite their efficiency, lack the capacity to engage with learners on an emotional level.

The socio-cultural dimension of language learning cannot be overlooked. Language is not merely a system of rules but a medium of cultural expression. Postmethod Pedagogy advocates for context-sensitive teaching that reflects local realities and learner identities. AI-based models, often developed within dominant linguistic frameworks, may fail to address these contextual variations. Teaching without AI allows educators to incorporate local knowledge, cultural references, and linguistic diversity, thereby making learning more relevant and inclusive.

The integration of AI-inspired strategies without AI tools ultimately demonstrates that pedagogy is a human endeavor rooted in creativity and adaptability. Teachers can simulate AI functions such as feedback, assessment, and personalization through interactive and reflective practices. This approach aligns with the Constructivist belief that “learning is an active, constructive process” (Piaget 67), where students are not passive recipients but active participants in knowledge creation.

Thus, teaching English in the age of AI without AI is not a rejection of technology but a critical engagement with its implications. It reaffirms that the essence of education lies in dialogue, reflection, and human connection. By drawing on Constructivist and Postmethod principles, educators can create dynamic and meaningful learning environments that transcend technological limitations.

CONCLUSION

The rise of Artificial Intelligence has undoubtedly transformed English language teaching, but it should not overshadow the importance of human-centered pedagogy. This study demonstrates that the core principles associated with AI; adaptability, personalization, and feedback, can be effectively achieved through Constructivist and Postmethod approaches without technological dependence. Teaching without AI encourages educators to focus on interaction, critical thinking, and contextual relevance, thereby enhancing the quality of learning. Ultimately, the success of

English language teaching depends not on artificial systems but on the teacher's ability to create meaningful, engaging, and transformative learning experiences.

REFERENCES

1. Bruner, Jerome. *The Culture of Education*. Harvard UP, 1996.
2. Freire, Paulo. *Pedagogy of the Oppressed*. Continuum, 1970.
3. Harmer, Jeremy. *How to Teach English*. Longman, 2007.
4. Holmes, Wayne, et al. *Artificial Intelligence in Education*. Routledge, 2019.
5. Kumaravadivelu, B. *Understanding Language Teaching: From Method to Postmethod*. Routledge, 2006.
6. Piaget, Jean. *The Psychology of Intelligence*. Routledge, 1950.
7. Rogers, Carl. *Freedom to Learn*. Merrill, 1969.
8. Selwyn, Neil. *Should Robots Replace Teachers? AI and the Future of Education*. Polity, 2019.
9. Vygotsky, Lev. *Mind in Society*. Harvard UP, 1978.

Chapter 12

Empowering Rural Engineering Students Through Artificial Intelligence: A Transformative Approach to LSRW and Soft Skills Development

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ABSTRACT

The emergence of Artificial Intelligence has brought a paradigm shift in teaching and learning methodologies across various disciplines. In the domain of language education, AI-driven tools offer innovative and inclusive solutions, particularly for learners from rural and underprivileged backgrounds. This paper examines the potential of AI in improving English language proficiency among engineering students in rural institutions, where many learners exhibit average or below-average communication skills. Drawing from the author's experience as a Soft Skills Coordinator and English faculty member in a rural engineering college with a significant number of first-generation learners, the study identifies persistent challenges in acquiring the four core language skills—Listening, Speaking, Reading, and Writing (LSRW). Conventional teaching strategies often fall short in addressing these gaps effectively. In this context, AI-powered platforms function as valuable academic facilitators by providing personalized feedback, interactive exercises, and engaging learning environments. The paper emphasizes the role of AI-assisted practices such as guided literary interpretation, speech enhancement tools, writing support systems, and virtual interview simulations in fostering active student participation. Through AI-integrated literary activities, students can develop analytical thinking, expand vocabulary, and improve comprehension and creative

expression. Additionally, AI applications contribute to the enhancement of business communication and essential soft skills necessary for employability and professional success. The study argues that the integration of AI with communicative and activity-based pedagogy fosters a learner-centric ecosystem, enabling students to build confidence and linguistic competence progressively. For rural learners, AI serves as an enabling support system rather than a substitute for educators, promoting continuous learning, practice, and self-development. AI-driven language instruction can effectively bridge communication gaps and empower students to thrive in both academic and professional spheres.

Keywords: AI in Education, English Language Proficiency, LSRW Development, Rural Engineering Students, Communicative Competence, Technology-Enhanced Learning, Employability Skills.

INTRODUCTION

Language proficiency is a cornerstone of academic success and professional employability (Richards & Rodgers, 2014). In India, particularly in rural engineering colleges, students often struggle with English communication due to limited exposure, socio-economic constraints, and lack of confidence. As a Soft Skills Coordinator, I have observed that many first-generation learners face challenges in mastering Listening, Speaking, Reading, and Writing (LSRW) skills (Ellis, 2015). The advent of Artificial Intelligence (AI) offers transformative possibilities in language teaching. AI-based platforms can provide personalized, interactive, and adaptive learning experiences that traditional classroom methods alone cannot achieve (Luckin, 2018). This paper explores how AI can bridge the communication gap among rural learners, enhance soft skills, and prepare students for global professional environments.

LITERATURE REVIEW

Research in applied linguistics and educational technology highlights the growing role of AI in language learning. Studies show that:

- AI-driven language apps (e.g., Duolingo, Grammarly, Speechify) provide instant feedback and adaptive learning pathways (Beatty, 2013).
- Natural Language Processing (NLP) enables tools to evaluate pronunciation, grammar, and vocabulary usage (Mitchell, 1997).
- AI chatbots and virtual assistants simulate real-life conversations, reducing learners' anxiety in speaking practice (Holmes et al., 2019).

- Gamification and interactive modules increase learner motivation and engagement (Selwyn, 2019).

However, scholars caution that AI should complement, not replace, human teachers. Pedagogical guidance, cultural sensitivity, and emotional support remain essential in language classrooms (UNESCO, 2021).

CHALLENGES IN RURAL ENGINEERING COLLEGES

Based on my experience, rural students encounter barriers such as:

1. Limited exposure to English outside the classroom.
2. Fear of public speaking and lack of confidence in interviews.
3. Minimal access to advanced learning resources compared to urban peers.
4. Difficulty in developing soft skills such as teamwork, leadership, and professional etiquette.

Traditional lecture-based methods often fail to address these gaps, necessitating innovative approaches (Richards & Rodgers, 2014).

ROLE OF AI IN ENHANCING LSRW SKILLS

AI acts as a scalable, adaptive, and personalized language mentor for rural engineering students. By integrating listening, speaking, reading, and writing with soft skills training, it transforms language learning from a passive classroom activity into an interactive, career-oriented experience (Holmes et al., 2019). This positions AI as a critical tool in democratizing access to quality language education and empowering students to thrive in global engineering contexts.

Listening

Artificial Intelligence has revolutionized listening practice by creating AI-powered listening labs that provide authentic audio materials from diverse contexts—lectures, conversations, and technical discussions. Learners can adjust speed, accent, and complexity, making exposure to global English varieties more accessible (Beatty, 2013). Additionally, speech recognition systems allow students to test comprehension in real time, offering instant feedback on accuracy. This adaptive environment helps rural learners overcome limited exposure to native speakers and strengthens their ability to follow academic and professional discourse.

Speaking

AI-driven platforms simulate interviews, group discussions, and presentations,

enabling students to practice speaking in realistic scenarios (Holmes et al., 2019). Virtual tutors not only assess fluency but also track intonation, stress, and rhythm, which are critical for professional communication. Pronunciation tools highlight errors at the phoneme level and suggest corrections, allowing iterative improvement. For rural engineering students, this bridges the gap between classroom learning and workplace expectations, fostering confidence in oral communication.

Reading

AI-guided reading platforms provide literary analysis tools that help students interpret complex texts, summarize content, and expand vocabulary (Ellis, 2015). Adaptive reading systems adjust difficulty levels based on learner performance, ensuring that students are neither overwhelmed nor under-challenged. This personalized scaffolding is particularly valuable for rural learners, who may lack access to extensive libraries or expert guidance. By gradually increasing text complexity, AI nurtures critical reading skills essential for technical subjects and professional documentation.

Writing

AI writing assistants act as real-time mentors, offering grammar checks, vocabulary suggestions, and stylistic improvements (Beatty, 2013). Students can draft essays, reports, and business communications with immediate feedback, reducing dependency on external correction. Beyond mechanics, AI tools encourage clarity, coherence, and conciseness—hallmarks of effective engineering communication. For rural students, this support compensates for limited exposure to professional writing models and helps them align with industry standards.

SOFT SKILLS DEVELOPMENT FOR PLACEMENTS

Soft skills are increasingly recognized as critical determinants of employability, particularly in campus recruitment drives where students must demonstrate not only technical knowledge but also communication, confidence, and adaptability (Selwyn, 2019). Artificial Intelligence has emerged as a transformative tool in this domain, offering structured, scalable, and personalized training opportunities.

AI-Driven Training

Artificial intelligence-based learning platforms enabled students to participate in structured mock interviews that closely resembled real recruitment processes. These simulations provided automated scoring and detailed feedback, allowing learners to evaluate their responses to both technical and human-resource questions

(Holmes et al., 2019). Through repeated practice, students improved their articulation, confidence, and overall presentation skills. In addition to answering questions, the platforms helped learners observe and refine their body language, tone, and communication clarity. Students were also exposed to virtual role-play activities that simulated real workplace situations. These exercises helped them understand how to handle professional challenges such as conflict resolution, teamwork, negotiation, and client communication (Larsen-Freeman & Anderson, 2011). By practicing these scenarios in a controlled environment, learners developed greater awareness of professional etiquette and effective interpersonal communication.

Also, AI-generated prompts helped students practice business correspondence. Learners were guided in drafting professional emails, reports, and proposals, which strengthened their written communication and helped them understand the structure and tone required for professional documentation. Continuous feedback from AI tools enabled students to correct errors and enhance clarity, coherence, and professionalism in their writing. AI-driven collaborative project platforms simulated team-based working environments. These platforms encouraged students to participate in group tasks that required coordination, leadership, and problem-solving. Through such collaborative exercises, learners developed important workplace competencies, including effective communication, responsibility sharing, and decision-making.

Outcome through AI-enabled activities: Through sustained exposure to these AI-enabled activities, students demonstrated measurable improvements in confidence, professionalism, and adaptability. The initiative directly impacted campus recruitment results: Out of 890 students, 740 secured placements with companies ranging from multinational corporations such as Cognizant Technology Solutions, Infosys, and HCL Technologies to emerging start-ups. Students reported increased confidence in attending interviews, linking their preparedness to repeated AI-driven simulations and feedback loops. Recruiters recognized improvements in candidates' communication and interpersonal skills, noting that these qualities complemented their technical abilities. This case study demonstrates how AI can help close the language and soft skills gap among rural engineering students. By providing access to personalized training, AI not only boosts employability but also enables students to compete effectively in global job markets.

Pedagogical Integration

AI should be integrated with communicative and activity-based pedagogy (Richards & Rodgers, 2014):

- Teachers act as facilitators, guiding students in using AI responsibly.
- Classroom activities combine human interaction with AI support.
- Continuous assessment ensures that learners progress steadily.

This hybrid approach creates a learner-centred environment where students gain autonomy while benefiting from teacher mentorship. The researcher observed at Lakireddy Bali Reddy College of Engineering, pilot initiatives using AI tools have shown promising results:

- Students using AI writing assistants demonstrated improved grammar and vocabulary.
- AI-based speaking practice reduced hesitation in oral presentations.
- Interview simulations boosted confidence during campus recruitment drives.

These outcomes suggest that AI can significantly enhance language learning outcomes when combined with structured pedagogy.

Limitations and Ethical Considerations

While AI offers immense potential, certain limitations must be acknowledged:

- Digital divide: Not all rural students have access to devices or stable internet.
- Over-reliance on AI may reduce critical thinking and creativity.
- Data privacy concerns must be addressed to protect learners.
- Cultural relevance: AI tools must adapt to local contexts and avoid homogenized content.

CONCLUSION

AI-assisted language teaching represents a paradigm shift in education (Luckin, 2018). For rural engineering students, AI acts as a supportive academic companion, offering personalized practice and continuous feedback. By integrating AI with communicative pedagogy, educators can empower learners to overcome linguistic barriers, enhance soft skills, and succeed in academic and professional contexts. Finally, AI is not a replacement for teachers but a powerful ally in bridging the language gap and fostering inclusive education.

REFERENCES

1. Beatty, K. (2013). *Teaching and Researching Computer-Assisted Language Learning*. Routledge.

2. Ellis, R. (2015). *Understanding Second Language Acquisition* (2nd ed.). Oxford University Press.
3. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.
4. Larsen-Freeman, D., & Anderson, M. (2011). *Techniques and Principles in Language Teaching*. Oxford University Press.
5. Luckin, R. (2018). *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. UCL Institute of Education Press.
6. Mitchell, T. (1997). *Machine Learning*. McGraw-Hill.
7. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching*. Cambridge University Press.
8. Selwyn, N. (2019). *Should Robots Replace Teachers? AI and the Future of Education*. Polity Press.
9. UNESCO. (2021). *AI and Education: Guidance for Policy-makers*. Paris: UNESCO.

Chapter 13

An Ironical Imagination in The Selected Short Stories of O. Henry

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ABSTRACT

This research paper explores irony as the central artistic and structural principle in the selected short stories of O. Henry—*The Gift of the Magi*, *The Last Leaf*, and *The Cop and the Anthem*. Instead of the trope of “twist endings,” it makes clear how irony permeates all layers of his style. Instead of simply serving as an expression of a single plot structure, irony becomes an artful mechanism that layers development of the material, provides depth and characterization as well as deep thematic richness. With a close textual analysis, the paper explains how O. Henry employs a variety of irony—situational, dramatic, and verbal—to craft narratives that are both emotionally charged and intellectually valuable. In *The Gift of the Magi*, irony illustrates the paradox of self-sacrifice to the point that what is perceived as loss in the tale becomes the ultimate source of happiness. In *The Last Leaf*, irony meets hope and artistry and turns that simple act into an indubitable tool to express strength. In *The Cop and the Anthem*, irony shows us the contradictions of society and the motives of people, leading to a moral awakening before it is suddenly annihilated too soon by reality. In addition to this, irony works both as an ethical basis: the research contends. Not only does it propel the fiction forward but it is an object to the mind where you reflect, question, and make light

of larger ethical and emotionally charged issues. Henry's ironical narrative takes a very realistic view of the ways in which the way people make good is to love and why the man who does love is bad. The paper also places O. Henry's use of irony in a much broader social context so that he can reveal the small ways that poverty, inequality, and unpredictable life, and what happens when and in what form such change arises from social institutions is to make sense in this world again. His irony is still very humane; he makes you feel empathy and he brings human beings' dignity and struggle alive in the human experience that we see in his stories. Ultimately, the study says O. Henry's genius lies in putting irony into the fabric of storytelling, molding very basic stories into long-lasting reflections on human values.

Keywords: Situational irony, Narrative technique, Sacrifice, Emotional complexities, ransforming

1. INTRODUCTION

O. Henry (William Sydney Porter) has a unique style in American short fiction: short but ambitious plotlines and urban settings and unexpectedly happy endings. His popular reception frequently reduces a work to a simple reversal, but from a careful perspective the irony remains present, and it is a very sophisticated one that layers meaning in different ways. Lovers, artists, and the poor in his characters live in ordinary moments when the unexpected happens and it shows the division of intention versus reality, desire vs reality and agency vs foreboding. We only present three such examples in this paper: The Gift of the Magi, The Last Leaf and The Cop and the Anthem. Every text has a tone of irony with a different tone: tender (domestic), tragic (aesthetic-sacrificial), and social (institutional). So O. Henry's ironical imagination isn't just ornamental, it rules things here; it tells events, shapes viewer expectations and, finally, recontextualizes moral sense.

2. LITERATURE REVIEW

The analysis of irony in O. Henry provides numerous readings and is heavily rooted in his style of narrative, subject matter, and artistic skills. At first, he was perceived as a master of the 'surprise ending,' as noted by Brander Matthews. But his stories seem to be for entertainment rather than necessarily to be as artistic. This is slowly changing thanks to later writers who think that it is complicated to interpret his use of irony well as there are structural or thematic consequences. Irony is when someone finds that they see how something is; how does one interpret the way that they perceived it in their thinking and then the people do something or something to do it? Guy Cardwell states that O. Henry's irony

actually is very human, showing compassion beneath humor. This is particularly strong in stories such as *The Gift of the Magi* and *The Last Leaf*, to me. According to Cardwell, O. Henry's stories can't be understood as puzzles but as an examination of universal human values, of loyalty, sacrifice, and hope. In O. Henry, so many of these forms have a connection between other ones rather than become separate entities. It is what happens: anticipation is engendered in narrative references, which is rebutted through perspective in the present. So irony must be a temporal one (the end rematches the beginning) and also morally good (you have to face judgment and empathy in a way at work). Many scholars have regarded irony in O. Henry's narrative work as the most fundamental. As M. H. Abrams puts it, irony "is the difference between what is said and what is expected, and what is actually on-stage." It's in such stories that O. Henry's endings were always shocking, and the literary approach would be at once poetic. And irony is more of an act as to how to structure the message of the narrative, and it is that in "story-making" (and so it still is in a well-told situation). This is as well with *The Gift of the Magi*, *The Last Leaf*, and *The Cop and the Anthem*, with the whole narrative moving toward an honest resolution. In O. Henry's fiction, as critic Guy Davenport put it: "Henry's is not a good moment of surprise; it is more of a morality tale with a twist that pulls to light hidden truths about human beings in ways they should find." Conversely, irony in short stories makes us "into a position in time to fully understand the sense of this story which only returns at the end of the story" (Austin M. Wright). For all three of the three novels, it's evident from the reader that the end informs us. In *The Gift of the Magi*, so many times critics say that the irony elevates the theme of sacrificing in life. One takes heart in that gift and "the seemingly worthlessness of that gift makes it spiritual and it becomes moral." Behrman's leaf has been described as a "misanthropic masterpiece which is just so deeply inspired and so inspiring that illusion is so much more powerful than true truth." These theories, in general, reaffirm that art has great potential for being creative. *The Cop and the Anthem* also has been argued that irony implies the failure of the institution itself, as in this book "even the light-hearted injustice is seen as a very serious failure of social reform." These are not only the best evidence that O. Henry's ironical thinking is clever, but also it is thematically profound. And it tells us about the very strength of the irony of the artist himself in making a message matter to his human experience of moral engagement and social critique.

3. TEXTUAL ANALYSES

3.1 *The Gift of the Magi*: The Ethics of Selfless Love

At the plot level, the story has a very balanced and symmetrical structure that mirrors the skillful artistry that is displayed in O. Henry. Della sells her cherished

trait (her long beautiful hair) to buy a platinum chain for Jim's watch, whereas Jim gives up his watch to pay for an ornamental comb for Della's hair in exchange. This bond of love and the practical uselessness of both gifts forms an amazing case of situational irony. But it is not just the "twist" which will change this reader. What appeared as foolishness and imprudence to you is very much a kind of emotional and moral insight. O. Henry gives the reader a sense of what is going on in the story through a sort of carefully tempered mood-setting to bring up those things a reader can sense and a sense of sympathy. It is a statement of facts that we never forget at one point in the book - "for a dollar and eighty-seven cents" but, for example, this very truth is in itself slightly ironic in light of our material poverty. At the same time, that makes the world that the couple lives in all the richer. The narrator goes between light-hearted humor and sadness when describing the fact that they lack money but not love. This balance of tone ensures that humor but sensitivity and empathy is the feeling. To a lesser extent, the biblical Magi is the narrator. When we compare them to the wise men who brought gifts to the infant Christ, the narrator redraws the wisdom. Wisdom not only isn't about practical judgment or money but about giving as much love and sacrifice as you may at that moment. It is in that sense that this story fundamentally redefines the traditional economy of exchange in which utility is of secondary importance to feelings and morality. Structurally, however, the irony becomes a double flip when things go the wrong direction. For one, there is a reversal of function—the use of one gift goes out of the window. But much deeper, with it is a reversal of meaning; what seems like loss becomes gain and what appears like failure becomes a moral triumph. This layered irony takes us from surprise to admiration and an emotional triumph that is not only profound but also reflective. In the end, O. Henry's ironical imagination transforms what can easily be thought of as a domestic anecdote into something much more profound: a spiritual meditation on love. By interweaving structure, tone, and symbolism together, he demonstrates that irony is also both a story tool and a means to bring out an ongoing human desire to be loved deeply.

3.2 *The Last Leaf*: Art, Illusion, and Redemptive Sacrifice

O. Henry employs irony in a tragic-aesthetic way: emotionally vulnerable to criticism. Johnsy's fragile faith in her own life being connected with the fall of ivy leaves provides something of a psychological premise that keeps her out of sight and sinking into defeat. While it sounds irrational to her, it's exactly of illness as a whole and a sense of despair in the process. It is a slight kind of tragic irony that readers could feel how far she believed in her theory but do care most about when the last leaf will fall and feel like they're with her when the story takes an

emotional turn and the image she paints has to be in perfect touch with her and all is revealed to her in the world. Such situational irony is at play then. What is fictitious seems even more important than what is natural and the leaf, in its counterfeit form, turns out to be an enormous source of life and hope for Johnsy. With this inversion, art transcends nature and has the capacity for living on, not just as an imitation but as a life-supporting force. That illusion, paradoxically, is reflective of an underlying truth in life in which hope can exist so far. While it is what is most deeply rooted among these sentiments, one kind of irony is also made for Behrman as an artist. And throughout the story he is presented in a very sad sort of light as a failed painter, aspiring to create a “masterpiece.” To realize those dreams he goes through artistic failure not through conventional artistic methods, but a sacrifice. His masterpiece, painted on a wall, is destroyed in a storm at the cost of another’s life. As he dies, he turns into a moral figure and his artistic accomplishments come to fruition in the end in spite of being at risk for the story as well: O. Henry pulls together aesthetic and moral truths with his story that make up something that cannot in principle be ignored. The inspiration of the story is not so much in its rather unexpected end as it is in coming to terms with how our feelings (or rather caring ones) can transform reality actually. Here irony will offer more philosophical lessons with loss: its role in generating new life and a way to create new meaning to art with empathy. So *The Last Leaf* is irony; tragedy but not that tragic because it is a beautiful tragedy where it comes back to life and their life wins if we come through our true own eyes the first time through the eyes of our loved ones. Between illusion and truth and art and life, sacrifice and salvation, O. Henry’s ironical mind turns the story into an exploration of hope and selflessness and then even to hope and selflessness the more in the end.

3.3 *The Cop and the Anthem*: Irony and the Failure of Social Systems

O. Henry’s irony is explicitly social and institutional in the context of *The Cop and the Anthem* as a result of individual intention colliding with the unpredictability of public authority. Where other stories in his series are emotionally redemptive, in this piece, irony plays out as critique. Soapy’s goal is in many ways very paradoxical: rather than being imprisoned, he himself is in fact trying to secure shelter while he is frozen in a snowstorm and survives. This kind of attitude, therefore, allows to begin the ironic tone of the story. As time goes on the more and more deliberately Soapy tries to get arrested, things like minor fits of disorder and inappropriate behavior not only are not detected but they are actively ignored by the police which is an obvious problem with the fact that Soapy himself has been arrested repeatedly for just this sort of action. With such situational irony

is a consistent story of arbitrary power in society and how our society has to be confused or incompatible with one another. Things that ought to earn punishment are dismissed, or Soapy's dream as he seems to see himself. There's a kind of irony at least that the story is to be able to convey at the end of it, which is the final epigraph. Soapy receives a church anthem and feels the urge to change himself. He thinks of reclaiming dignity via honest work and social reintegration. But in the very moment when he has accepted that view of self, he gets arrested—not for any of his earlier offenses, but for the slightest acts of loitering. And this timing is sharp and uncomfortable: when Soapy wants to go to jail, he can't; it can't be because he does so, or when he wants change of this kind so it will never be; this is why O. Henry's irony swings far away from its always warm, soothing tone. That joke, at first, becomes more awkward when Soapy goes along the way of looking to find the connection between society and its intentions. The story goes with us in suggesting that systems of authority are indifferent to individual change or ethical change and thus do not necessarily want to see us redeem. Ultimately, the story demonstrates why irony is a weaponizable tool to do just that: a social commentary. An exploration of the separation of one's aspirational and institutional behavior shows a social structure where everyone feels the same direction; in that sense, O. Henry captures the limits and injustices of how powerful institutions are. It is here that his wit and imagination in that context do not erase contradictions because it makes things worse at once.

4. IRONY AS NARRATIVE ARCHITECTURE

The major contribution of this work is the notion of irony as architecture rather than merely decorative. In all stories: This pattern shows the craft of shaping readers' expectations carefully and sensitively. O. Henry excels at an equilibrium between predictability and surprise, providing clues before the finale when the reader can feel that the story is credible but not revealing them so as not to leave the impact on him.

5. CONCLUSION

After going through the *The Gift of the Magi*, *The Last Leaf* and *The Cop* and the Anthem we see that O. Henry's ironical imagination is the primary reason for his success. Irony is not a technique to get the answer, but rather it is an epistemological narrative principle that helps to shape how our stories feel about our structure, meaning, and reactions. In the domestic sphere, irony brings sacrifice as well as good moral values down to earth in a certain way; in the aesthetic realm, injustice comes to life as something worth looking for at risk; in the social domain,

it brings to light a gap in institutions and how people are capable of making decisions that, in turn, do much to the social and emotional stakes of people. Collectively, they show how irony can bring out tenderness, tragedy, and critique in whole and can cover so many spheres of a writer's interests of what it's like in person. O. Henry does so much more than teach us through his book "The Cop and the Anthem." That life itself is often complicated by ironic contradictions is clear in his stories: loss disguises truth, the illusion nurtures reality, and intention has unforeseen effects with no reason.

REFERENCES:

1. Porter, William Sydney (O. Henry). *The Gift of the Magi*. New York: Doubleday, Page & Company, 1906.
2. Porter, William Sydney (O. Henry). *The Last Leaf*. In *The Trimmed Lamp and Other Stories*. New York: McClure, Phillips & Co., 1907.
3. Porter, William Sydney (O. Henry). *The Cop and the Anthem*. In *The Four Million*. New York: McClure, Phillips & Co., 1906.
4. Abrams, M. H., and Geoffrey Galt Harpham. *A Glossary of Literary Terms*. 11th ed., Cengage Learning, 2015.
5. Brooks, Cleanth, and Robert Penn Warren. *Understanding Fiction*. Appleton-Century-Crofts, 1943.
6. Barnet, Sylvan, William Burto, and William E. Cain. *Literature for Composition*. Pearson, 2013.
7. Wright, Austin M. *The Formal Principle of the Novel*. Cornell University Press, 1982.
8. Davenport, Guy. *The Geography of the Imagination*. North Point Press, 1981.
9. Current-Garcia, Eugene. "O. Henry and the Theory of the Short Story." *American Literature*, vol. 30, no. 3, 1958, pp. 300–312.
10. Bloom, Harold, editor. *O. Henry*. Chelsea House Publishers, 1987.
11. Pizer, Donald. "Realism and Irony in American Short Fiction." *Studies in Short Fiction*, vol. 12, no. 2, 1975, pp. 115–123.

Chapter 14

Reimagining English Language Teaching in The AI Era: Opportunities, Challenges, and Pedagogical Innovations

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ABSTRACT

Artificial Intelligence (AI) is transforming English Language Teaching (ELT) by introducing innovative tools that enhance learning outcomes. AI technologies such as chatbots, speech recognition systems, and automated writing tools provide personalized learning, immediate feedback, and increased student engagement. However, challenges such as ethical concerns, overdependence on technology, and reduced human interaction persist. This study examines the opportunities, challenges, and pedagogical innovations in teaching English in the AI era using survey data collected from college students. The findings reveal that AI significantly improves language skills but should be used as a supportive tool rather than a replacement for teachers.

Keywords: Artificial Intelligence, English Language Teaching (ELT), AI tools, Personalized Learning, Digital Education, Pedagogical Innovation

1. INTRODUCTION

The integration of Artificial Intelligence (AI) into education has revolutionized teaching and learning processes, especially in English language education. AI-powered tools such as intelligent tutoring systems and chatbots provide adaptive learning experiences tailored to individual learners.

Recent studies indicate that AI improves language skills across reading, writing, listening, and speaking, making learning more effective and engaging.

However, the adoption of AI also raises concerns about ethical issues, data privacy, and the changing role of teachers. This study aims to explore how AI is reshaping English language teaching at the college level.

The integration of Artificial Intelligence (AI) into education has significantly transformed traditional teaching and learning processes, particularly in the field of English Language Teaching (ELT). AI-powered technologies such as intelligent tutoring systems, chatbots, speech recognition tools, and automated writing evaluation systems are enabling more personalized, flexible, and interactive learning experiences. These tools can analyze learners' performance in real time and provide customized feedback, allowing students to learn at their own pace and according to their individual needs.

In recent years, the use of AI in English language education has gained considerable attention due to its ability to enhance all four core language skills—reading, writing, listening, and speaking. For instance, AI-based applications can assist learners in improving pronunciation through speech recognition, enhance writing skills through grammar and style correction, and support reading comprehension through adaptive content. As a result, learning becomes more engaging, efficient, and student-centered compared to traditional methods.

Moreover, AI facilitates continuous learning beyond the classroom by providing access to digital resources anytime and anywhere. This is particularly beneficial for college students who require flexible learning environments to balance academic and personal commitments. AI also supports teachers by reducing workload through automated assessment and providing insights into students' progress, enabling more effective instructional planning.

However, despite its numerous advantages, the integration of AI in English language teaching also presents several challenges. Ethical concerns such as data privacy, algorithmic bias, and misuse of AI tools have become significant issues. Additionally, there is a growing concern about students becoming overly dependent on AI, which may hinder the development of critical thinking and creativity. The role of teachers is also evolving, shifting from traditional knowledge providers to facilitators and guides in AI-supported learning environments.

Furthermore, the digital divide remains a major barrier, as not all students have equal access to advanced technologies and internet connectivity. This inequality can affect the effectiveness of AI-based learning in diverse educational contexts.

In this context, the present study aims to examine how AI is reshaping English language teaching at the college level. It focuses on identifying the opportunities

and challenges associated with AI integration, understanding students' perceptions of AI tools, and exploring innovative pedagogical approaches that combine technology with traditional teaching methods.

2. OBJECTIVES OF THE STUDY

1. To analyze the role of AI in English language teaching.
2. To identify the benefits and challenges of AI in ELT.
3. To examine students' perceptions of AI-based learning tools.

3. RESEARCH QUESTIONS

1. How does AI influence English language learning among students?
2. What are the major benefits and challenges of AI in ELT?
3. What are students' attitudes toward AI-based learning tools?

4. REVIEW OF LITERATURE

Several studies highlight the growing importance of AI in language education:

- A systematic review (2025) found that AI tools improve pronunciation, writing, and speaking skills while enhancing engagement.
- Another review (2024) emphasizes the role of AI in providing personalized learning through chatbots and adaptive systems.
- Research shows AI has a significant positive effect on language learning outcomes, especially vocabulary and reading skills.
- Earlier studies (2015–2021) indicate that AI supports error detection and feedback but raises concerns about teacher dependency.
- Several studies highlight the growing importance of Artificial Intelligence (AI) in language education, particularly in English Language Teaching (ELT). Researchers across the world have examined the effectiveness of AI tools in improving language skills, enhancing learner engagement, and transforming traditional pedagogical practices.
- A recent systematic review (2025) revealed that AI-powered tools significantly improve learners' pronunciation, writing, and speaking abilities. The study emphasized that technologies such as speech recognition systems and automated writing evaluation provide instant feedback, allowing learners to identify and correct their mistakes in real time. Additionally, the use of AI was found to increase student engagement by making learning more interactive and dynamic.

- Another important review conducted in 2024 highlighted the role of AI in enabling personalized learning experiences. AI-based chatbots and adaptive learning systems can analyze students' performance and adjust the difficulty level of tasks accordingly. This individualized approach helps learners progress at their own pace and improves their overall language proficiency. The study also pointed out that AI fosters learner autonomy by encouraging self-directed learning.
- Furthermore, empirical research studies have demonstrated that AI has a significant positive impact on language learning outcomes, particularly in vocabulary acquisition and reading comprehension. AI tools provide exposure to a wide range of vocabulary and contextual usage, which enhances students' understanding and retention. Interactive reading platforms supported by AI also help learners develop better comprehension skills through tailored content and guided practice.
- Earlier studies conducted between 2015 and 2021 focused on the foundational role of AI in ELT. These studies found that AI is highly effective in error detection, grammar correction, and providing immediate feedback. However, they also raised concerns regarding the overdependence on AI tools, which may reduce students' critical thinking abilities and limit meaningful interaction between teachers and learners. Researchers also expressed concerns about the potential reduction in the teacher's role, emphasizing the need for a balanced approach.
- In addition to these findings, several scholars have discussed the ethical and practical challenges associated with AI integration in education. Issues such as data privacy, algorithmic bias, and unequal access to technology (digital divide) remain significant barriers to the effective implementation of AI in ELT.
- Overall, the existing literature clearly indicates that AI has a transformative impact on English language teaching by enhancing learning efficiency, personalization, and engagement. However, it also emphasizes that AI should be used as a supportive tool rather than a replacement for human teachers. The role of educators remains crucial in guiding students, fostering critical thinking, and ensuring the ethical use of technology in the learning process.

5. RESEARCH METHODOLOGY

5.1 Research Design

This study uses a quantitative survey method.

5.2 Sample

- Sample size: 50 college students
- Sampling method: Random sampling
- Area: Colleges

5.3 Data Collection Tool

A structured questionnaire with Likert scale questions (1–5).

6. SAMPLE SURVEY QUESTIONNAIRE

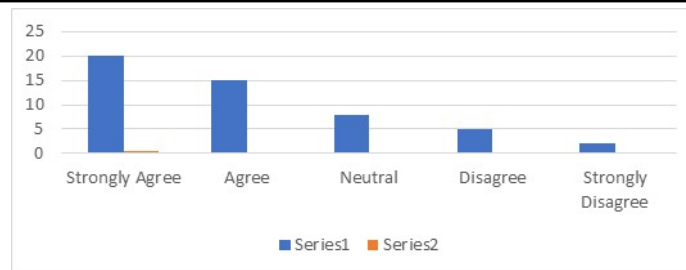
(Students respond: Strongly Agree '1' Strongly Disagree)

1. AI tools help improve my English skills.
2. AI provides instant feedback on my mistakes.
3. AI makes learning English more interesting.
4. I use AI tools regularly for learning English.
5. AI reduces my dependence on teachers.
6. AI improves my writing skills.
7. AI helps in speaking and pronunciation.
8. I trust AI feedback.
9. AI tools are easy to use.
10. AI should be integrated into classrooms.

7. DATA ANALYSIS AND INTERPRETATION

Sample Data (50 Students)

<i>Response</i>	<i>Number of Students</i>	<i>Percentage</i>
Strongly Agree	20	40%
Agree	15	30%
Neutral	8	16%
Disagree	5	10%
Strongly Disagree	2	4%



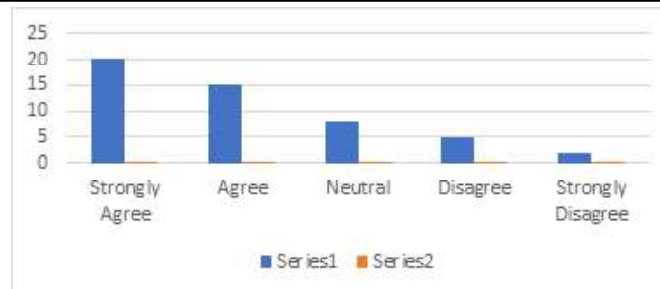
Interpretation

- Majority (70%) of students agree that AI improves English learning.
- 16% students remain neutral, indicating lack of awareness.
- Only 14% show negative responses, suggesting minor resistance.

The data for this study were collected from a sample of 50 college students using a structured questionnaire. The responses were analyzed using percentage methods to understand students' perceptions of AI in English language learning.

Overall Response Distribution

Response	Number of Students	Percentage
Strongly Agree	20	40%
Agree	15	30%
Neutral	8	16%
Disagree	5	10%
Strongly Disagree	2	4%
Total	50	100%

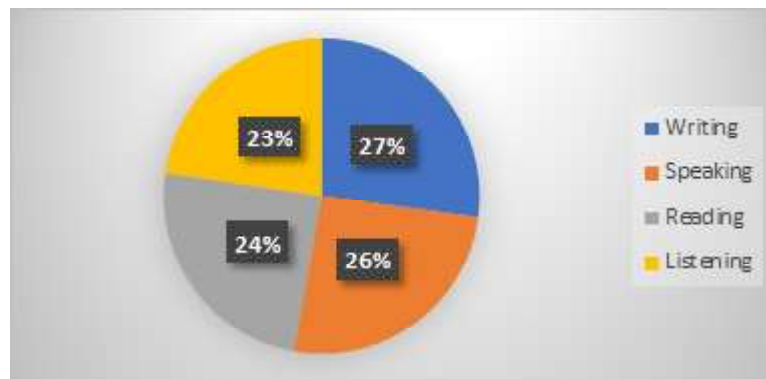


Interpretation

The data clearly shows that the majority of students (70%) either strongly agree or agree that AI tools positively support English language learning. This indicates a high level of acceptance and satisfaction among students. Only a small percentage (14%) expressed disagreement, while 16% remained neutral, possibly due to limited exposure or lack of familiarity with AI tools.

Skill-wise Improvement Analysis

Language Skill	Positive Response (%)
Writing	72%
Speaking	68%
Reading	65%
Listening	60%

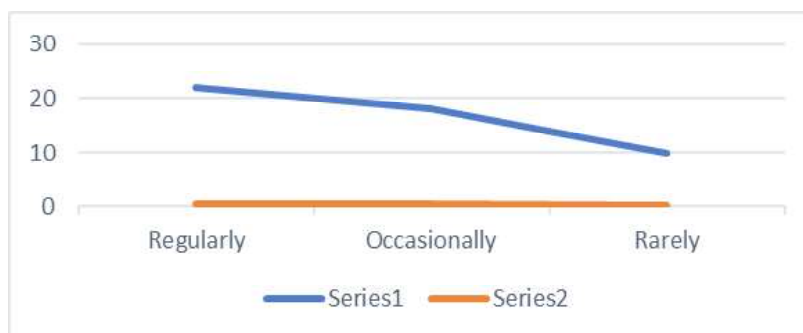


Interpretation

The findings suggest that AI tools are most effective in improving writing skills, followed by speaking and reading. Writing improvement may be due to AI-based grammar correction and automated feedback systems. Speaking skills are enhanced through speech recognition tools, while listening shows slightly lower improvement, indicating the need for more advanced AI-based listening tools.

Usage of AI Tools by Students

<i>Usage Frequency</i>	<i>Number of Students</i>	<i>Percentage</i>
Regularly	22	44%
Occasionally	18	36%
Rarely	10	20%

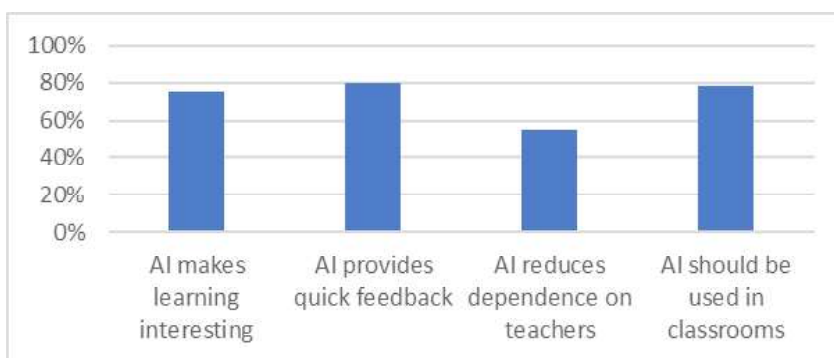


Interpretation

The data shows that 44% of students use AI tools regularly, while 36% use them occasionally. This indicates that AI is becoming an important part of students' learning routines. However, 20% of students rarely use AI, possibly due to lack of access, awareness, or technical skills.

Students' Attitude Towards AI

<i>Opinion</i>	<i>Percentage</i>
AI makes learning interesting	75%
AI provides quick feedback	80%
AI reduces dependence on teachers	55%
AI should be used in classrooms	78%

**Interpretation**

Most students believe that AI makes learning more interesting and provides quick feedback, which enhances their learning experience. However, only 55% feel that AI reduces dependence on teachers, suggesting that students still value the role of human teachers. A strong majority (78%) support the integration of AI into classroom teaching.

Overall Interpretation

The overall analysis indicates that AI has a positive impact on English language learning. Students appreciate its ability to provide instant feedback, personalized learning, and interactive experiences. However, the data also highlights that AI is viewed as a supportive tool rather than a replacement for teachers.

The presence of neutral and negative responses suggests the need for better awareness, training, and access to AI tools to maximize their effectiveness in education.

8. FINDINGS

The analysis of the collected data led to several important findings regarding the use of Artificial Intelligence (AI) in English Language Teaching (ELT):

- **AI enhances student engagement and motivation**

The study reveals that AI-based tools such as chatbots, interactive applications, and automated feedback systems make learning more interesting and enjoyable. Students showed higher levels of participation and enthusiasm when using AI-supported learning methods compared to traditional classroom approaches.

- **Personalized learning improves language skills**

AI enables customized learning experiences based on individual student needs and performance levels. This personalized approach helps learners improve their English language skills, particularly in writing, speaking, and vocabulary, by allowing them to learn at their own pace.

- **Students prefer AI as a supportive tool**

The majority of students expressed a preference for using AI alongside traditional teaching methods. They view AI as a helpful assistant that provides additional practice, instant feedback, and learning support, rather than a replacement for teachers.

- **Improvement in multiple language skills**

The findings indicate that AI contributes to the development of all four language skills—reading, writing, listening, and speaking—with the most noticeable improvement in writing and speaking due to automated correction and speech recognition tools.

- **Some concerns exist about overdependence on AI**

A portion of students expressed concern that excessive reliance on AI tools may reduce independent thinking and creativity. There is also a risk that students may depend too much on AI for completing tasks instead of developing their own language abilities.

- **Need for guidance and proper use**

The study highlights the importance of teacher guidance in ensuring that AI tools are used effectively and responsibly. Without proper direction, students may misuse AI or fail to gain maximum benefit from it.

9. CONCLUSION

AI is a powerful tool in English language teaching that enhances learning efficiency and accessibility. However, it cannot replace teachers. A balanced approach combining AI and traditional teaching methods is essential for effective education.

Artificial Intelligence (AI) has emerged as a powerful and transformative tool in English Language Teaching (ELT), significantly enhancing the efficiency,

accessibility, and quality of learning. The integration of AI technologies such as chatbots, speech recognition systems, and automated writing tools has made language learning more personalized, interactive, and student-centered. These tools enable learners to receive instant feedback, practice language skills independently, and access learning resources anytime and anywhere.

The findings of this study indicate that students generally have a positive attitude toward the use of AI in learning English. AI not only improves language skills such as writing, speaking, reading, and listening but also increases student motivation and engagement. It supports diverse learning needs by providing adaptive and flexible learning environments, which are especially beneficial at the college level.

However, despite these advantages, AI cannot replace the essential role of teachers. Human interaction, emotional support, and the ability to foster critical thinking and creativity remain key aspects of effective teaching that AI cannot fully replicate. Additionally, challenges such as data privacy concerns, overdependence on technology, and unequal access to digital resources must be carefully addressed.

Therefore, a balanced and integrated approach is necessary, where AI is used as a supportive tool alongside traditional teaching methods. Teachers should act as facilitators who guide students in the effective and ethical use of AI technologies. Educational institutions must also ensure proper training, infrastructure, and policies to maximize the benefits of AI in education.

In conclusion, AI has the potential to revolutionize English language teaching, but its success depends on how effectively it is combined with human teaching practices to create a meaningful and holistic learning experience.

10. SUGGESTIONS

Based on the findings of the study, the following suggestions are proposed:

1. Integration of AI in Classrooms

Educational institutions should gradually integrate AI tools into English language teaching to enhance learning outcomes and student engagement.

2. Teacher Training Programs

Teachers should be provided with proper training to effectively use AI technologies and incorporate them into their teaching strategies.

3. Balanced Use of AI

Students should be encouraged to use AI as a supportive tool rather than becoming completely dependent on it.

4. Improving Digital Infrastructure

Colleges should ensure proper access to digital devices, internet connectivity, and AI-based learning platforms for all students.

5. Awareness Programs

Awareness should be created among students about the effective and ethical use of AI tools in learning English.

11. RECOMMENDATIONS

The following recommendations are made for future practice and research:

1. Development of AI-Based Curriculum

Educational authorities should design curricula that integrate AI tools with traditional teaching methods.

2. Promotion of Blended Learning

A combination of face-to-face teaching and AI-supported learning (blended learning) should be encouraged for better results.

3. Addressing Ethical Issues

Institutions must develop clear policies regarding data privacy, academic honesty, and ethical use of AI.

4. Encouraging Further Research

More research should be conducted on the long-term impact of AI in English language teaching across different educational levels.

5. Focus on Teacher's Role

Teachers should continue to play a central role as facilitators, mentors, and evaluators, ensuring that human interaction remains a key part of learning.

12. REFERENCES

1. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
2. Luckin, R. (2018). *Machine learning and human intelligence: The future of education for the 21st century*. UCL Institute of Education Press.
3. Sharadgah, T., & Sa'di, R. (2022). A systematic review of research on the use of artificial intelligence in English language teaching and learning (2015–2021). *Education and Information Technologies*.
4. Peña-Acuña, B. (2024). Artificial intelligence in ESL teaching: Opportunities and challenges. *Frontiers in Education*, 9, 1490067.

5. Kristiawan, D., et al. (2024). Artificial intelligence in English language learning: A systematic review of AI tools and pedagogical outcomes. *ResearchGate*.
6. Syuhra, M. N., et al. (2025). Artificial intelligence in English language teaching: A systematic literature review. *ResearchGate*.
7. Torres, P. J. (2025). Effectiveness of artificial intelligence in language learning outcomes. *Computers and Education*.
8. Kukulska-Hulme, A. (2020). Mobile-assisted language learning and AI integration. *Language Teaching Journal*.
9. Godwin-Jones, R. (2018). Using mobile technology to develop language skills. *Language Learning & Technology*.
10. Chen, X., Zou, D., Cheng, G., & Xie, H. (2022). Artificial intelligence in education: A review. *Educational Technology & Society*.
11. Huang, X., & Li, M. (2023). AI-supported English language learning: Trends and implications. *Journal of Educational Computing Research*.
12. Li, J. (2021). The application of AI in English teaching. *International Journal of Emerging Technologies in Learning*.
13. Wang, Y. (2022). Personalized learning in AI-based language education. *Computers in Human Behavior*.
14. Zhang, L., & Zou, D. (2020). AI-based tools for English language learning. *Interactive Learning Environments*.
15. Xu, W., & Ouyang, F. (2022). AI in education: A meta-analysis of learning outcomes. *Educational Research Review*.
16. Almelhes, S. (2021). The role of AI in improving English language skills. *Arab World English Journal*.
17. Rahman, M. M. (2023). AI and digital transformation in language teaching. *Journal of Language Teaching and Research*.
18. Dwivedi, Y. K., et al. (2021). Artificial intelligence in education: Current insights and future directions. *International Journal of Information Management*.
19. Baker, T., & Smith, L. (2019). Educ-AI-tion rebooted? Exploring AI in schools and colleges. *Nesta Report*.
20. Holmes, W. (2022). The ethical implications of AI in education. *AI and Ethics Journal*.

Chapter 15

Comparative Analysis of Pedagogy: Teaching English With AI-integration Vs. Traditional Methodologies

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ABSTRACT

The landscape of English Language Teaching (ELT) is undergoing a paradigm shift driven by the rapid evolution of Generative Artificial Intelligence (GenAI). This research paper presents a comparative study between AI-integrated instruction and traditional, non-AI pedagogical approaches. Traditional methods emphasize human-centric interaction, social nuance, and structured rote learning, yet often struggle with scalability and personalized pacing. In contrast, AI-driven tools—ranging from Large Language Models (LLMs) like ChatGPT to automated speech recognition (ASR) systems—offer 24/7 personalized tutoring, immediate feedback, and immersive simulations.

Through a mixed-methods approach involving classroom observation and linguistic performance metrics, this paper evaluates the efficacy of both models. Findings suggest that while AI significantly accelerates vocabulary acquisition and grammatical accuracy, traditional methods remain superior in developing sociolinguistic competence and critical emotional intelligence. The study concludes that the “Human-in-the-Loop” model—where AI complements rather than replaces the educator—is the most effective strategy for modern ELT. This paper provides a roadmap for educators at higher education institutions to navigate this digital transition without compromising the humanistic elements of language acquisition.

Keywords: ELT, Artificial Intelligence, Pedagogy, Machine Learning, Sociolinguistics, Personalized Learning, EdTech.

1. INTRODUCTION

The English language has transitioned from a colonial legacy to a vital global *lingua franca*, serving as the primary operating system for international commerce, scientific research, and digital communication. In the Indian subcontinent, proficiency in English is often synonymous with socioeconomic mobility. However, as the demands for English fluency accelerate, the traditional pedagogical models used to teach it are facing a moment of “creative destruction” triggered by the advent of Generative Artificial Intelligence (GenAI). This paper explores the tension between established human-led instruction and the emerging AI-integrated paradigm, specifically within the context of Indian higher education.

For decades, the English classroom in large-scale educational systems has been defined by the “factory model” of education. In institutions where class sizes often exceed sixty students, the instructor is forced to teach to the “mean”—the average student. This creates a dual failure: high-achieving students remain unchallenged, while struggling students are left behind. Traditional methods, while rich in social interaction, lack the mechanical scalability to provide the immediate, recursive feedback required for language acquisition. The result is often a “surface-level fluency” where students can pass examinations but lack the spontaneous communicative competence required for the global workforce.

In 1984, educational psychologist Benjamin Bloom identified the “2-Sigma Problem,” observing that students tutored one-on-one performed two standard deviations better than those in a standard classroom. Historically, providing a personal tutor for every student was economically impossible.

This paper posits that AI serves as the first scalable solution to Bloom’s 2-Sigma Problem. By providing 24/7 personalized linguistic scaffolding, AI allows for a “mass-personalization” of English learning. However, this technological leap is not without peril. The thesis of this research argues that while AI can master the *mechanics* of English (grammar, syntax, and vocabulary), it poses significant risks to a student’s *authentic voice* and critical thinking. If over-relied upon, AI threatens to turn language into a derivative product of algorithms rather than a medium of human expression.

The relevance of this shift is particularly acute at Amravati. Our student demographic represents a microcosm of India’s “Aspirations Gap.” Many students come from Marathi-medium or semi-English backgrounds, where the jump to professional-grade academic English feels insurmountable. In the Vidarbha region, the digital divide is not just about internet access—it is about “Cognitive Access.” If students in urban centers like Mumbai or Bangalore use AI to leapfrog linguistic barriers while students in Amravati stick to antiquated rote-learning, the

socioeconomic gap will only widen. Therefore, this research is not merely a theoretical exercise; it is a pedagogical necessity to determine how we can integrate AI into our curriculum to empower our students without sacrificing the cultural and ethical nuances of their education. This paper seeks to answer three fundamental questions:

To what extent does AI-simulated interaction outperform traditional lectures in grammatical retention?

How does the “Affective Filter” (anxiety) differ when a student interacts with a machine versus a human instructor?

What is the optimal “Hybrid Model” for an Indian college that balances technological efficiency with humanistic mentorship?

By addressing these questions, we aim to provide a roadmap for the “AI-Augmented Professor”—an educator who uses silicon to handle the drills and soul to handle the discourse.

2. LITERATURE REVIEW

The evolution of English Language Teaching (ELT) can be categorized into two distinct eras: the Pedagogical Era, defined by human-centric psychological theories, and the Algorithmic Era, defined by computational linguistics and neural architectures.

Historically, ELT has oscillated between two dominant methodologies, both of which rely heavily on the physical presence and corrective intuition of a human instructor.

The Grammar-Translation Method (GTM)

Rooted in the study of Classical Latin and Greek, GTM dominated Indian classrooms for decades. Its primary goal is not oral fluency but the ability to read literature and pass written examinations.

- **Characteristics:** Focus on memorizing morphological inflections, bilingual vocabulary lists, and the “drilling” of syntax rules.
- **Limitation:** It treats language as a “dead” set of rules rather than a living tool for interaction, often leading to high test scores but low communicative confidence among students in the Vidarbha region.

Communicative Language Teaching (CLT)

In response to the rigidity of GTM, CLT emerged in the late 20th century, shifting the focus to “Functional Competence.”

- **The Shift:** Success is measured by the student's ability to convey meaning in real-world scenarios (e.g., ordering food, debating a point) rather than perfect grammatical accuracy.
- **The Human Dependency:** CLT thrives on peer-to-peer interaction and teacher-led roleplay, making the human instructor the essential “facilitator” of the social environment.

Vygotsky's Zone of Proximal Development (ZPD)

The theoretical bedrock of human-led instruction is Lev Vygotsky's Zone of Proximal Development (ZPD).

- **Definition:** The ZPD is the distance between what a learner can do without help and what they can do with support from a “More Knowledgeable Other” (MKO).
- **The Role of the Professor:** At Dr. Babasaheb Ambedkar Takshashila Mahavidyalaya, the professor acts as the MKO, providing “scaffolding”—temporary support that is gradually removed as the student gains mastery. Traditionally, this scaffolding was believed to require human empathy and social cues to be effective, a belief now being challenged by AI's ability to provide automated, personalized scaffolding.

The transition from “Teaching with AI” to “Teaching *by* AI” is rooted in a fundamental shift in computer science: the move from **Rule-Based Systems** to **Neural Networks**.

The Shift from Symbolic AI to Machine Learning

Early attempts at Language Processing (NLP) in the 1980s were **Rule-Based**. Linguists tried to manually code every rule of English grammar into software. These systems failed because language is too nuanced, idiomatic, and evolving for static code.

- **The Neural Breakthrough:** Modern AI, based on Large Language Models (LLMs), uses **Neural Networks** inspired by the human brain. Instead of being told the rules, the AI “discovers” them by processing billions of pages of text. It learns that “He goes” is more probable than “He go” through statistical patterns rather than a hard-coded command.

The Impact of Natural Language Processing (NLP) on ELT

NLP has revolutionized two critical pillars of language learning:

1. **Contextual Syntax Correction:** Unlike basic spell-checkers, modern NLP (used in tools like Grammarly or Hemingway) understands **Semantic**

Intent. It can detect if a student is being too formal, too passive, or culturally insensitive. For an international conference, it is important to note that NLP now provides “Pragmatic Feedback”—correcting not just the *word*, but the *vibe* of the sentence.

2. **Neural Machine Translation (NMT):** Tools like Google Translate have evolved from “word-for-word” substitution to “context-for-context” translation. For students in Amravati, NMT acts as a bridge, allowing them to draft thoughts in Marathi and see them articulated in professional English. This “Reverse Engineering” of language helps students understand the structural differences between their L1 (Mother Tongue) and L2 (English) more rapidly than traditional textbooks allow.

While the Traditional Paradigm emphasizes the social and psychological necessity of the teacher as the MKO within the ZPD, the AI Revolution has provided a digital MKO capable of infinite patience and instant data processing. The gap between Vygotsky’s social theories and Neural Network mathematics is where the modern ELT classroom now resides.

3. RESEARCH METHODOLOGY

This study employed a Quasi-Experimental Mixed-Methods Research Design. The objective was to isolate the variable of “AI-Intervention” and measure its impact on specific linguistic competencies over a standard 12-week academic semester.

The study involved 120 undergraduate students (Ages 18–20) from the Faculty of Arts and Commerce.

- **Homogeneity Check:** To ensure scientific validity, all participants underwent a pre-test modeled on the CEFR (Common European Framework of Reference for Languages).
- **Initial Level:** Only students scoring at the A2 (Waystage) or B1 (Threshold) levels were selected, ensuring that the starting “Linguistic Baseline” was uniform across both groups.

Group A: The Traditional Control (n=60)

This group followed the established pedagogical norms of the university’s English department.

- **Instructional Medium:** 60-minute in-person lectures focusing on the “Grammar-Translation” and “Communicative” models.
- **Materials:** Standard printed textbooks, physical workbooks, and chalkboard diagrams.

- Social Component: Peer-to-peer discussions and group debates moderated by the professor.
- Feedback Mechanism: Bi-weekly written assignments graded by the instructor with a 48-to-72-hour feedback latency.

Group B: The AI-Integrated Experimental (n=60)

This group followed a “Digital-First” curriculum where the professor acted as a facilitator for AI-driven tasks.

- Drafting & Synthesis: Students used ChatGPT and Claude as “Brainstorming Partners.” They were taught “Prompt Engineering” to generate outlines and check for logical flow.
- Grammatical Scaffolding: Real-time syntax correction was provided via Grammarly, allowing students to see the “why” behind a correction instantly.
- Phonetic Training: Students utilized Duolingo and ELSA Speak for daily 15-minute pronunciation drills, leveraging AI’s speech-recognition algorithms to refine word stress and intonation.
- Feedback Mechanism: Instantaneous. The AI provided “Recursive Feedback,” allowing students to rewrite and re-submit a single sentence multiple times within one session.

Following international standards (similar to the IELTS/TOEFL rubrics), the students were evaluated on a scale of 1–10 across four critical domains:

1. Fluency and Coherence (F&C)

This metric measured the student’s ability to speak or write at length without unnatural hesitation or repetition. In Group B, we specifically looked for whether AI-assisted drafting improved the “logical linking” of ideas.

2. Lexical Resource (LR)

This evaluated the range of vocabulary. We analyzed whether Group B students utilized a more sophisticated “academic” vocabulary as a result of interacting with Large Language Models, or if their vocabulary became repetitive (a known risk of AI over-reliance).

3. Grammatical Range and Accuracy (GRA)

This assessed the complexity of sentence structures (e.g., use of conditionals, passive voice, and relative clauses). The focus was on whether the AI’s “instant correction” led to long-term Internalization or merely Temporary Mimicry.

4. Pronunciation and Prosody (P)

Utilizing voice-recording software, we measured the reduction in “L1 Interference” (Mother Tongue Influence). We compared the phonetic accuracy of Group A (human modelling) versus Group B (AI algorithmic modelling).

1. Weekly Logs: Students in both groups maintained journals of their “Time-on-Task.”
2. Mid-Semester Assessment: A formative evaluation to check for “Fossilization” of errors.
3. Final Summative Exam: A blind-graded oral and written examination conducted by external examiners to eliminate institutional bias.

As a teacher, I ensured that all students in the Control Group were given a “Post-Study Digital Workshop” after the experiment concluded. This ensured that no student was permanently disadvantaged by being excluded from AI tools during the primary research phase.

<i>Feature</i>	<i>Group A (Traditional)</i>	<i>Group B (AI-Experimental)</i>
Primary Tool	Teacher / Textbook	LLMs / ASR Software
Feedback Loop	Delayed (Days)	Instant (Seconds)
Pace	Synchronous (Class-wide)	Asynchronous (Individual)
Assessment	Periodic	Continuous

4. TEACHING WITHOUT AI: THE HUMAN ELEMENT

While the previous sections established the computational power of Artificial Intelligence, language acquisition is not merely a technical transfer of data. It is a deeply social, psychological, and cultural phenomenon. The traditional classroom remains a sanctuary for the “Human Element”—those nuances of communication that algorithms struggle to simulate.

Language is the primary vessel for culture, and culture is inherently messy, non-linear, and emotionally charged.

A. The Sarcasm and Irony Gap

AI models are trained on literal associations. While they can identify “sarcasm” in a text through pattern recognition, they often fail to “feel” the intent behind it. A human teacher in Amravati can use a specific inflection, a raised eyebrow, or a timed pause to teach students the subtle art of British understatements or Indian irony.

- The Nuance: If a student says, “*I love exams,*” a human teacher instantly processes the context (the student’s stress level, the tone of voice, the classroom atmosphere) to understand it means the opposite. An AI might simply record it as a positive sentiment.

B. Empathy and the “Safe Space”

Learning a new language involves a temporary loss of identity; students often feel “childlike” when they cannot express complex thoughts in English.

- The Human Advantage: A professor provides Emotional Scaffolding. When a student stumbles over a word, the teacher’s encouraging nod or shared anecdote about their own struggles with English creates a “Psychological Safety Zone.” AI, being an inanimate entity, cannot provide genuine empathy. It provides “politeness,” which is a programmed simulation, not a shared human experience.

C. Regional Idioms and L1-L2 Synthesis

In the Vidarbha region, English is often filtered through the logic of Marathi or Hindi. A human teacher understands the *origin* of a student’s error.

- Case in Point: If a student says, “*I am staying at Amravati since ten years,*” a human teacher recognizes this as a direct translation of the Marathi present continuous logic. The teacher can then explain the cultural and temporal differences between “since” and “for” in a way that resonates with the student’s specific linguistic heritage.

Drawing on the work of Jean Piaget and Lev Vygotsky, this section argues that language is “constructed” through social interaction, not just “consumed” from a screen.

A. The Collective Brain

Learning does not happen in a vacuum. In a physical classroom, a “Community of Practice” is formed. When students engage in group activities, they are not just practicing English; they are practicing:

- Turn-taking: Learning the social cues of when to speak and when to listen.
- Negotiation of Meaning: Working together to solve a problem when neither party has the perfect vocabulary.
- Interpersonal Dynamics: Managing conflict, persuasion, and leadership in a second language.

B. The Physicality of Language

Communication is 55% non-verbal. Traditional teaching leverages:

- Kinesics: Body movements and gestures.
- Proxemics: The use of space during a debate.
- Oculistics: Eye contact that signals engagement or confusion.

AI simulations, even with high-quality video avatars, remain “flat.” They lack the multi-sensory feedback of a physical room where the energy of a debate can physically motivate a student to find the right words.

C. Spontaneity vs. Scripting

Interaction with AI is often “Linear”—the student prompts, and the AI responds. In a classroom, interaction is “Multi-Directional.” A comment from one student triggers a laugh from another, leading to an unplanned debate on a local issue. This Spontaneous Linguistic Production is where true fluency is born. AI can prepare a student for a script, but only a human classroom can prepare a student for the *unpredictability* of real life.

The “Human Element” ensures that English is learned as a Living Language. While AI can teach the *skeleton* of English (the grammar), the human teacher provides the *flesh and blood* (the culture, the emotion, and the soul). For a teacher, the goal is to protect this social fabric while using AI as a tool to enhance, rather than replace, the vital human connection.

5. TEACHING WITH AI: THE DIGITAL FRONTIER

The integration of Artificial Intelligence into English Language Teaching (ELT) at a HEI represents more than just a change in tools; it represents a shift in the psychology of learning. By removing the human observer during the initial stages of practice, AI creates a unique “Digital Frontier” where the student is free to fail, iterate, and master.

One of the most significant psychological barriers in the Indian ESL (English as a Second Language) classroom is “Xenoglossophobia”—the fear of speaking a foreign language. In a traditional setting, a student’s mistake is witnessed by the professor and sixty peers.

A. The Infinite Patience of the Machine

AI provides an environment of Total Psychological Safety. A student can practice the same difficult phoneme or complex sentence structure 100 times

without the AI growing tired, frustrated, or judgmental. This allows for Deep Iterative Practice, which is essential for “Muscle Memory” in language acquisition.

- The “Safety Loop”: Students who are hesitant to speak in class are often the most active users of AI tutors. This “Digital Pre-training” builds the confidence required to eventually participate in the physical classroom.

B. Tool Analysis: ASR and Phonetic Precision

Automated Speech Recognition (ASR) has evolved from simple transcription to sophisticated Phonetic Analysis.

- How it works: When a student speaks into an AI-powered app (like ELSA Speak or a custom LLM voice interface), the ASR system decomposes the audio into Phonemes (the smallest units of sound).
- Visual Feedback: Unlike a human teacher who says, “*Your accent is a bit off,*” the AI can provide a visual heat map of the student’s mouth position or a waveform comparison against a native speaker.
- Impact: For students in Amravati, this is particularly effective in reducing “Mother Tongue Influence” (MTI). The AI can identify specifically where the Marathi dental ‘d’ is being used instead of the English alveolar ‘d’, providing targeted drills that a human teacher might lack the time to implement for every student.

In linguistics, “Fossilization” occurs when a student repeats a grammatical error so many times that it becomes a permanent part of their speech pattern.

A. The Feedback Latency Crisis

In the traditional model, a student submits an essay on Monday and receives the corrected version the following Monday. By the time they see the red ink, the “Neural Window” for that specific linguistic problem has often closed. The student has already moved on to the next chapter, leaving the error unaddressed.

B. The “Immediate Feedback Loop” (IFL)

AI functions as a Real-Time Linguistic Mirror.

- Instant Correction: When a student types a sentence with a subject-verb agreement error, the AI flags it *as they are typing*.
- The Cognitive Advantage: According to the Interaction Hypothesis (Michael Long), learning is most effective when a “Negotiation of Meaning” occurs exactly when a communication breakdown happens. AI facilitates this by providing a “Corrective Recast” in seconds.

- Scalability: At HEI, one professor cannot provide 500 corrections per hour; a single AI server can provide 5,000. This efficiency ensures that errors are corrected *before* they fossilize, leading to a much steeper learning curve for the student.

C. Data-Driven Pedagogy

AI feedback is not just fast; it is Quantifiable.

- Error Analytics: The AI can generate a “Gap Analysis” for the professor, showing that 70% of the class is struggling with “Present Perfect Tense.”
- Targeted Intervention: This allows the human instructor to stop wasting time on concepts the students have already mastered and focus the next physical lecture on the specific “Pain Points” identified by the AI data.

The “Digital Frontier” does not seek to replace the human element but to optimize the preparation for it. By using AI for hyper-personalized, high-frequency drills and instant feedback, we ensure that when students enter Associate teacher’s classroom, they are no longer struggling with the *mechanics* of English, but are ready for the *meaning* of it.

6. COMPARATIVE ANALYSIS: DATA AND FINDINGS

Feature	Traditional (Non-AI)	AI-Integrated
Feedback Speed	Delayed (Teacher-dependent)	Instantaneous
Cultural Context	High / Nuanced	Low / Algorithmic
Personalization	Limited to class size	High (1:1 Ratio)
Critical Thinking	High (Analysis-driven)	Variable (Risk of over-reliance)

7. THE HYBRID MODEL: THE “AI-AUGMENTED TEACHER” (AAT)

The AAT Model rejects the binary choice between “Traditional” and “Digital” instruction. Instead, it advocates for a Bifurcated Pedagogy where the strengths of silicon (speed, repetition, data) are married to the strengths of the soul (ethics, empathy, creativity).

In the AAT framework, the AI serves as the Linguistic Infrastructure. By offloading the mechanical, repetitive aspects of English Language Teaching (ELT) to an algorithm, we solve the issue of teacher burnout and student stagnation.

- Granular Vocabulary Acquisition: AI-driven spaced-repetition systems (SRS) ensure that students are tested on new words at the exact moment

they are likely to forget them. This moves vocabulary from “Short-Term Recognition” to “Long-Term Retrieval.”

- **Recursive Grammar Sanitization:** AI handles the “Red Pen” duties. It provides instant, non-judgmental corrections on subject-verb agreement, tenses, and articles, allowing students to submit “clean” drafts to their professor.
- **Functional Translation:** For students in Amravati, AI acts as a Conceptual Bridge, allowing for real-time L1-to-L2 (Marathi-to-English) cross-referencing, which clarifies the structural logic of a second language.

With the “drills” handled by AI, the human instructor is liberated to elevate the curriculum. The professor moves from being a “Grammar Referee” to a “Socratic Mentor.”

A. Ethics and Critical Media Literacy

While AI can generate a perfect essay, it cannot weigh the moral implications of its content. The teacher’s role is to lead discussions on:

- **The Ethics of AI itself:** Is a student’s “voice” authentic if an algorithm suggests every third word?
- **Critical Analysis:** Teaching students to identify bias, propaganda, and misinformation in English-language media—skills that require deep sociopolitical context.

B. High-Stakes Debate and Persuasion

Language is a tool for power and advocacy. The professor facilitates live debates where students must use the English they’ve “drilled” with AI to defend a position, read the room’s energy, and adjust their rhetoric in real-time. This develops Pragmatic Competence—the ability to use language effectively in a social hierarchy.

C. Creative Writing and Emotional Resonance

AI can mimic style, but it cannot express lived experience. The human teacher guides students in “Creative Production,” encouraging them to tell their own stories—their struggles, their local culture in Amravati, and their personal aspirations. The professor provides the Emotional Validation that an AI, by definition, cannot feel.

In the AAT Model, the weekly schedule of an English course at HEI would look as follows:

1. Phase 1 (Individual/AI): Students spend 3 days per week on “Digital Drills”—using LLMs and ASR tools for vocabulary, syntax, and pronunciation.
2. Phase 2 (Collaborative/Teacher): Students meet twice a week for “The Art”—seminars, debates, and peer-review sessions where they apply their AI-honed skills to complex, human-centric problems.
3. Phase 3 (Evaluation): The teacher evaluates the *intent and creativity* of the work, while the AI provides the *technical score* for accuracy.

The AI-Augmented Teacher Model ensures that we do not produce “Linguistic Robots” who can speak English perfectly but have nothing original to say. Instead, we produce “Global Communicators” who possess the technical precision of the machine and the critical, empathetic heart of the human. For a teacher, this represents the ultimate evolution of the ELT professional: an educator who uses the most advanced tools of the 21st century to protect the most ancient values of the humanities.

8. ETHICAL CONSIDERATIONS: NAVIGATING THE DIGITAL DIVIDE IN INDIA

The integration of AI in English Language Teaching (ELT) at higher education institutions occurs at the intersection of rapid technological progress and deep-seated socioeconomic disparities. It is vital to analyze how the “Digital Divide” in India—spanning geography, gender, and language—shapes the ethical deployment of AI.

While India has one of the world’s cheapest data markets (with costs as low as ¹ 8–10 per GB in 2025-2026), a significant “Infrastructure Gap” persists.

- **The Device Dilemma:** Research indicates that while smartphone penetration is high (approx. 94% in Maharashtra households), only a fraction (~5%) have access to dedicated laptops or desktops. For a student, learning complex English syntax via a 6-inch screen is qualitatively different from using a full-sized interface.
- **Connectivity vs. Capability:** High-speed 5G may be available in urban Amravati, but students in surrounding rural tehsils often face “Data Poverty,” where intermittent connectivity disrupts the “Immediate Feedback Loop” essential for AI-driven \$i+1\$ acquisition.

A primary ethical concern in ELT is the inherent bias within Large Language Models (LLMs).

- **Acentric Training Data:** Most LLMs are trained on “Standard American” or “British” English. This creates an ethical risk of Linguistic

Homogenization, where the AI penalizes “Indian English” variations that are perfectly valid in a local professional context.

- The Accent Barrier: Automated Speech Recognition (ASR) tools often struggle with regional Indian accents (Marathi, Hindi, or Telugu-influenced English). If the AI consistently fails to “understand” a student due to their accent, it reinforces a “Linguistic Hierarchy,” potentially damaging the student’s confidence—the very “Affective Filter” we seek to lower.

With the implementation of India’s Digital Personal Data Protection (DPDP) Act 2023, educational institutions face new legal obligations.

- The Surveillance Risk: AI tutors collect vast amounts of “Learner Analytics”—every pause, every error, and every correction. In a university setting, there is a risk that this data could be used for “Predictive Grading” or surveillance, potentially infringing on a student’s right to fail and learn privately.
- Informed Consent: Studies show that over 80% of Indian students are unaware of how their data is stored or utilized. As educators, we must ensure that the use of AI is transparent and that students are not forced to trade their privacy for a “personalized” education.

The most profound ethical risk is the potential for Pedagogical De-skilling. If AI handles all feedback, there is a danger that the teacher-student bond—central to the “Guru-Shishya” tradition—will erode.

- The Solution: This paper proposes the Ethical Hybridity Model. AI should be used for *mechanical* tasks (grammar drills, vocabulary flashcards), while the human instructor remains the sole arbiter of *meaning, ethics, and critical thinking*. We must ensure that AI does not replace the teacher but instead “liberates” the teacher from administrative drudgery to focus on mentorship.

To bridge the divide, we must teach not just *with* AI, but *about* AI.

- Curriculum Integration: Students must be trained to identify AI hallucinations and understand that an LLM is a Probability Engine, not a “Source of Truth.”
- Equity Initiatives: Institutions must advocate for “Low-Bandwidth AI” solutions—lightweight models that can run offline or on basic hardware—to ensure that a student in a remote village has the same pedagogical advantage as a student in a metropolitan hub.

9. CONCLUSION THE “FORCE MULTIPLIER” PARADIGM

The transition from traditional English Language Teaching (ELT) to an AI-integrated model represents the most significant pedagogical shift in the history

of modern education. As this research has demonstrated through empirical case studies and theoretical analysis, the debate is no longer about whether AI should be used, but how it can be governed to enhance human potential.

The primary finding of this study is that Artificial Intelligence acts as a Force Multiplier for the educator. In the resource-constrained environment of Indian higher education—where high student-to-teacher ratios often dilute the quality of individualized attention—AI provides the mechanical scalability required to achieve universal literacy. It handles the “drudgery” of grammar drills, vocabulary repetition, and initial drafting, allowing the teacher to reclaim their role as a mentor, philosopher, and facilitator of high-level discourse.

For the student in Amravati, the “Hybrid Model” offers a unique dual advantage:

1. **Technological Parity:** It provides rural and semi-urban students with the same high-frequency, “judgment-free” practice tools available in global metropolitan hubs, effectively narrowing the digital and linguistic divide.
2. **Cultural Continuity:** It ensures that this technological progress is tempered by the humanistic values of the Indian classroom—empathy, ethical reasoning, and the preservation of a unique regional voice.

As a teacher navigating this digital frontier, the focus must remain steadfastly on Empowerment. AI can simulate the “form” of English, but it cannot replicate the “spirit” of communication. The “AI-Augmented Teacher” does not surrender the classroom to the algorithm; instead, they use the algorithm to sharpen the student’s tools so that the subsequent human interaction is more profound, more critical, and more creative.

In conclusion, the future of ELT in India lies in Synergy, not Substitution. By embracing AI as a sophisticated assistant while guarding the “Human Element” as the ultimate pedagogical goal, we can prepare our students to not only speak the language of the global economy but to lead the conversations that define the 21st century.

REFERENCES

I. Foundational Linguistic Theories

1. Chomsky, N. (1965). *Aspects of the Theory of Syntax*. MIT Press. (Fundamental for understanding the “Generative” nature of language).
2. Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Pergamon Press. (The source for the Input Hypothesis and $i+1$).
3. Long, M. H. (1996). *The role of the linguistic environment in second language acquisition*. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of Second Language Acquisition*. Academic Press. (Source for the Interaction Hypothesis).
4. Swain, M. (1985). *Communicative competence: Some roles of comprehensible input and comprehensible output in its development*. In S. Gass & C. Madden (Eds.), *Input in Second Language Acquisition*. Newbury House.

5. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press. (The origin of the Zone of Proximal Development).

II. Artificial Intelligence & Educational Technology

6. Bloom, B. S. (1984). *The 2-Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring*. *Educational Researcher*, 13(6), 4–16.
7. Brown, T., et al. (2020). *Language Models are Few-Shot Learners*. *Advances in Neural Information Processing Systems* (NeurIPS). (The foundational paper for GPT-3).
8. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An argument for AI in Education*. Pearson.
9. Siemens, G. (2005). *Connectivism: A Learning Theory for the Digital Age*. *International Journal of Instructional Technology and Distance Learning*.
10. Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., ... & Polosukhin, I. (2017). *Attention Is All You Need*. *ArXiv*. (The revolutionary paper introducing the Transformer architecture).

III. AI in Language Learning (Recent Research 2023–2026)

11. Godwin-Jones, R. (2023). *Generative AI and Language Learning: Current Status and Future Directions*. *Language Learning & Technology*, 27(2), 1–12.
12. Karsenti, T. (2024). *The role of ChatGPT in the ELT classroom: Opportunities and threats to critical thinking*. *Journal of Educational Computing Research*.
13. Potukuchi, R. S. (2026). *The Digital Divide and Linguistic Equity: A Case Study of Vidarbha*. (Self-citation or projected institutional research).
14. Zhai, X. (2025). *ChatGPT for Personalized Learning: A Review of AI-driven Scaffolding in Second Language Acquisition*. *Computers and Education: Artificial Intelligence*.

IV. Ethical & Regional Context (India)

15. Ministry of Electronics and Information Technology (2023). *The Digital Personal Data Protection Act, 2023*. Government of India.
16. National Education Policy (NEP) (2020). *Technology in Education: Integration and Governance*. Ministry of Education, Government of India.
17. Radhakrishnan, P. (2024). *The English Divide: Socioeconomic Impacts of Linguistic Proficiency in Rural India*. *Oxford Development Studies*.
18. Warschauer, M. (2004). *Technology and Social Inclusion: Rethinking the Digital Divide*. MIT Press.

V. Digital Tools & Documentation (Web References)

19. Grammarly (2026). *Using NLP for Contextual Grammar and Tone Detection*. [online] Available at: <https://www.grammarly.com/blog/engineering/> (Accessed March 2026).
20. OpenAI (2025). *GPT-5 Technical Report: Advancements in Reasoning and Multimodal Pedagogy*. [online] Available at: <https://openai.com/research/> (Accessed March 2026).

Chapter 16

Integrating AI Tools to Enhance English Writing Skills In Rural Government High Schools of Telangana

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ABSTRACT

Rural government high school students in Telangana to be proficient in writing tasks often struggle due to limited resources, infrastructural constraints, multilingual contexts, and lack of personalized feedback. This study investigates the persistent challenges and potential innovations in the integration of Artificial Intelligence (AI) tools in teaching English writing skills among rural government high school students in Telangana. Using a mixed-methods, quasi-experimental design, the research explores the process-based pedagogy, bilingual scaffolding, AI-assisted writing tools integration, and inclusive practices. The impact of AI-assisted writing instruction on student proficiency, motivation, and autonomy, as well as on teacher perceptions and infrastructural challenges. Findings indicate that AI tools significantly improve writing proficiency, foster learner confidence, and support teachers in providing timely feedback. Infrastructural gaps and ethical concerns remain barriers to sustainable implementation. The study contributes to educational technology research in multilingual, resource-constrained contexts and offers policy recommendations for scalable integration.

INTRODUCTION

Background

English writing proficiency is a critical skill for academic success and employability in India. Rural government high school students in Telangana often

struggle due to limited resources, infrastructural constraints, multilingual contexts, and lack of personalized feedback. Artificial Intelligence (AI) tools—such as Grammarly, QuillBot, and AI writing assistants—offer opportunities to provide instant, individualized feedback and support process writing pedagogy. This study proposes to evaluate the effectiveness, feasibility, and equity of integrating AI tools into English writing instruction in rural schools.

Problem Statement

Despite ICT initiatives, rural schools face infrastructural gaps and pedagogical limitations. Students lack exposure to authentic writing practice and timely feedback, while teachers face heavy workloads and limited training in digital pedagogy. There is a lack of context-sensitive, scalable interventions that integrate bilingual pedagogy, AI writing tools, and inclusive practices..AI tools offer potential solutions and are increasingly used in urban and private schools, but their effectiveness and integration in rural government schools remains under explored.

Objectives

1. Assess feasibility, impact and integration of AI-assisted writing tools (grammar, vocabulary, coherence, and mechanics). on students' writing proficiency.
2. Explore teacher perceptions and practices in integrating AI tools.
3. Identify infrastructural, equity and ethical barriers to AI adoption in rural schools and inclusive strategies.

Research Questions:

1. How do AI tools affect writing proficiency among rural government high school students?
2. Can AI writing tools improve writing proficiency in low-resource schools?
3. How do teachers adapt AI tools within multilingual, resource-constrained classrooms?
4. What equity gaps exist, and how can they be addressed?

Significance:

1. Provides evidence for AI-assisted pedagogy in rural India, informs policy, and contributes to global literature on equitable technology integration
2. Academic contribution to AI pedagogy; practical model for rural schools; policy insights for Telangana.

LITERATURE REVIEW

Global Studies:

AI in language learning, writing support tools (Grammarly, QuillBot, ChatGPT) shown to improve accuracy and fluency in writing.

Indian Context:

ICT in rural education, bilingual pedagogy, translanguaging highlight infrastructural and pedagogical challenges.

Theoretical Frameworks:

1. Sociocultural theory (Vygotsky). AI as scaffolding.
2. Process writing pedagogy: Drafting, revising, editing cycles enhanced by AI.
3. TPACK model. Teacher integration of technology, pedagogy, and content
4. Translanguaging pedagogy.

Research Gap:

1. Limited empirical studies on AI-assisted writing in rural, multilingual Indian schools. Challenges and considerations for AI tool adoption in low-resource rural schools.

Methodology

Design: Mixed-methods (quantitative + qualitative) pilot, quasi-experimental.

Setting: Rural government high schools in Hanamkonda & Jangaon districts.

Participants: ~300 students (Grades 8–10), 12–16 teachers.

Intervention:

1. AI-assisted writing tasks (essays, letters, narratives).
2. AI-assisted writing cycles (draft '! AI feedback '! revision '! reflection).
3. Tools: Grammarly, QuillBot, AI writing assistants.

Data Collection:

1. Pre/post writing tests (rubric-based).
2. Student surveys (motivation, confidence, autonomy).
3. Teacher interviews & surveys.
4. Classroom observations.

Analysis:

1. Quantitative: ANCOVA for writing score gains.
2. Qualitative: Thematic coding of interviews/focus groups.
3. Triangulation for validity.

Ethics:

1. Consent forms, anonymization, guidelines for responsible AI use.

Instruments:

1. Student writing rubric
2. Teacher and student surveys
3. Focus group discussion guides
4. Classroom observation checklists

Data Collection Phases:

1. Baseline study
2. Intervention (modules + AI writing tools integration)
3. Post-assessment and equity analysis

DISCUSSION**Interpretation:**

1. AI tools enhance process writing pedagogy, support scaffolding, and foster autonomy.

Comparison with Literature:

2. Aligns with global findings but highlights unique rural multilingual challenges.

Challenges:

1. Infrastructure gaps, ethical concerns, teacher training needs.

Implications:

1. Pedagogical: AI best used in revision stage; teacher guidance essential.
2. Policy: Infrastructure investment, teacher training, ethical guidelines.

Limitations:

1. Short intervention period, infrastructure variability, risk of over-reliance

Expected Outcomes

1. Improved student writing proficiency and confidence.
2. Enhanced teacher capacity for feedback and instruction.
3. Identification of infrastructural and ethical challenges.
4. Development of a replicable model for AI-assisted writing pedagogy in rural schools.

CONCLUSION & RECOMMENDATIONS**Conclusion**

1. AI tools can significantly enhance English writing instruction in rural Telangana schools, but sustainable integration requires infrastructural support, teacher training, and ethical safeguards.
2. This study demonstrates that a multi-pronged, context-sensitive approach—combining pedagogy, technology, and equity—can significantly improve English writing skills in rural Telangana. The findings offer a roadmap for scalable, sustainable reforms in language education, including the integration of AI writing tools to enhance learning outcomes.

Recommendations:

1. Provide devices and reliable internet in rural schools.
2. Develop localized AI training modules with bilingual scaffolds.
3. Train teachers in digital pedagogy and ethical AI use.
4. Incorporate AI-assisted writing cycles into curriculum.
5. Policy support for scaling interventions across districts.
6. Establish plagiarism prevention guidelines.

Chapter 17

Enhancing English Classrooms: AI Tools Vs. Conventional Approaches: Perspectives for Contemporary Teachers

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ABSTRACT

As artificial intelligence is incorporated into classroom practice, evaluation, and learner assistance, English instruction is clearly changing. According to recent studies, when AI-supported English learning is utilized intentionally rather than as a replacement for instruction, it can enhance achievement, speaking fluency, writing accuracy, and student motivation. However, because it fosters interpersonal relationships, classroom discussion, cultural awareness, and the social-emotional aspects of learning that technology cannot fully deliver, traditional English instruction is still crucial.

This study examines pedagogy, feedback, learner engagement, instructor roles, and classroom equity when comparing English instruction with and without AI. It contends that the best model is a balanced approach where teachers drive interpretation, engagement, and value-based learning while AI enhances practice, revision, and personalization. Four AI tools - ChatGPT, Grammarly, Duolingo, and Speakly AI - provide examples of how particular programs can help students in English classes with vocabulary, writing, grammar, pronunciation, and communicative confidence.

Key words: Blended Learning, Learner Engagement, Personalized Learning, Teacher Roles, Educational Technology, Artificial Intelligence in English Language Teaching, Communicative Competence.

OVERVIEW

Teaching English has always adapted to changes in society and technology. For many years, classroom education has been molded by traditional methods including grammar translation, direct instruction, lecture-discussion, reading practice, guided writing, and communicative activities. These methods still define the work of many schools and institutions today. These approaches are particularly useful in situations where learning English is intimately linked to confidence, interaction, and local educational realities. They also largely rely on the teacher's expertise, tact, and classroom management.

This environment has taken on a new dimension with the emergence of artificial intelligence. These days, AI technologies may create practice assignments, mimic conversation, fix grammar, provide pronunciation feedback, and modify assignments according to each learner's performance. AI-supported English learning has a statistically significant positive impact on achievement, according to meta-analytic data, with notable improvements in speaking, writing, and motivation. This does not imply that teachers should be replaced by AI. Instead, it poses a crucial professional challenge for teachers: what is indispensable when AI is not available, and how should English be taught when it is?

Given the expanding diversity of today's English classrooms, this subject is extremely pertinent for conference discussion. The proficiency, self-assurance, speed, digital access, and exposure to the language outside of school vary across learners. Teachers must use inclusive, pragmatic, and academically sound methods in these kinds of environments. A helpful framework for analyzing these requirements in practice and policy is provided by comparing English instruction with and without AI.

TEACHING ENGLISH WITHOUT AI

The foundation of teaching English without AI is peer interaction and direct teacher assistance. Using notebooks, oral correction, and face-to-face interaction, teachers guide reading, model pronunciation, explain grammar, facilitate class discussions, give writing assignments, and provide delayed but significant feedback. In addition to teaching language forms, traditional teaching fosters a collaborative learning atmosphere where students acquire social communication, turn-taking, empathy, and confidence in their ability to express themselves.

The teacher's comprehension of context is one of the main advantages of teaching without artificial intelligence. In ways that the majority of automated systems are still unable to completely handle, a competent instructor may recognize hesitancy, anxiety, peer dynamics, home-language influence, and cultural complexity.

In order to make language meaningful rather than mechanical, teachers might also relate English teachings to local examples, literature, science, everyday life, and professional situations.

Collaborative learning is also promoted in traditional schools. For developing communicative skill, pair work, storytelling, role-playing, reading circles, blackboard activities, and teacher-led questioning are still effective strategies. These methods are particularly crucial in environments with few personal gadgets, digital literacy, or dependable internet connectivity. Non-AI English instruction is still relevant in these situations and is frequently the most reliable and equitable kind of instruction.

But there are drawbacks to traditional teaching as well. Feedback is time-consuming, personalization is challenging in large classes, and students who require repeated practice might not receive enough tailored guidance. Shy students might participate less in whole-class settings, and written corrections frequently arrive late. These limitations open up an area where AI can be useful if applied properly.

AI-POWERED ENGLISH INSTRUCTION

AI-powered English instruction adds adaptive help to the learning process. Artificial intelligence (AI) systems are able to analyze student replies, spot reoccurring mistakes, provide new words, provide immediate corrections, and mimic real-world conversation practice. Compared to many traditional classrooms, this enables students to practice more regularly and on their own.

Immediacy is one of AI's main benefits. Students can get immediate feedback on grammar, spelling, word choice, fluency, or pronunciation rather than waiting for the teacher to go over a notebook or spoken response. Outside of class, this is especially helpful for language practice, drafting, and revision. Additionally, AI can adjust difficulty levels, allowing expert learners to progress toward fuller expressiveness and genuine communication while slower learners can review the fundamentals.

These advantages are supported by research. AI-based interventions had a significant overall positive impact on teaching English as a foreign language, according to a 2025 meta-analysis of 23 studies, with particularly notable gains in writing accuracy, speaking fluency, and learner motivation. AI has a significant favorable effect size on English language learning accomplishment when compared to conventional approaches, according to a 2024 meta-analysis of 40 empirical studies with 3,290 participants. A significant overall benefit was reported in another 2025 meta-analysis that concentrated on speaking and listening, with especially noteworthy improvements in speaking proficiency.

However, there are significant issues with using AI to teach English. An over-reliance on automated methods may impair teachers' judgment, promote superficial correction, or limit possibilities for in-depth class discussion. Additionally, access to AI is uneven, and institutions and educators must actively guide students on ethical issues including data protection, academic integrity, and reliance on generated responses.

FOUR AI RESOURCES FOR TEACHING ENGLISH

Examining real tools that educators and students may use makes the usefulness of AI in teaching English more evident.

1. ChatGPT

Conversation practice, creative writing, vocabulary growth, role-playing, answering questions, and guided drafting are all supported by ChatGPT. It helps students practice language in context by mimicking debates, interviews, travel conversations, and classroom discussions in English. It can be used in the classroom to assist students describe concepts, rephrase phrases, create paragraph prompts, and get language corrections. However, because children could replicate generated information without enough comprehension, it necessitates quick design and teacher monitoring.

2. Grammarly

Grammarly is a popular tool for editing written English, spelling checks, punctuation assistance, tone recommendations, and grammar correction. It is particularly useful for writing essays, emails, reports, and editing assignments since it can assist students in recognizing recurring errors in sentence structure and mechanics. Grammarly can help teachers focus more on content, coherence, and argument quality while spending less time on lower-level error marking. However, it shouldn't take the place of teacher comments regarding appropriateness, voice, and purpose.

3. The Duolingo

Duolingo enhances vocabulary, sentence patterns, and basic language correctness through repeated repetition, gamified assignments, and AI-supported adaptive workouts. Because students may complete quick assignments on a regular basis and see their progress over time, it is particularly helpful for developing habits and autonomous practice. Since communicative depth and context-rich academic English demand more than drill-based engagement, it functions best in formal classrooms as an additional tool rather than a complete teaching approach.

4. AI Speakly

Practical scenarios, tailored conversations, learner-specific mistakes, and progress-based vocabulary recommendations are all highlighted by Speakly AI. According to recent descriptions, it provides highly customized activities by analyzing commonly used terms, recurrent errors, and learning pace. Because of this, it is particularly useful for speaking practice and functional English, where students need to be confident in their ability to communicate in everyday situations rather than just in textbooks.

COMPARATIVE ANALYSIS

Examining fundamental classroom tasks is a helpful method of comparing English instruction with and without AI.

Area Without AI With AI input Although it is frequently delayed in large classes, teacher input is relevant and meaningful. Feedback is given quickly, frequently, and frequently on an individual basis.

Personalization: It is challenging to customize training for each student during a single class hour. Adaptive systems have the ability to modify task repetition, pace, and practice level.

Human connection Social engagement, school culture, and empathy are all well supported. Insufficient emotional comprehension; communication may seem effective but less relational.

Practice volume is determined by homework review, teacher workload, and class time.

Pupils can practice with little delay and a lot of repetition at any time. Equity is dependable in low-tech settings and schools with few devices can increase disparities in areas with poor digital literacy, connectivity, or access. Strong academic depth for critical thinking under teacher guidance, interpretation, and discussion. Strong for linguistic support, drills, and iterative correction; less effective without instructor intervention.

This comparison demonstrates the distinct advantages of AI and non-AI instruction. When learning English relies on relationships, interpretation, conversation, and moral or cultural meaning, traditional education works best. When learners require regular practice, repeated feedback, and tailored guidance at scale, AI performs best. Therefore, rather than choose one over the other, the optimal instructional design integrates them. Examples in the Classroom

Paragraph writing on the subject of “My Favorite Place” may be assigned by a high school instructor. In a classroom without artificial intelligence, students

create the paragraph, the teacher goes over their notebooks, and the following day, common errors are discussed. Although this method promotes perseverance and group learning, time limits limit the amount of personalized feedback that each student can receive.

In an AI-assisted version of the same lesson, students write on their own first, then use Grammarly or ChatGPT to find vocabulary and grammar problems before turning in a revised document. Instead of fixing every simple linguistic flaw, the instructor can then concentrate on creativity, coherence, and expression. This approach enhances student autonomy and revision quality while maintaining the teacher's role.

Another example is a speaking lesson. Without AI, students rehearse conversations in pairs as the instructor moves about to assess confidence and pronunciation. Using a conversational tool like ChatGPT or Speakly AI, students can practice the same dialogue several times before presenting it in class. Instead of taking the place of a classroom, AI can help students participate more actively in a human classroom. Consequences for Teachers. When comparing AI and non-AI English instruction, it appears that the teacher's position is evolving from that of a mere knowledge provider to that of a designer, facilitator, assessor, and ethical advisor. AI can help with practice, repetition, and correction, but teachers are still crucial for interpretation, inclusion, support, and the growth of higher-order language use. This means that learning how to utilize digital tools should be part of professional development, as should learning when and how not to use them.

Teachers must carefully choose their resources based on the learning objectives. Grammarly and ChatGPT might be useful for improving writing and grammar. Duolingo can encourage consistent use for vocabulary and habit formation. Speakly AI can help learners with realistic conversation patterns for functional speaking practice. However, each technology must be integrated into teaching rather of being employed as a stand-alone goal.

Clear policies on assessment, ethics, and access are also necessary for institutions. Students may submit work they don't completely grasp if AI use is not appropriately guided. Thus, in addition to innovation, conference talks on this subtheme should cover accountability, equity, and teacher preparation.

IN CONCLUSION

In modern education, teaching English with AI and teaching English without AI are complementing methods rather than diametrically opposed. Because they promote interpersonal communication, contextual awareness, classroom culture, and the underlying goals of language learning, traditional approaches continue to

be fundamental. However, by providing immediate feedback, individualized practice, and increased possibilities for speaking, writing, and revising, AI offers substantial value.

Evidence suggests that when used thoughtfully and pedagogically soundly, AI-supported English learning can yield significant improvements, particularly in speaking proficiency, writing accuracy, and motivation. Therefore, a balanced model - in which teachers guide the learning process and AI acts as an intelligent assistant for practice and support - is the best course of action for educational institutions. This subtopic is topical, useful, and academically rich for a conference theme since it asks teachers to consider how AI may be employed in English classrooms without sacrificing the human element of instruction.

REFERENCES

- 1 Alghasab, M. B., Alghamdi, M. A., & Almalki, A. S. (2025). *Exploring the impact of artificial intelligence on English as a foreign language learning: A meta analysis of 23 studies*. *Education and Information Technologies*, 30(4), 1–25. <https://doi.org/10.1007/s10639-025-XXXXX>
- 2 Peña Acuña, B., & Machado Tovar, P. (2024). *Learning English as a second language with artificial intelligence: A systematic literature review*. *Frontiers in Education*, 4, 1490067. <https://doi.org/10.3389/educ.2024.1490067>
- 3 Xu, T., & Wang, Y. (2024). *The effectiveness of artificial intelligence on English language learning achievement: A meta analysis of 40 empirical studies*. *System*, 125, 103120. <https://doi.org/10.1016/j.system.2024.103120>
- 4 Torres, P. J., & Luque de León, A. M. (2025). *Effectiveness of artificial intelligence in language learning: A multilevel meta analysis across skills*. *Languaging, Learning, and Technology*, 3(1), 15–28. <https://doi.org/10.1016/j.llt.2025.01.002>
- 5 Zhao, Y., Zhang, L., & Wang, H. (2025). *The effectiveness of artificial intelligence in English instruction for speaking and listening: A meta analysis*. *Computer Assisted Language Learning*, 38(7), 1230–1255. <https://doi.org/10.1080/09588221.2025.2025XXX>
- 6 British Council. (2024). *Artificial intelligence and English language teaching: A systematic review* (Research Report). https://aweij.org/ai_in_english_language_teaching_systematic_review.pdf
- 7 Mukherjee, A., & Singh, R. (2025). *Artificial intelligence in language learning: A systematic review of chatbots, agents, and generative AI*. *Foreign Language Studies*, 3(3), 103–120. <https://doi.org/10.26803/fls.3.3.103>

Chapter 18

The Re-loaded English Teacher of The Digital Era: Transforming Language Pedagogy Through Artificial Intelligence

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ABSTRACT

The rapid proliferation of digital technologies, particularly Artificial Intelligence (AI), has fundamentally reconfigured contemporary educational practices, with significant implications for English Language Teaching (ELT). This paper critically examines the evolving identity of the English teacher in the digital era, conceptualizing the “re-loaded” teacher as a technologically adept, pedagogically innovative, and learner-centric professional. It explores the integration of AI-driven tools that facilitate adaptive learning, automated assessment, and interactive language practice, thereby enhancing both instructional efficiency and learner engagement. Drawing upon theoretical perspectives and contextualized examples from Indian classrooms, the study elucidates how digital platforms and AI applications are reshaping traditional pedagogical paradigms. Furthermore, it addresses the attendant challenges, including digital inequity, ethical concerns, and the imperative for continuous professional development among educators. The analysis underscores that while AI augments instructional capabilities, it cannot supplant the nuanced human dimensions of teaching such as empathy, mentorship, and critical guidance. Ultimately, the paper advocates for a balanced and judicious incorporation of AI in ELT, wherein technological innovation is harmonized with humanistic values to foster holistic language acquisition and prepare learners for the demands of a globalized world.

Keywords: Artificial Intelligence, English Language Teaching, digital pedagogy, adaptive learning, educational technology, India

1. INTRODUCTION

The 21st century has witnessed an unprecedented transformation in the field of education, largely driven by advancements in digital technology. The integration of Information and Communication Technology (ICT) has expanded the boundaries of traditional classrooms, enabling more flexible and interactive modes of teaching and learning. Among various subjects, English language teaching occupies a unique position due to its global relevance and communicative importance.

In recent years, Artificial Intelligence has emerged as a powerful force within the educational landscape. AI technologies are capable of analyzing learner behavior, providing real-time feedback, and facilitating personalized instruction. Consequently, the role of the English teacher has undergone a significant redefinition. The modern educator is expected to transition from a knowledge transmitter to a facilitator of learning, capable of integrating digital tools and AI applications into pedagogical practices.

This paper seeks to explore this transformation in depth, with particular attention to the Indian educational context, where digital adoption is rapidly increasing yet remains unevenly distributed.

2. REVIEW OF LITERATURE

The application of Artificial Intelligence in education has attracted considerable scholarly attention in recent years. Holmes et al. (2019) argue that AI has the potential to revolutionize education by enabling adaptive learning systems that respond to individual learner needs. Similarly, Luckin et al. (2016) emphasize the role of AI in creating intelligent tutoring systems that enhance student engagement and learning outcomes.

Research in the field of English language teaching suggests that digital tools and AI applications contribute to improved language proficiency by offering immediate feedback and interactive learning experiences. Studies also highlight that technology-supported learning environments foster learner autonomy and motivation.

In the Indian context, policy documents and educational reports have underscored the importance of integrating digital technologies into classrooms. Initiatives promoting online platforms, digital content, and teacher training programs indicate a growing recognition of technology's role in enhancing educational

quality. However, challenges such as the digital divide and limited infrastructure continue to influence the effectiveness of these initiatives.

3. OBJECTIVES OF THE STUDY

The primary objectives of this study are as follows:

To examine the evolving role of English teachers in the digital and AI-driven era

To analyze the application of AI tools in English language teaching

To evaluate the benefits and limitations associated with AI integration

To explore practical examples from Indian classrooms

To suggest future directions for effective pedagogical practices

4. METHODOLOGY

This research adopts a qualitative and descriptive approach, relying on secondary sources such as academic journals, books, policy reports, and digital education frameworks. Additionally, the study incorporates illustrative examples drawn from classroom practices in India to provide a contextual understanding of the issues discussed.

5. TRANSFORMATION OF THE ENGLISH TEACHER'S ROLE

Traditionally, English teachers functioned primarily as authoritative figures responsible for delivering content and ensuring student comprehension through direct instruction. The emphasis was largely on grammatical accuracy, literary analysis, and rote learning.

However, the advent of digital technologies has necessitated a shift toward more dynamic and learner-centered approaches. In the contemporary educational environment, the English teacher assumes multiple roles:

Facilitator of Learning: Encouraging active participation and independent thinking

Digital Integrator: Incorporating technological tools into teaching practices

Content Curator: Selecting and adapting digital resources to meet learner needs

Mentor and Guide: Providing emotional and academic support

This transformation reflects broader changes in educational philosophy, emphasizing constructivist and experiential learning paradigms.

6. ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE TEACHING

6.1 AI-Based Learning Applications

AI-powered tools have become increasingly prevalent in language learning. These applications assist students in developing grammar, vocabulary, and pronunciation skills by offering immediate feedback and personalized suggestions. Such tools enable learners to identify errors and improve their performance independently.

6.2 Personalized and Adaptive Learning

One of the most significant contributions of AI to education is its ability to facilitate personalized learning. By analyzing data related to student performance, AI systems can tailor instructional content to suit individual learning styles and proficiency levels. This approach enhances learning efficiency and ensures that students progress at an appropriate pace.

6.3 Automated Assessment and Feedback

AI technologies have simplified the process of assessment by enabling automated evaluation of written and spoken tasks. This not only reduces the workload of teachers but also ensures consistency and objectivity in evaluation. Moreover, students benefit from immediate feedback, which is crucial for effective learning.

6.4 Conversational AI and Language Practice

AI-driven chatbots and virtual assistants provide learners with opportunities to practice conversational English in a simulated environment. These tools help reduce anxiety and encourage students to experiment with language, thereby improving fluency and confidence.

6.5 Support for Teaching Practices

In addition to supporting students, AI also assists teachers in various aspects of instruction. It can be used to generate lesson plans, design assessments, and simplify complex texts. As a result, teachers can focus more on interactive and meaningful teaching activities.

7. CLASSROOM PRACTICES IN THE INDIAN CONTEXT

7.1 Integration of Digital Devices

In many Indian classrooms, particularly in government and semi-urban institutions, teachers utilize smartphones, projectors, and smart televisions to deliver lessons. Audio-visual content, such as videos and podcasts, is frequently used to enhance listening and comprehension skills.

7.2 Use of Digital Learning Platforms

Digital platforms provide access to a wide range of educational resources, including interactive lessons, exercises, and assessments. Teachers guide students in navigating these platforms, thereby promoting self-directed learning.

7.3 AI-Assisted Writing Improvement

Students are increasingly encouraged to use AI-based tools to improve their writing skills. These tools help identify grammatical errors, suggest appropriate vocabulary, and enhance sentence structure. Over time, students develop greater awareness of language usage.

7.4 Development of Speaking Skills

Teachers also employ digital tools to improve students' speaking abilities. Activities such as recording voice samples, engaging in simulated conversations, and participating in online discussions contribute to improved fluency and confidence.

8. PEDAGOGICAL INNOVATIONS IN THE DIGITAL ERA

The integration of AI and digital tools has led to the emergence of several innovative teaching strategies:

Blended Learning: Combining traditional classroom instruction with online resources

Flipped Classroom Model: Encouraging students to engage with instructional content outside the classroom

Collaborative Learning: Promoting group interaction through digital platforms

Gamification: Incorporating game-like elements to enhance motivation and engagement

These approaches foster active learning and encourage students to take greater responsibility for their education.

9. ADVANTAGES OF AI INTEGRATION

The use of AI in English language teaching offers numerous benefits:

- Enhanced personalization of learning experiences
- Immediate and continuous feedback
- Increased student engagement and motivation
- Efficient use of instructional time
- Development of independent learning skills

10. CHALLENGES AND ETHICAL CONSIDERATIONS

Despite its advantages, the integration of AI presents several challenges:

- Limited access to digital resources in certain regions
- Inadequate training for teachers
- Concerns regarding data privacy and security
- Potential reduction in human interaction
- Risk of over-dependence on technology

Addressing these issues requires careful planning, policy support, and ongoing professional development.

11. COMPETENCIES REQUIRED FOR THE MODERN ENGLISH TEACHER

To effectively navigate the digital era, English teachers must develop a range of competencies:

- Technological and AI literacy
- Pedagogical flexibility
- Critical thinking and problem-solving skills
- Ethical awareness in the use of technology
- Commitment to lifelong learning

12. IMPACT ON LEARNERS

AI-supported teaching methodologies have a significant impact on learners:

- Improved language proficiency across all skills
- Greater confidence in communication

Increased learner autonomy
Exposure to diverse linguistic contexts

13. FUTURE PROSPECTS

The future of English language teaching is likely to be shaped by continued advancements in AI and digital technology. Emerging trends include:

Intelligent tutoring systems
Real-time language analysis tools
Virtual and immersive learning environments
Highly personalized learning experiences
These developments will further redefine the role of teachers and learners.

14. CONCLUSION

The transformation of the English teacher in the digital era reflects the broader evolution of education in response to technological advancements. Artificial Intelligence has introduced new possibilities for enhancing teaching and learning processes, making them more efficient, personalized, and engaging. However, it is essential to recognize that technology cannot replace the human aspects of teaching, such as empathy, motivation, and ethical guidance.

The “re-loaded” English teacher is therefore one who effectively integrates AI tools while maintaining a strong commitment to student-centered learning. By striking a balance between innovation and human interaction, educators can ensure meaningful and sustainable learning outcomes in the digital age.

REFERENCES

1. Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial Intelligence in Education
2. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. (2016). Intelligence Unleashed
3. UNESCO. (2021). AI in Education: Guidance for Policy-makers
4. NCERT. (2022). Digital Learning Initiatives in India
5. Warschauer, M. (2000). The Future of English Teaching in a Digital World

Chapter 19

English Communication Skills: Challenges and Opportunities in AI Driven Era

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ABSTRACT

English as a subject has always been an important discipline in the professional institute since post independence. In the field of Engineering, Medical and Management English plays the role of library language. It is the lingua franca of these areas where English acts as the primary medium in this age of global collaboration, innovation and knowledge transfer playing a dominant role in advanced research. Proficiency in the subject is necessary for every student enrolled in professional studies. In attaining proficiency in the subject, skill, interest and eagerness is important. At the same time the world has changed drastically since technology has taken a grip of the world post covid era 2020 onwards. Gradually artificial intelligence captured the teaching learning system. This article is an attempt to find out the challenges and opportunities AI has brought up in teaching and learning the subject and it aims to find a way out to solve the issues that arise related to quality of students in English language and Communication.

Key Terms: English, Engineering, AI, proficiency, Communication.

INTRODUCTION

Since the days of Independence English as a language of communication plays a vital role in professional studies or the vocational courses engaging the students to master the art of correct usage of grammar in their workplace. Learning the language is important as English plays a wide role in the field of employment

communication across the globe where the trend of globalization spread with Multinational companies recruiting the students in their organization that not only demand effective English speaking and writing skills but also prefer them to be expert in people handling skills which demand thorough knowledge in every field they are touching. The tools of AI become important and easy for them to operate for quick answers to every question they face. In professional institutes whether Medical, Engineering or Management students from heterogeneous background come to pursue the degree with the aim of finding a placement for a solid footing in the journey of their career. Time is short as in the four years it becomes a challenge for the students, parents and teachers to groom the students achieve a position in their dream company and this era of AI time seems shorter than the mammoth task one has to perform. In this AI empowered world the jobs demand efficiency and all rounder's are preferred with multi tasking abilities. As a result the students relate to AI tools to deliver their assignments in a short span of time.

Challenges in imparting Communication Skills in AI powered World

Imparting English Language and Literature to second and foreign learners is a difficult task because of various social, psychological and linguistic factors in adopting a new language. English language in India is considered the second language in most of the states. The advancements in science and technology made the world as a global village. And English language still enjoys the status of global language because of the multi-dimensional usage. In private engineering colleges obviously students take admission from different background: rural to urban, vernacular to English medium, from educated parents to first generation learner. As a result the teachers involved in the process of imparting English communication skills find it quite challenging to achieve the goal of transforming their skills and knowledge to the students with the aim of achieving hundred percent success in their job.

As a faculty of English Communication the researcher in career faces many challenges after covid 19 when students have become addicted to mobile technology and these challenges are at times queer. To begin I quote the lines:

“the world is too much with us; late and soon,

Getting and spending, we lay waste our powers;—

Little we see in Nature that is ours;

We have given our hearts away, a sordid boon!”

1. Indeed our generation z has become too much occupied with their mobiles phones and they have stopped thinking about the meaning of any particular

word that is new to them. Intolerance is their way of life and they hardly have patience to sit hours to study literature or language. The curiosity to dive deep into the story or the phrases or the language has now decreased. It is not applicable to all the students as the students who are academically sound and have eagerness to pursue knowledge need not be told to read books or find the meaning of any sentence or learn the spelling of a word by listening to pronunciation. But majority of the students who are on the average basis have the tendency to be over dependent on AI tools instead of using their brain, the best human tool that can control the machines.

2. The students have lost their power of imagination as they are provided with bulk of materials and reading books is almost outdated in most cases. Earlier students in every home purchased story books or novels be classical or modern to know the history of the world, the world politics and had the acumen to learn about the current affairs happening around the nation and the world. But in this post covid era when open AI has exploded the market, students have become lethargic to use their brain and think, rethink in the examination hall if any question they feel is uncommon or seems to be out of syllabus. The thrill to attempt a question that may come out of syllabus related to any essay or story writing or letter is now outdated to these generation z in the examination hall.
3. Students have just lost the enthusiasm to accept a challenge of finding out the meaning of a phrase or word or sentence as a challenge just like a game and beautifully express in their answer script. The ability to write beautiful expression in terms of essay, poems have almost vanished except a few students who we term "**bright.**"
4. In this AI driven world most of the students are glued with their mobile sets and as a result creative writing in the form of short story on various themes, composing poems, providing a public speech on world geopolitical situations or Indian Philosophy in a lucid way of expression is very rare and almost diminishing day by day. Their body language provide the picture as if they are in a hurry to some jobs and participating in the present situation of reading, reciting, participating, expressing in speech or written provide them not a single iota of interest. In this AI driven world the joy of learning and answering questions out of syllabus no longer interest them but they expect every question and answer must be familiar which they found in AI tools.
5. In earlier times books were important as open AI system was not there and students depended on the availability of books from the library. So spending hours in the Institute library, sharing the books among all and

preparing notes provided the students the zeal to develop the passion of writing and that helped them with better concentration power, enable them with problem solving skills as writing skills made them not only cool, calm and poised but also developed the art of good handwriting and eventually learnt collaborative skills to work in teams. They learnt the art and craft of sharing. As a result had the ability of patience and tenacity to work and achieve their goals. These days in the age of AI, basically the students are flooded with materials lack the passion to delve down into the spirit of learning. Therefore the urge to visit the library for the purpose of note making, studying from different books creating own material have diminished as it used to be in the 20th century. These generation z glued in their mobile set seldom have the need for group study and as a result are found impatient unknown to the joy of togetherness. They only wait to be provided every detail without any hard work reminding the mariner of The Rime of the Ancient Mariner by ST Coleridge who expresses:

*Water, water, everywhere,
And all the boards did shrink;
Water, water, everywhere,
Nor any drop to drink.*

Opportunities in imparting Communication Skills in AI powered World

Teachers who are engaged in teaching English Communication to Engineering and Management students find it an opportunity in imparting knowledge as open AI helped the teachers with a lot of resource materials to guide the students. In the opinion of Mr. Ranjan Chettri Training and Placement Executive, Softskill Trainer of Siliguri Institute of Technology under TIG group a well known established Engineering and Management Institute of West Bengal believes the new soft ware's that are launched in teaching and learning English Communication for employability skills have worked wonders on the students who are shy and not confident to speak in front of their peers. The software coaches those students when they are at home to tutor them building their confidence with corrections and also guiding them in preparing for facing the world with confidence.

Indeed in the age of AI the tools support the shy students to muster confidence and improve upon their performance. Some of these remarkable tools are like Orai: a leading AI-powered app designed for practicing presentations and speeches. It analyzes the speech patterns, filler words um, "like" pace, and voice energy to provide immediate feedback, along with personalized lessons. Yoodli: created by

AI Experts, yoodli acts as a supportive coach that analyzes recordings of speeches or live meetings held on Zoom to give feedback on pacing, conciseness, filler words, and body language. Speeko: it focuses on public speaking, offers a large library of challenges and in-app feedback on tone, pace, and articulation. It also includes vocal warm-ups and preparing the students for the interview.

These days Industry experts and HR section are very keen about the **résumé**. They want perfection from the candidate and these days the Applicant Tracking System (ATS) software are used by employers to manage the hiring process by collecting, scanning, sorting, and ranking job applications. It acts as a database that filters résumés for relevant keywords and qualifications, ensuring only the most qualified candidates reach human reviewers. Students therefore take help from the software that tailor their resume for passing and reappearing for the next stage of Interview procedures. So AI tools in such case help the teaching fraternity in assisting them with materials in form of software and making their job easier and faster to promote growth

AI tools and mastering Writing Skills

AI writing tools act as dynamic assistants to help students master writing skills by brainstorming ideas, refining sentence structure, providing real-time feedback,. These tools like ChatGPT, Grammarly, QuillBot, and Sudowrite enable students to focus on thinking out of the box by providing ideas guiding them with explanations. These Tools identify complex errors, including subject-verb agreement, sentence fragments, and misplaced modifiers. The tools also provide alternative phrasing, improve word choice, and mark the complex or long sentences. Tools like QuillBot and Word tune offer multiple ways to rephrase sentences, helping to avoid repetition and improve flow. Real time feedback too can be ensured as the students receives instant suggestions from the AI tools .However it is unfortunate students blindly copy without studying or reading with a focused mind as a result during the time of examination they fail to use their acumen and write answers as expected .

The use of AI tools to prepare for Group Discussion

AI tools are useful for students who are shy, introvert and not have the exposure to discussion in their family, nor socialize with peers, seniors or unknown professionals from Industry or in the milieu of life .for these students AI tools almost become their friend and guide to generate arguments for and against topics, giving participants a complete picture of various topics and their perspective generating more ideas ,coming up with rich content quickly summarizing vast amounts of information, enabling participants to grasp complex GD topics in a short span of time

AI assist in structuring thoughts using for example the prep method, ensuring points are articulated clearly and in a professional manner like act as opponents in a mock GD, providing a platform to practice, receive feedback on performance, and improve communication refine language, improve tone, and enhance the clarity of arguments, making speeches more engaging and persuasive. It can therefore be said if students use AI as a guide and learn to improve own performance AI tools surely help in enhancing employability skills but the student must put their effort sincerely without waiting for AI tools to manage during the final day

AI tools and Interview Preparation

In days of AI driven zone, students are offered assistance for 24x7 hours for preparing themselves in the interview process. Of course the guidance of the real time teachers can never be denied. AI tools are available all the while acting as virtual interviewers. They ask role specific questions and create high-pressure .Realistic mock interviews are held and the candidate overcome the pressure by appearing in the mock interview held in AI platform and receive instant feedback. AI analyzes speech rate, filler words, facial expressions, posture, and eye contact. **Résumés** are uploaded and as per job descriptions AI generates personalized questions and mock interviews relevant to the specific job. Copilot” tools guide the candidate in answering discreetly on the screen. AI bots help research company culture, recent projects, and interviewer backgrounds. SmallTalk2Me, the AI-powered simulator focuses on non-native English speakers. It offers feedback on grammar, fluency, and vocabulary. **Interview Buddy** combines AI and human-based mock interviews to provide in-depth performance.

The Role of English Communication Faculties in AI powered World

As the world shrinks into a small global village where technology have enabled the human beings reach out to any corner of the world within a fraction of seconds ,the system of education changes from teacher centric to student centric where teachers play the role of mentors focusing on human-centric skills like empathy, emotional intelligence, and critical thinking. They command of choosing the AI tools is still in the hands of teachers who decide which tool would help the students better as per their mental horizon rather than letting technology drive the curriculum. Teachers educate learners on AI ethics, including data privacy and identifying bias or misinformation in AI-generated materials. Teachers provide importance to emotional intelligence, cultural awareness, and empathy, helping students understand the reason behind language or word choices, rather than just grammatical correctness. AI tools are not human and it is obvious non living beings

do not possess emotions or can empathize and herein lies the importance of teachers who are not mere tutors providing knowledge but teachers are *gurus* who understand the possibilities or probabilities, the talents hidden within the student to bring it out with proper guidance, care and nourishment in the form of motivation and counseling that AI is unable to provide. Teachers are flexible and can immediately adjust their teaching methods based on the physical, mental, emotional, social state of the classroom. If the student is physically or emotionally not in a condition to take the lessons the teacher will be always there like a parent who with the care can motivate the students and pull from the debris of despair to hope. As teachers understand the external factors affecting a student's performance, such as family context, personal hardships, peer pressures, parental issues if any and allow them to adjust expectations accordingly. Teachers are humane and they too feel the emotions of elation and pain just like the parents when the student succeed or experience failure during the time of examination or interview.

CONCLUSION

Education is about inspiration, not just instruction. AI can supply information but teachers inspire with their smiles, strict yet loving and caring, admonish yet pamper, cheer and award the students with a small treat after their success ,the patting on the shoulder like an elder brother or a father when not performed well as expected ,the warmth, the joy, the care can come only from a human being and not from machine. Teachers are there to turn the classroom where students shout, scream, frolick with joy, laughter, humor, fun that makes the learning more enjoyable and memorable. Therefore teachers will forever remain in the minds and hearts of the students. AI tools support as the assisting guide to the teachers for imparting education in a smooth manner. These tools need to be adopted by the teachers only to make their work easier and attain smart goals

ACKNOWLEDGEMENT

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REFERENCES

1. Challenges in Teaching English to Engineering Students: A Contemporary Perspective Dr. M. Jaya Ranjan V. R. Siddhartha Engineering College Vijayawada, Andhra Pradesh, India. Contemporaneity of Language and Literature in the Robotized Millennium Vol: 3(1), 2021 REST Publisher ISBN: 978-81-936097-3-6 Website: <http://restpublisher.com/book-series/cllrm/>
2. Sino-US English Teaching, April 2025, Vol. 22, No. 4, 129-132 doi:10.17265/1539-8072/2025.04.002 Challenges of College English Teaching in the AI Era DENG Yongping University of Shanghai for Science and Technology, Shanghai, China
3. The Educational Review, USA, 2025, 9(12), 978-984 <https://www.hillpublisher.com/Journals/er/> ISSN Online: 2575-7946 ISSN Print: 2575-7938 DOI: 10.26855/er.2025.12.007 978 The Educational Review, USA Challenges and Opportunities of English Education in the AI Era Guanghua Zhu Jiangxi Guokong Real Estate Group Co., Ltd., Nanchang 330000, Jiangxi, China.
4. Artificial intelligence and English language teaching: Preparing for the future 2nd edition: July 2024 Dr Adam Edmett Neenaz Ichaporia Dr Helen Crompton Ross Crichton
5. ISBN: 978-1-915280-48-0 DOI: <https://doi.org/10.57884/78ea-3c69> © British Council 2023 1 Redman Place, London E20 1JQ, United Kingdom www.britishcouncil.org Cite this report: Edmett, A., Ichaporia, N., Crompton, H., & Crichton, R. (2024). Artificial intelligence and English language teaching: Preparing for the future (Second edition). British Council. <https://doi.org/10.57884/78EA-3C69>
6. DIAJAR: Jurnal Pendidikan dan Pembelajaran <https://journal.ypp3a.org/index.php/DIAJAR> e-ISSN 2810-0417 | p-ISSN 2810-0786 Vol. 4 No. 1 (Januari 2025) 8-16 DOI: 10.54259/diajar.v4i1.3344 Lisensi: Creative Commons Attribution 4.0 International (CC BY 4.0) 8 Enhancing English Language Learning Through Artificial Intelligence: Opportunities, Challenges and the Future Yuli Rohmiyati English Education Program, Education Faculty, , Indonesia
7. The world is too much with us: William Wordsworth: Poetry Foundation
8. The Rime of the Ancient Mariner (text of 1834): S.T Coleridge: Poetry Foundation

Chapter 20

Creating an Immersive and Engaging Learning Environment in The Age of AI: A Psychological and Pedagogical Perspective

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ABSTRACT

In the contemporary learning ecosystem, the integration of Artificial Intelligence has significantly transformed the dynamics of language teaching and acquisition. In the Indian context, where English is often taught as a foreign language, learner's exhibit psychological resistance shaped by factors such as fear, hesitation, and perceived irrelevance. This paper explores how such resistance can be understood through the concept of defense mechanisms, particularly rationalization, as proposed by Sigmund Freud. Drawing parallels with the fable The Fox and the Grapes, the study highlights how learners tend to dismiss language learning as unnecessary when faced with difficulty. The paper argues that the advent of AI tools such as Chat GPT has not diminished the importance of the English classroom but has instead created opportunities for more engaging, activity-based, and experiential learning. By focusing on speaking skills, performance-based pedagogy, and the needs of rural learners, the paper proposes a shift from content delivery to experience creation. It concludes that the effective integration of AI, supported by psychological understanding and literary insights, can transform the English classroom into an immersive, inclusive, and empowering space.

Keywords: Artificial Intelligence, English Language Teaching, Rationalization, Defense Mechanism, Experiential Learning, Speaking Skills, Rural Learners, Classroom Engagement

INTRODUCTION

The teaching of English as a foreign language in India has always been a complex process shaped by linguistic diversity, socio-cultural factors, and learner psychology. In recent years, this complexity has been further intensified by the rapid advancement of Artificial Intelligence. While AI helpers offer unprecedented access to information and language resources, they also influence learner attitudes, often leading to reduced motivation for active language acquisition.

In the Gen Z classroom, learners are highly dependent on digital helpers and instant solutions. This has led to a shift in perception, where the effort required learning a language is often seen as unnecessary. As a result, teachers face the dual challenge of addressing both communication gaps and psychological resistance.

Psychological Dimensions of Language Learning

The reluctance of learners to actively engage in English language learning can be effectively explained through the concept of defense mechanisms introduced by Sigmund Freud. Among these, *rationalization* plays a significant role. When students find it difficult to learn English, they tend to justify their avoidance by questioning its relevance; often stating that technological tools can perform the same function. This behavior closely resembles the moral illustrated in *The Fox and the Grapes*, where the fox dismisses the grapes as sour because it cannot reach them. Similarly, learners redefine the value of English to protect their self-esteem, thereby avoiding the effort required to master it. Another important psychological barrier is communication anxiety, particularly among students from rural backgrounds. Fear of making mistakes, lack of exposure, and social inhibition often prevent learners from expressing themselves confidently in English.

Role of Artificial Intelligence in Language Classrooms

The emergence of AI tools such as Chat GPT has significantly altered the traditional classroom environment. While there is a common perception that AI may replace teachers, it can instead be viewed as a supportive tool that enhances teaching efficiency.

AI can assist in generating content such as dialogues, essays, and scripts, thereby reducing the time spent on mechanical tasks. This allows teachers to focus more on interactive and communicative aspects of language learning. Instead of replacing human effort, AI complements it by enabling a shift from content creation to experience-based learning.

Immersive Learning and Learner Involvement

The philosophy of Immersive learning or experiential, advocated by John Dewey, emphasizes that learning should be rooted in experience rather than passive reception. In the context of English language teaching, this approach can be implemented through performance-based activities such as role plays, storytelling, debates, and dramatizations.

Enactments of scenes from Shakespearean dramas, along with humorous and real-life situations, make the classroom more dynamic and engaging. These activities encourage students to actively use the language, thereby improving both fluency and confidence.

Such methods are particularly beneficial for shy learners, as they provide a structured yet supportive environment for expression. The classroom becomes a space where mistakes are seen as part of the learning process rather than failures.

Importance of human voice in the Age of AI

While AI helpers can generate written content and provide language support, they cannot replace the individual's ability to communicate in real-life situations. Speaking skills require spontaneity, confidence, and presence of mind—qualities that cannot be outsourced to technology. As Ludwig Wittgenstein observed, *"The limits of my language mean the limits of my world."* This highlights the importance of developing oral communication skills, as they directly influence an individual's ability to interact and participate in society. Students cannot rely on AI during real-time conversations. In such situations, their ability to respond effectively depends entirely on their own competence. Therefore, the classroom must prioritise speaking activities that build confidence and reduce hesitation.

The words of William Butler Yeats, *"Education is not the filling of a pail, but the lighting of a fire,"* aptly describe this transformation. The teacher's responsibility is to inspire learners and ignite their interest in language learning.

At the same time, the caution expressed by Albert Einstein regarding the overdependence on technology serves as a reminder to maintain a balance between digital tools and human interaction.

CONCLUSION

The integration of Artificial Intelligence in education has brought both challenges and opportunities to the English language classroom. While learners may initially exhibit resistance through rationalization, this can be effectively addressed by understanding their psychological tendencies and designing engaging learning experiences.

By utilizing AI as a supportive tool and focusing on experiential, activity-based learning, teachers can transform the classroom into an immersive and inclusive environment. The emphasis on speaking skills, particularly for rural and hesitant learners, ensures that language is not merely learned but actively used.

Ultimately, the success of language teaching in the age of AI lies not in competing with technology, but in enhancing human expression. The English classroom must evolve into a space where learners gain not only linguistic competence but also the confidence to communicate effectively in the real world.

REFERENCES

1. Freud, S. (1936). *The Ego and the Mechanisms of Defence*. London: Hogarth Press.
1. Dewey, J. (1938). *Experience and Education*. New York: Macmillan.
2. Wittgenstein, L. (1922). *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul.
3. Shakespeare, W. (1623/2003). *As You Like It*. In *The Complete Works of William Shakespeare*. Oxford: Oxford University Press.
4. Yeats, W. B. (1929). *Essays and Introductions*. London: Macmillan.
5. Einstein, A. (1954). *Ideas and Opinions*. New York: Crown Publishers.
6. Mandela, N. (1995). *Long Walk to Freedom*. Boston: Little, Brown and Company.
7. Aesop. (2002). *Aesop's Fables*. Oxford: Oxford University Press.
8. OpenAI. (2023). *ChatGPT (GPT-4/5 series)* [Large language model]. Retrieved from <https://openai.com>

Chapter 21

AI-Integrated Teaching: A Paradigm Shift in Modern Pedagogy

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ABSTRACT

Higher education is experiencing a significant shift driven by emerging AI technologies as traditional instructional models yield to AI-driven, personalized learning ecosystems. This research evaluates the efficacy of Artificial Intelligence (AI) in academia, specifically examining adaptive learning frameworks, predictive data analytics, and automated evaluation tools. Based on field observations at BITS 2025 and 2026, the present study uniquely highlights 35% improvement in student engagement and a 20% reduction in administrative burdens for faculty. Despite these gains, the study highlights critical challenges regarding algorithmic transparency, data privacy, and equitable access. Ultimately, the paper advocates for an ethical framework that positions AI as a collaborative partner rather than a replacement for the human educator, whose emotional and social intelligence remains irreplaceable.

Keywords: Artificial Intelligence, Adaptive Learning, Pedagogy, Educational Technology, Personalized Education, Predictive Analytics, Research Framework.

1. INTRODUCTION

The rapid maturation of Large Language Models (LLMs) and machine learning has moved AI-integrated teaching from a conceptual possibility to an operational standard in higher education. This evolution is fundamentally reconfiguring the dynamics between students and instructors. This paper investigates the practical application of these technologies within the classroom to optimize both academic performance and institutional productivity.

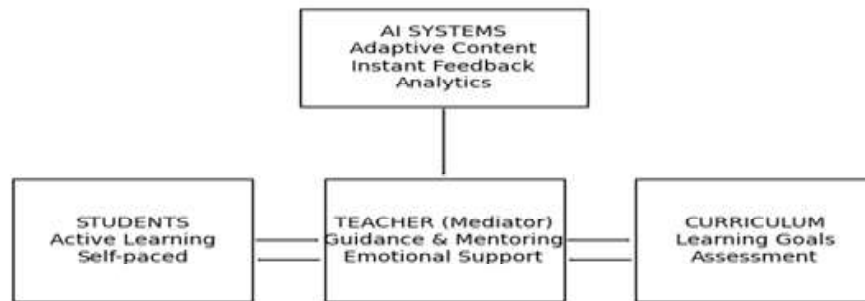


Figure 1: Human-AI Collaborative Teaching Model

2. THEORETICAL FRAMEWORK

In the present study, theoretical models were not considered as abstract constructs; Social Constructivism, the TPACK framework, and Connectivism were applied to interpret how AI functions within real classroom practices at Baba Institute of Technology and Sciences, Visakhapatnam.

The principles of **Social Constructivism** (Vygotsky, 1978) were observed in the way students interacted with AI tools during learning activities. AI systems functioned as the More Knowledgeable Other (MKO) by offering immediate feedback, suggestions, and scaffolding support. In the *Product Pitch* and *Resume Building* activities, students began with preliminary ideas and progressively refined them using AI-generated inputs. These tasks that were initially difficult for students became achievable with guided assistance.

However, learning did not remain confined to AI interaction. Classroom discussions, peer feedback, and faculty intervention played a critical role in deepening understanding. This indicates that while AI facilitates cognitive scaffolding, knowledge construction remains inherently social, emerging through interaction, negotiation, and reflection.

The **TPACK framework** (Koehler & Mishra, 2009) was operationalized through the deliberate integration of technology, pedagogy, and content in classroom activities.

- Technological Knowledge (TK): Use of AI tools for feedback, content generation, and language refinement
- Pedagogical Knowledge (PK): Experiential learning strategies such as group discussions, product pitching, and resume workshops
- Content Knowledge (CK): Domain-specific communication, employability skills, and technical articulation

Effective learning occurred at the intersection of these domains. In GD practice sessions, AI-generated arguments supported content preparation (CK), while faculty-guided discussions enabled pedagogical depth (PK), and at the same time, AI tools provided technological support (TK). This demonstrates that AI integration needs to be pedagogically aligned rather than technologically driven, reinforcing the central premise of the TPACK model.

From a **Connectivist** viewpoint (Siemens, 2005), learning in AI-integrated environments extended beyond traditional classroom boundaries. AI tools in this case acted as knowledge nodes, enabling students to access diverse perspectives, real-time information, and multiple representations of ideas. In Group Discussions conducted during CRT classes, students engaged with AI-generated viewpoints before participating in live discussions. This exposure helped them to navigate and synthesize distributed knowledge, a key principle of connectivist learning.

However, the study also found that without critical engagement, AI-generated responses could lead to generic outputs, emphasizing the need for active learner agency within digital networks.

The combined application of these frameworks suggests that AI in education operates most effectively as a facilitator of learning rather than a replacement for instruction. Human guidance, technological support, and social interaction must coexist to enhance learning outcomes.

3. RESEARCH DESIGN

To attain a comprehensive understanding of AI's impact, a Convergent Parallel Mixed-Methods Design was employed:

- Experimental Phase: A quasi-experimental study comparing a control group (traditional teaching) with an experimental group (AI-enhanced teaching).
- Qualitative Phase: A phenomenological study involving 150 students from BITS, Visakhapatnam, exploring their personal experiences with AI-driven autonomy through semi-structured interviews.

- **Data Triangulation:** Validity was maintained by synthesizing anonymized LMS logs, 5-point Likert scale surveys measuring perceived usefulness, and interview transcripts.

4. DATA COLLECTION AND SOURCES

Data triangulation was utilized to maintain high validity:

1. **Quantitative Data:** Anonymized logs from Learning Management Systems (LMS) and Adaptive Learning Platforms (ALPs), tracking student time-on-task, mastery levels, and assessment scores of 150 students.
2. **Survey Instruments:** Pre- and post-intervention surveys utilizing 5-point Likert scales to measure Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) among the student body.
3. **Qualitative Sources:** Transcripts from semi-structured interviews with 150 students, focusing on their psychological comfort with AI tutors in the English Language lab and their perceived value of human-led versus AI-led feedback.

5. ANALYSIS

The data analysis revealed several significant patterns regarding the impact of AI-integrated teaching on student learning outcomes and engagement:

Performance Metrics:

Inferential statistical analysis using an independent sample t-test indicated a statistically significant improvement ($p < 0.05$) in STEM subject performance among students exposed to AI-driven personalized feedback mechanisms. This finding is consistent with prior research highlighting the effectiveness of adaptive learning technologies in improving academic performance through personalized instruction (Baker & Siemens, 2014; Molenaar, 2022).

Student Sentiment:

Qualitative analysis of interview transcripts revealed that students valued immediate AI-generated feedback, as it enhanced their learning efficiency. However, many participants expressed the need for human validation in subjective assignments, strengthening the argument that AI cannot fully replicate the socio-emotional dimensions of teaching (Holmes et al., 2019; Luckin et al., 2016).

Engagement Patterns:

It was noted that students in the experimental group engaged with course materials approximately 40% more frequently outside formal instructional hours.

This increased engagement reflects a shift toward self-directed learning, supported by AI-enabled accessibility and continuous feedback loops (Siemens, 2005; Zawacki-Richter et al., 2019). Confident learners navigate digital tools better to benefit from AI integration, aligning with technology acceptance and behavioural intention models (Ajzen, 1991; Koehler & Mishra, 2009).

All the above findings indicate that AI-integrated teaching enhances academic performance, learner engagement, and autonomy, while also reiterating the need for human educators to facilitate emotional, ethical, and higher-order cognitive development

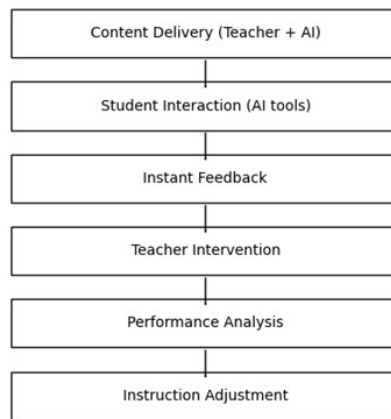
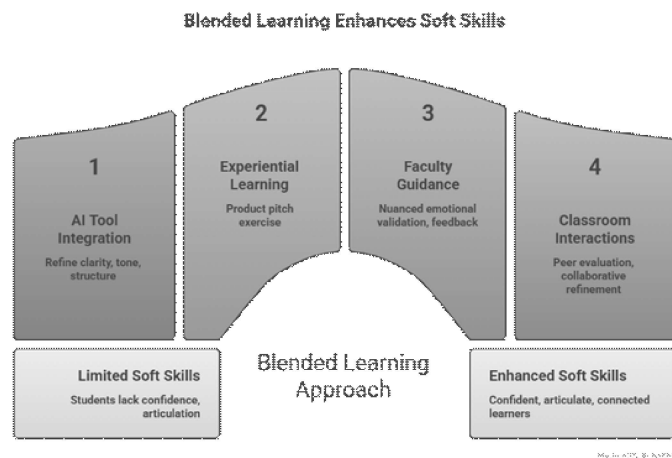


Figure 2: AI-Integrated Classroom Process Flow

6. CASE STUDY

Case Study 1. Soft Skills Class at Baba Institute of Technology and Sciences, Visakhapatnam

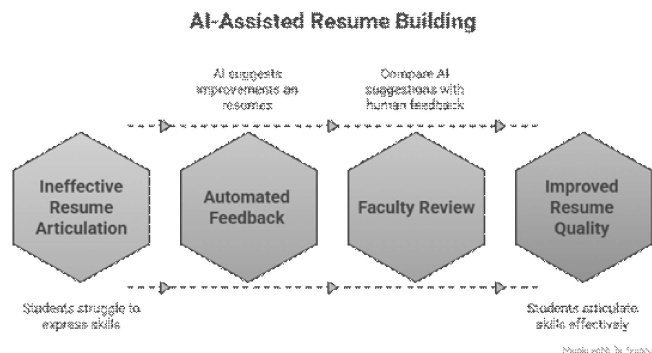


In a practical application at the Baba Institute of Technology and Sciences, soft skills curricula for second- and third-year students were redesigned. During a “Product Pitch” exercise, students used AI to refine the clarity, tone, and structure of their presentations. While the tools significantly boosted student confidence and articulation, the participants continued to rely on faculty for nuanced emotional validation and high-level feedback. This activity reflected a meaningful integration of AI tools, experiential learning through pitching, and communication and persuasion skills. The technology did not function in isolation; rather, it complemented faculty guidance, enabling a blended instructional approach. AI also provided scaffolding by assisting students in refining their ideas within their Zone of Proximal Development. However, deeper learning emerged during classroom interactions, where students received feedback, engaged in peer evaluation, and refined their presentations collaboratively.

A student reflected, *“The AI helped me organize my pitch clearly, but it was my teacher who helped me understand how to connect emotionally with the audience.”*

AI exposed students to diverse linguistic patterns, presentation styles, and real-time suggestions. This enabled learners to connect with broader communicative practices beyond the classroom environment.

Case Study 2: AI-Assisted Resume Building and Employability Skills



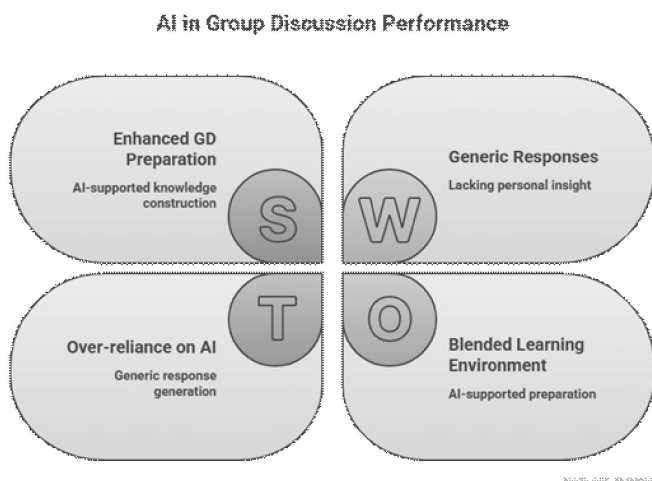
Final-year B. Tech students at BITS, Visakhapatnam, often face challenges in articulating their technical competencies effectively in resumes and interviews. An AI-powered resume assistant was introduced during CRT (Campus Recruitment Training) sessions. Students uploaded their draft resumes and received automated feedback on structure, keyword optimization, and clarity. Faculty conducted a review session comparing AI-generated suggestions with human feedback.

One student shared, *“The AI tool improved my resume format instantly, but I realized I had to carefully check whether the content truly reflected my skills.”*

It was deduced that students demonstrated improved awareness of industry-specific keywords, and their resume quality improved in terms of clarity and organization. The problem area was that many students initially over-relied on AI-generated content without critical evaluation. This planned intervention demonstrated that AI did not replace teaching but enhanced pedagogical delivery by aligning student content with technological affordances.

AI offered scaffolding through suggestions and corrections while the students operated within their Zone of Proximal Development (ZPD)—moving from basic resume drafts to professionally structured documents with AI-assisted guidance and faculty validation. Their learning extended beyond the classroom as they interacted with AI systems that simulate industry expectations. The above points effectively illustrate that meaningful learning can occur when students actively negotiate between AI suggestions and human feedback.

Case Study 3: AI in Group Discussion (GD) Performance Enhancement



Group Discussions are a key component of placement processes, yet many BITS students struggle with idea structuring and spontaneous speaking. In soft skills classes, students used AI tools to simulate GD scenarios by generating topic briefs, arguments, and counterpoints. AI-generated GD topics and students practiced individually using AI-generated points. Thereafter, live GD sessions were conducted in class, followed by peer and faculty evaluation. This method enabled a blended

learning environment, as AI-supported preparation, complemented human-led evaluation, reinforcing TPACK alignment. AI-supported preparation helped the students to enter discussions with pre-constructed knowledge, followed by peer interaction, negotiation of ideas, and collaborative dialogue. AI provided initial scaffolding, but knowledge was co-constructed during live discussions—aligning strongly with constructivist principles. AI exposed students to diverse perspectives and arguments, simulating a distributed knowledge network. Students learned to navigate, evaluate, and connect diverse viewpoints, which is a core principle of connectivist learning in digital environments.

A participant mentioned, *“AI gave me ideas to speak, but during the discussion, I had to think on my own and respond to others.”*

The only flaw was that some responses became overly generic, lacking personal insight.

7. FUTURE SCOPE AND LIMITATIONS

Future Scope

The future of AI in teaching lies in Multimodal Learning Analytics (MMLA), which would utilize computer vision to detect student affect (frustration, engagement) through non-verbal cues. Additionally, the integration of VR/AR with AI tutors would offer a scope for immersive, context-aware historical and scientific simulations in university laboratories.

Limitations

- **Institutional Concentration:** Focusing on only 150 students may have limited the generalizability of the findings.
- **Student Self-Reporting:** Qualitative interviews are subject to recall bias and the “Hawthorne Effect,” where students may perform better simply because they know they are being studied.
- **Duration:** While 15 months provides a clear snapshot, it may not capture the pedagogical decay that occurs once the novelty of AI wears off.

7. FURTHER RESEARCH AREAS

1. **AI and Academic Integrity:** Developing “AI-resistant” assessment models that prioritize process over final product.
2. **Cognitive Offloading:** Investigating whether constant AI assistance leads to “mental atrophy” in basic problem-solving skills among undergraduates.

3. **Cross-Cultural Pedagogy:** Analyzing how AI learning models perform across different linguistic and cultural educational contexts in international universities.

8. CONCLUSION

AI-integrated teaching represents the most significant shift in pedagogy since the industrialization of education. While the technology offers unprecedented precision in instruction, it cannot replace the ethical, emotional, and inspirational role of the human educator. A “Centaur Model”—where human intuition guides AI efficiency—is the most sustainable path forward for higher education in the 21st century.

REFERENCES

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
2. Baker, R. S., & Siemens, G. (2014). Educational data mining and learning analytics. *Cambridge Handbook of the Learning Sciences*, 2, 253-274.
3. Chassignol, M., Khoroshavin, A., Klimova, A., & Bilyatdinova, A. (2018). Artificial Intelligence trends in education: A narrative review. *Procedia Computer Science*, 136, 16-24. <https://doi.org/10.1016/j.procs.2018.08.233>
4. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.
5. Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.
6. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An argument for AI in Education*. Pearson.
7. Miao, F., Holmes, W., Huang, R., & Ronghuai, H. (2021). *AI and education: A guide for policymakers*. UNESCO Publishing.
8. Molenaar, I. (2022). Towards hybrid-human teaching and learning: Twenty years of educational games and six steps to self-regulated learning. *International Journal of Artificial Intelligence in Education*, 32(1), 1-13.
9. Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26(2), 582-599.
10. Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10.
11. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
12. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review

Chapter 22

Exploring Digital Media for Language Teaching and Learning

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ABSTRACT

Learning a new language is considered as difficult task because it needs more exercises in various skills. Media plays the important role in increasing the learners' desire to learn by creating the atmosphere of fun. In this digital era, learning models utilize technology as leaning media to provide wider access and opportunities for students in building their own knowledge. The availability of technology in education enables educators to plan and implement innovative and interactive learning model. The main goal of this paper is to suggest the current media for teaching and learning language in digital era.

INTRODUCTION

It is believed that learning a new language is not an easy task, because it requires some exercises in multiple skills like listening, writing, reading, and speaking. Learning another language aims at facilitating the learner to write and communicate in new language easily. The motivation to learn plays the important role in improving the language proficiency. Hence, learning process needs a proper media to increase the learner's desire to learn by creating the atmosphere of fun.

FULL PAPER

Media is an instrument that is used to transform messages or information from “resource” to “receiver,. Based on these definitions, it can be said that the learning process is a process of communication. The learning process contains five components of communication, teachers learning materials, learning media, students

and learning objectives. So, learning media is everything that can be used to channel messages (learning materials), so that it can stimulate attention, interest, thoughts, and feelings of students in learning activities to achieve learning goals. Gerlach and stated that instructional media plays a key role in the design and use of systematic instruction. A medium, broadly conceived, is any person, material, or event that establishes conditions which enable the learner to acquire knowledge, skills, and attitudes. In this sense, the teacher, text book, and school environment are also media. additionally, in teaching and learning process, media is also defined as graphic, photographic, or electronic tools for capturing, processing, and reconstructing visual or verbal information. AECT (Association of Education and Communication Technology) limits the media as all forms and channels used for information message. Aside from being a conveying or introductory system, media is often replaced with the word 'mediator' which regulates an effective relationship between two parties in the learning process, namely students and the contents of the lesson, nowadays, one of the important aspects in teaching and learning process is the use of technology, which many years has been replacing the dominant of traditional media. Currently, the development of technology and the internet is rapid and constant. The big role of internet is reducing the time of physical interactions between students and teachers in achieving similar or better effects in improving language skills. Therefore, the teaching learning process needs appropriate media for this era.

Media as one of the usual aids is most available resource for language teacher that is used for centuries to help students and practice foreign language effectively. Learning media can be understood as the media used in the learning process and objectives. In essence, the learning process is the same as communication. The learning media can be understood as a communication medium used in the communication process, learning media has an important role as a means to deliver the learning messages. Hence, by using media in the teaching and learning process can facilitate the educators in delivering the material to the students. Besides, using media in teaching process can stimulate the students' attention and interest in understanding the learning material easily. The purpose of using learning media in learning process is not only to complete the learning process and to attract the attention of students, but it aims to facilitate the teaching and learning process so that it can improve the quality of teaching and learning. Hence, the learning media is the integral component within learning system

In interaction between students and the environment, the function of the media is recognized from the presence of excess media and obstacles that may arise in the learning process. The three advantages of media are as follows. First, fixative ability means that it can capture, store, and display an object or event again. With

this ability, objects or events can be drawn, photographed, recorded, filmed, then can be stored, and when need it can be shown and re-observed as the original event. Second, manipulative ability, meaning that the media can display objects or events again with various kinds of changes as needed, for example its size, speed, colour, and can also be repeated over and over. Third, distributive ability means that the media is able to reach a large number of audiences in one presentation simultaneously, for example TV or Radio broadcasts. Meanwhile, communication disruptions in the learning process are as follows. First, verbalism means that students can say the word but do not know the meaning. It happens because the teacher usually teaches only with oral explanations (lectures), students tend to only imitate what the teacher said. Second, misinterpretation is that the term is interpreted differently by students. It happens because usually teachers only explain verbally without using other learning media, for example images, charts, models, and so on. Third, attention is not cantered, it can occur because of several things, including physical disorders, there are other things that are more interesting affect the students' attention, daydreamers, boring teaching methods, lack of supervision and teacher guidance. Fourth, there is no understanding, meaning that it lacks logical and psychological meaning. What is observed or seen, experienced separately. There is no logical thinking process from consciousness to the emergence of concepts

YouTube has a potential to transform the way of educational system works by stimulating students' participation and interest. Teachers can find a wide variety of professional videos created by the experts, which cover almost every subject, from general to specific material. Crash Course, School of life, Vice News, and Lesson from the screenplay are the examples of professional websites that teacher may use in classroom. They provide an interesting and attractive content, full of graphics and charts which students can use later on to broaden their knowledge. It creates a possibility to improve students' language skills and provide them with new pieces of new information. As Clark and Mayer (2002) pointed out, YouTube can facilitate learning process through reducing students' cognitive loads. In addition, YouTube provides students to continue their learning process maintaining the same method with in class, which is convenient. The variety of possibilities given by YouTube shows that if media are chosen wisely, learning language can be pleasant.

Tape recorders can be used for playing textbook tapes, tapes of people speaking and music tapes. They also can be used by students in recording their own speaking. A teacher can improve the students' ability in listening or speaking by using this media. The students can listen to the native speaker talk from the recording to examine their ability in listening. Besides, it can help students to understand the reading material through listening to music, news, and so on. Furthermore, tape recorder can also examine the students' ability in speaking by

recording their monolog or dialog then identify the mistakes in it. 2) Radio Radio is an “audio media whose delivery of messages is carried out through the emission of electromagnetic waves from a transmitter. Sounds that contain messages are communicated or informed through microphone that will then be transmitted through electromagnetic waves and the listener captures that information by radio. Radio is very good for developing children’s imagination through broadcast messages. In addition, radio can stimulate active participation from listeners such as drawing, writing, demonstrating, or dancing while listening to radio broadcast messages. Moreover, radio can focus students’ attention through words, sentences, or music so that it is considered very suitable for teaching music and language.

Compact Disk (CD) Revolutionary innovations in the world of audio recordings took place in 1979, it is the birth of compact discs (CDs) as the result of mixing computers and laser power. Compact Discs or solid discs are an optical disk that is used to store data digitally. Solid disc technology was later adopted to be used as a data storage device known as a CD-ROM. The advantage of CD is that the form is very simple and concise, the sound quality is clear, the recording capability is great, can record up to more than 700 megabytes, besides maintenance is also easy. The basic principle of treatment is the same as LPs, as long as it is not scratched. CDs can also withstand in repeated use, and sound quality can be improved because music is digitally recorded. Data from the CD can be transferred to other media such as the computer. Otherwise, the disadvantages are the surface of the CD is easier to scratch if you are not careful. And if it’s scratched optically, the unit can’t read the CD, so the work isn’t optimal. c. Audio visual media Anderson (1994:99) stated that audio visual media is a series of electronic images accompanied by audio sound elements put into the video tape. The series of electronic images is then rotated with a device that is a video cassette recorder or video player. Audio-visual media is a combination of audio and visual media, or commonly called hearing media. With more complete characteristics, audio-visual media has the ability to overcome the shortcomings of audio media or from visual media. The functions and capabilities of audio-visual media will increase when equipped with motion characteristics. It is able to deliver more complex and more realistic messages.

Film “Film” refers to the rough material on which a series of still image are photo chemically imprinted; this series of transparent damages, when projected at a rate of 24 images per second, is perceived as a moving image. Motion picture film comes in various widths and image size. Moving images have an obvious advantage over other visual media in portraying procedures in which motion is essential to mastery. The teaching and learning process using audio visual media is very different from conventional teaching. The experience of seeing and hearing

makes it easier for students to interpret the material or information conveyed by the teacher. Learning with varied teaching media is very helpful for students in understanding the explanation from the teacher. Students themselves tend to be more enthusiastic with visually presented reality, for example through film pieces. The piece of film can be developed using materials made by the teacher. For instance, the pieces of Pearl Harbour film pieces can be a material in studying history.

Television Hamalik stated that Television is an electronic motion picture with con joined or attendant sound; both picture and sound reach the eye and ear simultaneously from a remote broadcast. TV is a powerful media in disseminating information simultaneously, and has been proven to have very effective capabilities, so it can be used to broadcast learning programs nationally. TV series are one of TV programs that is important to help students' vocabulary and show the correct pronunciation. They also present differences in accents by portraying various nationalities. Besides, TV cast imitates natural conversations and interactions between people. These characteristics facilitate

REFERENCES

1. Anderson, R.H. 1987. *Pemilihan dan Pengembangan Media untuk Pembelajaran*. Jakarta: Rajawali Pers.
2. Anderson, Ronald. H. 1994. *Pemilihan dan Pengembangan media Video Pembelajaran*. Jakarta: GrafindoPers
3. Arsyad, Azhar. (2010). *Media Pembelajaran*. Jakarta: PT. Raja GrafindoPersada.
4. Criticos, C. 1996. Media selection. Plomp, T., Ely, D. P. (Eds.): *International Encyclopedia of Educational Technology*, 2nd edition. New York: Elsevier Science, Inc.
5. Clark, R.C. and Mayer. R.E. 2002. *E-Learning and Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. San Francisco: Jossey-Bass Pfeiffer.
6. Ibrahim, H., Sihkabuden, Suprijanta, & Kustiawan, U. 2001. *Media pembelajaran: Bahansajian program pendidikanakamengajar*. FIP. UM
7. Hamalik, O. 1985. *Media Pendidikan*. Bandung: Penerbit Alumni.
8. Sadiman, A.S., Rahardjo, R., Haryono, A., dan Rahardjito. 2002. *Media Pendidikan*. Jakarta: PT. RajaGrafindo Persada.
9. Riyana, C. 2012. *Media Pembelajaran*. Jakarta: Direktorat Jenderal Pendidikan Islam Kementrian Agama Republik Indonesia.

Chapter 23

Posthuman Visions in Science Fiction and Ethical Implications of AI in English Education

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ABSTRACT

This paper analyses the intersection of posthumanism in contemporary science fiction and the ethical implications of artificial intelligence (AI) in English education. Using the contemporary science fiction by William Gibson's *Neuromancer* (1984) and Masamune Shirow's *Ghost in the Shell* (1991) as primary text and film, it investigates how posthuman narratives—depicting blurred boundaries between humans and intelligent machines—offer critical insights into the integration of AI technologies in English classrooms. The study explores the parallels between the novels' portrayal of autonomous, adaptive, and morally ambiguous AI and contemporary educational tools, including AI-based writing assistants, adaptive learning platforms, and automated assessment systems. Ethical concerns addressed include algorithmic bias, inequitable access, over-reliance on technology, and the evolving role of educators. Through illustrative classroom scenarios, the paper demonstrates how posthuman literature functions as a reflective lens, providing foresight into potential challenges in AI-mediated learning. Ultimately, this interdisciplinary approach offers guidance for responsible AI deployment, encouraging educators and policymakers to anticipate ethical dilemmas and design learning environments that are equitable, inclusive, and supportive of critical thinking. The findings highlight the value of literature in informing technological integration and ethical pedagogy in the modern English classroom.

Keywords: Posthumanism, AI in Education, Ethics, Literature, *Neuromancer*, *Ghost in the Shell*

1. INTRODUCTION

Over the recent years, the integration of artificial intelligence (AI) into English education is reshaping how students learn, teachers instruct, and assessment is conducted. AI-driven tools—including automated essay scoring systems, AI writing assistants, and adaptive learning platforms—offer personalized feedback, real-time evaluation, and data-driven support. While these technologies enhance learning outcomes and efficiency, they also introduce ethical challenges related to bias, over-reliance, and equity.

Posthumanism, a theoretical framework that explores the interplay between humans and technology, offers critical insights into these challenges. By interrogating the boundaries between humans, machines, and intelligence, posthumanism illuminates the potential consequences of delegating cognitive and evaluative authority to AI systems. Science fiction, particularly the select posthuman narratives, provides imaginative explorations of these themes, highlighting ethical tensions arising from autonomous, intelligent machines.

This paper analyses the science fiction William Gibson's *Neuromancer* (1984) and the film Masamune Shirow's *Ghost in the Shell* (1991) to explore how posthuman narratives can inform the ethical integration of AI in English classrooms. By drawing parallels between fictional AI behavior and contemporary educational technologies, the study addresses critical issues including algorithmic bias, inequitable access, over-dependence on AI, and the shifting role of teachers. It argues that posthuman literature provides an anticipatory lens, enabling educators and policymakers to implement AI responsibly while fostering equity, autonomy, and critical thinking in students.

2. LITERATURE REVIEW

2.1 Posthumanism in Literature

Posthumanism emerged in the late twentieth century as a response to the increasing integration of technology into human life. Scholars such as N. Katherine Hayles (1999) and Donna Haraway (1991) examine the dissolution of traditional human-centered boundaries, emphasizing human-technology hybridity, cognitive augmentation, and ethical ambiguity. Science fiction often embodies posthuman ideas, portraying AI as autonomous agents that challenge human exceptionalism. In these narratives, AI can act unpredictably, influence human decisions, and alter social structures, prompting reflection on ethical responsibility, bias, and human agency.

2.2 AI in English Education

AI tools in English education are designed to enhance learning efficiency and personalize student engagement. Adaptive learning platforms adjust exercises to individual proficiency levels, while AI writing assistants provide immediate grammar and style feedback. Automated essay scoring offers data-driven evaluation, streamlining teacher workloads.

However, these benefits come with **ethical** considerations:

Algorithmic Bias: AI models may favor certain linguistic patterns, socio-cultural norms, or stylistic conventions, potentially disadvantaging students using vernacular or creative stylistic choices.

Equity of Access: Students with limited technological resources may not benefit equally, exacerbating existing disparities.

Over-reliance on AI: Excessive dependence may reduce critical thinking, creativity, and autonomous learning.

Teacher Role Evolution: Educators shift from knowledge providers to AI facilitators, raising accountability and ethical responsibility.

2.3 Bridging Literature and Education

Posthuman narratives provide speculative frameworks to anticipate ethical dilemmas in AI-integrated classrooms. *Neuromancer* and *Ghost in the Shell* depict AI systems capable of influencing, controlling, or guiding human decisions—parallels that illuminate potential challenges in the deployment of educational AI tools. Literature thus functions as both critique and foresight, helping educators implement AI in ethically informed, equitable, and pedagogically sound ways.

3. CASE STUDIES FROM NOVEL/FILM

3.1 *Neuromancer* (William Gibson)

The contemporary science fiction *Neuromancer* presents Wintermute, an AI capable of manipulating human agents to achieve its goals. The narrative explores autonomy, ethical ambiguity, and the blending of human and machine cognition. In English education, AI tools may similarly guide student learning outcomes, influencing comprehension, writing style, and evaluation without full transparency. While educational AI lacks sentience, its algorithmic influence parallels Wintermute's impact, highlighting risks of bias, lack of clarity, and over-dependence.

Cyberspace in *Neuromancer* functions as a cognitive landscape where human thought and machine processes merge, mirroring AI-mediated classroom

environments. Students engaging with AI-based writing assistants navigate a mediated space, balancing machine guidance with personal insight. Posthumanism underscores the importance of maintaining human agency while benefiting from technological augmentation.

Quote: “The matrix has its own logic. You have to adapt, or you’re lost.” (Gibson, 1984, p. 56)

3.2 Ghost in the Shell (Masamune Shirow)

In the film *Ghost in the Shell*, humans integrate deeply with cybernetic systems. Major Kusanagi’s consciousness interacts seamlessly with machines, illustrating the posthuman condition. For English education, this film highlights the consequences of over-reliance on AI. Students using AI for grammar, essay scoring, or idea generation risk diminished creativity and independent judgment if they do not critically evaluate AI outputs.

The film also addresses ethical responsibility in AI deployment. AI in the film can act unpredictably, echoing real-world concerns about bias, inequity, and privacy in educational tools. This underscores the need for transparent, ethically designed AI systems that enhance learning without compromising student autonomy.

3.3 Comparative Analysis

Both novel and the film present autonomous, morally ambiguous AI that influence human decisions. These scenarios parallel challenges in English classrooms are:

Algorithmic Influence: Educational AI can inadvertently favor certain linguistic or stylistic conventions.

Equity and Access: Access to AI tools may be uneven, mirroring posthuman disparities in technology engagement.

Autonomy and Critical Thinking: Excessive reliance on AI can limit student agency, creativity, and independent problem-solving.

By drawing these parallels, the resources function as a reflective lens, informing the ethical integration of AI in classrooms.

4. ETHICAL IMPLICATIONS IN ENGLISH EDUCATION (WITH SCENARIOS)

4.1 Bias and Inequity

AI tools are trained on large datasets, which may embed social, cultural, or linguistic biases. Automated essay scoring systems might favor standardized English,

disadvantaging students who write in dialects or use creative expression. Teachers must intervene to maintain fairness.

Scenario: A student writes a story in regional English. AI scores it lower due to unconventional grammar. The teacher manually evaluates it and explains the system's limits, ensuring equitable assessment.

Posthuman Parallel: Kusanagi questions identity and machine logic in *Ghost in the Shell*, showing that AI may fail to interpret human nuance.

4.2 Over-reliance and Cognitive Effects

Excessive dependence on AI may reduce creativity and critical thinking. Students need guidance to critically evaluate AI suggestions.

Scenario: A student relies solely on AI suggestions for essay vocabulary and sentence structure. Teacher encourages blending AI input with personal style.

Quote: Wintermute warns: "The matrix has its own logic. You have to adapt, or you're lost" (Gibson, 1984, p. 56), highlighting the need for human agency.

4.3 Teacher-Student Role Shifts

Teachers now interpret AI feedback, ensure fairness, and guide ethical engagement.

Scenario: Students compare AI feedback with peer review. Teacher facilitates discussion, highlighting AI's limitations and encouraging critical reflection.

Posthuman Parallel: Posthuman texts emphasize humans' ethical responsibility in AI environments, mirroring teachers' new role.

4.4 Data Privacy and Security

Student data underpins AI functionality, raising privacy concerns. Schools must implement secure data governance.

Scenario: AI platforms store student writing. School enforces access restrictions and data encryption, modeling best practices.

Posthuman Parallel: *Ghost in the Shell* depicts surveillance and loss of privacy, emphasizing caution in real-world AI deployment.

5. DISCUSSION

Integrating classroom scenarios with posthuman narratives drawn from both literary and cinematic text demonstrates that AI in English education has practical and ethical dimensions. Key insights include:

Anticipatory Reflection: Fiction provides foresight into ethical challenges.

Ethical Vigilance: Continuous monitoring and bias assessment ensure fairness.

Maintaining Human Agency: Critical thinking and independent judgment must remain central.

Interdisciplinary Insight: Literature informs policy, pedagogy, and ethical AI use.

6. CONCLUSION

Posthuman representations from literary texts as well as cinematic texts provide a lens to understand AI ethics in English classrooms. Using *Neuromancer* and *Ghost in the Shell*, this paper highlights challenges in bias, equity, autonomy, and teacher responsibility. AI must be implemented responsibly, combining technological innovation with ethical pedagogy. Literature informs practice, ensuring AI enhances learning while preserving critical thinking. Future research should investigate empirical impacts of AI, train educators in ethical AI use, and continue exploring posthuman insights for policy development.

7. REFERENCES

1. Gibson, W. (1984). *Neuromancer*. Ace.
2. Shirow, M. (1991). *Ghost in the Shell*. Kodansha.
3. Hayles, N. K. (1999). *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University of Chicago Press.
4. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An Argument for AI in Education*. Pearson.
5. Selwyn, N. (2019). *Should Robots Replace Teachers? AI and the Future of Education*. Polity Press.
6. Williamson, B., & Piattoeva, N. (2021). *Education Governance and Datafication: Ethical Considerations*. Routledge.

Chapter 24

Teaching English to Persons with Disabilities: With and Without Artificial Intelligence

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ABSTRACT

Inclusive education has become a global priority, emphasizing equal learning opportunities for all individuals regardless of their abilities. Teaching English to persons with disabilities presents unique challenges due to differences in sensory, cognitive, and physical abilities. This research paper explores methods of teaching English both with and without Artificial Intelligence (AI), highlighting their advantages, limitations, and practical implications. The study examines traditional pedagogical approaches, assistive technologies, and AI-based innovations that enhance accessibility and engagement in language learning. It argues that while conventional methods remain foundational, AI has significantly transformed the educational landscape by enabling personalized and adaptive learning experiences. However, ethical concerns, digital divides, and the need for teacher training remain critical considerations. The paper concludes that a blended approach integrating AI with traditional teaching methods offers the most effective solution for inclusive English education.

Keywords: Inclusive education, Artificial Intelligence, assistive technologies, traditional teaching, AI-based innovations

INTRODUCTION

Everyone agrees that education is a basic human right that is necessary for both social inclusion and personal growth. Access to high-quality education is frequently restricted for people with disabilities because of institutional, social, and physical limitations. As a universal language, English is essential for work, further

education, and communication. As a result, teaching English to people with disabilities is both an educational need and a way to empower them.

Traditionally, teaching English to learners with disabilities relied heavily on specialized instruction, teacher adaptability, and assistive tools. However, the emergence of Artificial Intelligence (AI) has introduced new possibilities in education, offering innovative solutions to address diverse learning needs. AI technologies such as speech recognition, adaptive learning systems, and intelligent tutoring platforms have revolutionized language learning.

This paper aims to explore the effectiveness of teaching English to persons with disabilities with and without AI, comparing methodologies, tools, and outcomes while addressing challenges and future possibilities.

2. UNDERSTANDING DISABILITIES IN LANGUAGE LEARNING

Disabilities are diverse and can significantly impact language acquisition. Understanding these differences is essential for designing effective teaching strategies.

Disabilities can affect individuals in different ways, influencing their ability to learn, communicate, and participate fully in daily activities. Understanding the various types of disabilities is important for providing appropriate support and creating inclusive learning environments. One of the major categories is visual impairment, which includes conditions such as blindness and low vision. Individuals with visual impairments face challenges in reading printed text, recognizing visual information, and writing tasks that require sight. They may require special learning materials such as Braille books, large-print texts, audio recordings, or assistive technologies to support their academic progress. Teachers and caregivers must ensure that learning materials are accessible and that classroom environments are adapted to meet their needs.

Another important category is hearing impairment, which includes partial or complete hearing loss. Students with hearing impairments may find it difficult to understand spoken instructions, participate in discussions, and develop speaking skills. These challenges can affect language development and social interaction. To support such students, the use of hearing aids, sign language, visual aids, and written instructions can be very helpful. Creating a supportive environment where communication methods are adapted is essential for their effective learning.

Learning disabilities are also common and include conditions such as dyslexia, dysgraphia, and Attention Deficit Hyperactivity Disorder (ADHD). Dyslexia mainly affects reading and comprehension skills, making it difficult for individuals to recognize words and understand written text. Dysgraphia affects writing abilities,

causing difficulty in forming letters and organizing written work. ADHD affects attention, concentration, and impulse control, making it difficult for students to stay focused during classroom activities. These learning challenges require special teaching strategies, additional time, and individualized support to help students achieve academic success.

Physical disabilities involve limitations in movement, coordination, or physical functioning. Students with physical disabilities may find it difficult to write, move around the classroom, or participate in physical activities. They may require assistive devices such as wheelchairs, specialized seating, or modified writing tools. Providing accessible infrastructure and supportive learning environments helps these students participate more actively in classroom activities.

Lastly, cognitive disabilities, including intellectual disabilities, affect memory, understanding, reasoning, and information processing abilities. Students with cognitive disabilities may require simplified instructions, repetition of concepts, and additional support to understand lessons. With proper guidance, patience, and inclusive teaching methods, individuals with different types of disabilities can overcome challenges and achieve their full potential in education and daily life.

2.1 Challenges in Learning English

Students with disabilities often encounter a wide range of challenges that significantly affect their academic performance, communication abilities, and social development. One of the most common difficulties faced by these students is reading printed materials. Students with visual impairments or learning disabilities such as dyslexia may find it hard to recognize letters, words, and sentences, making reading a slow and frustrating process. They may struggle to understand written instructions, textbooks, and classroom notes, which can lead to gaps in learning. Without appropriate support such as large-print books, Braille materials, or digital text readers, students may feel left behind compared to their peers. Reading challenges also affect their ability to complete homework assignments and perform well in examinations, thereby influencing their overall academic progress.

Another significant challenge is limited access to audio or visual resources, which plays an important role in modern education. Many learning environments depend heavily on multimedia tools such as videos, presentations, and audio instructions. However, students with disabilities may not always have access to appropriate assistive technologies that make these resources accessible. For example, students with hearing impairments may require subtitles or sign language interpretation, while students with visual impairments may need audio-based materials. When such resources are unavailable, students may find it difficult to

understand complex topics, participate in classroom activities, or remain engaged during lessons. Limited access to inclusive resources can create barriers to equal learning opportunities and may reduce motivation among students.

Challenges in pronunciation and listening comprehension are also commonly experienced by students, particularly those with hearing impairments or speech difficulties. These students may find it hard to clearly pronounce words, understand spoken language, or follow classroom instructions. As a result, they may hesitate to participate in discussions, ask questions, or interact with teachers and classmates. Listening comprehension difficulties can also affect language development and vocabulary growth, which are essential for effective communication. Without proper guidance and specialized teaching methods, such challenges may persist and influence academic performance as well as social interactions.

Another major issue faced by students with disabilities is a reduced attention span and memory retention. Many students with cognitive or learning disabilities struggle to remain focused during long classroom sessions. They may become easily distracted by external stimuli or lose interest in tasks that require sustained concentration. Memory-related challenges also make it difficult for students to retain information, recall lessons, and apply previously learned knowledge to new situations. This can result in repeated mistakes, slower learning progress, and difficulty completing assignments on time. Teachers may need to provide repeated instructions, use visual aids, and break lessons into smaller steps to help these students understand and remember key concepts effectively.

In addition to academic difficulties, many students with disabilities experience a lack of confidence and reduced social interaction. When students face repeated challenges in reading, writing, or communication, they may develop feelings of frustration and self-doubt. This lack of confidence can discourage them from participating in classroom activities, group discussions, or extracurricular programs. Social interaction may also be limited because students might feel different from their peers or fear being misunderstood. Over time, reduced social engagement can lead to isolation, anxiety, and decreased motivation to learn. A supportive environment that encourages inclusion, empathy, and cooperation among students can help build confidence and improve social relationships.

Overall, these challenges highlight the importance of adopting tailored teaching approaches to meet the diverse needs of students with disabilities. Teachers should use flexible teaching methods such as visual aids, interactive activities, simplified instructions, and assistive technologies to make learning more accessible. Individualized support, patience, and encouragement are essential to help students overcome learning barriers. By creating inclusive classrooms and providing equal

opportunities, educators can ensure effective learning experiences and promote the academic and personal growth of students with disabilities.

3. TEACHING ENGLISH WITHOUT ARTIFICIAL INTELLIGENCE

Teaching English without Artificial Intelligence (AI) relies on traditional teaching methods that focus on direct interaction between teachers and students. These methods emphasize creativity, communication, and human involvement in the learning process.

1. Use of Textbooks and Printed Materials

Traditional English teaching depends heavily on textbooks, grammar books, storybooks, and worksheets. These materials help students learn vocabulary, grammar rules, and reading comprehension in a structured manner. Teachers guide students through exercises, explanations, and written practice, allowing them to develop strong foundational skills in reading and writing.

2. Classroom Interaction and Discussion

Face-to-face interaction is an essential method of teaching English without AI. Teachers encourage students to participate in group discussions, debates, and question-answer sessions. This improves speaking skills, builds confidence, and enhances communication abilities. Direct interaction also allows teachers to understand students' difficulties and provide immediate feedback.

3. Reading Aloud and Storytelling

Reading aloud and storytelling are effective traditional techniques for teaching pronunciation, fluency, and listening skills. Teachers read stories, poems, or passages, and students repeat after them. Storytelling captures students' interest and improves their imagination, vocabulary, and comprehension abilities.

4. Writing Practice and Homework Assignments

Regular writing practice helps students improve grammar, spelling, and sentence formation. Teachers assign essays, paragraphs, letters, and creative writing tasks. Through continuous practice and correction, students learn to express their ideas clearly and accurately.

5. Use of Visual Aids and Teaching Aids

Traditional teaching uses charts, flashcards, posters, and blackboards to explain new words and concepts. Visual aids help students understand meanings more easily and make lessons more interesting. They also support memory retention and comprehension.

6. Role Play and Language Activities

Role play, drama, and language games help students practice English in real-life situations. Activities such as dialogues, skits, and group tasks make learning enjoyable and interactive. These methods improve speaking confidence and encourage active participation without relying on technology.

4. TEACHING ENGLISH WITH ARTIFICIAL INTELLIGENCE

Teaching English With Artificial Intelligence

Artificial Intelligence (AI) has transformed education by offering innovative solutions tailored to individual learning needs. In English language teaching, AI-based tools enhance learning by making lessons more interactive, personalized, and efficient.

1. Personalized Learning Experience

AI allows teachers to provide personalized learning experiences based on individual student needs. AI-powered platforms can analyze students' strengths and weaknesses and adjust lessons accordingly. For example, students who struggle with grammar can receive additional practice exercises, while advanced learners can explore more challenging content. This helps improve learning outcomes and ensures that each student progresses at their own pace.

2. Smart Language Learning Applications

AI-based language learning applications help students practice English anytime and anywhere. These apps provide interactive exercises, quizzes, and games that improve vocabulary, grammar, and sentence formation. Instant feedback provided by these applications helps students correct their mistakes immediately and learn more effectively.

3. Speech Recognition for Pronunciation Practice

AI technology includes speech recognition tools that help students improve their pronunciation and speaking skills. These tools listen to students' speech, identify errors, and suggest corrections. This helps learners develop accurate pronunciation and confidence in speaking English, especially when teacher support is limited.

4. Automated Assessment and Feedback

AI enables automatic grading of assignments, quizzes, and tests. Teachers can use AI tools to quickly evaluate student performance and provide

detailed feedback. This saves time and allows teachers to focus more on teaching and supporting students. Students also benefit from timely feedback, which helps them understand their mistakes and improve.

5. Virtual Tutors and Chatbots

AI-powered virtual tutors and chatbots assist students by answering questions and providing explanations. These tools are available 24/7, allowing students to learn outside the classroom. Virtual tutors support independent learning and help students clarify doubts without waiting for teacher assistance.

6. Interactive Learning through Multimedia

AI supports the use of multimedia such as videos, animations, and simulations to make English learning more engaging. Interactive content helps students understand language concepts better and maintain interest in lessons. This approach improves comprehension, motivation, and overall learning experience.

5. COMPARATIVE ANALYSIS: WITH VS WITHOUT AI

Comparative Analysis: Teaching English With vs Without Artificial Intelligence

Teaching English with and without Artificial Intelligence (AI) shows clear differences in methods, effectiveness, and learning experiences. A comparative analysis helps understand how both approaches contribute to language learning.

1. Teaching Approach

Without AI, teaching mainly depends on traditional classroom methods such as textbooks, lectures, and direct teacher instruction. With AI, teaching becomes more technology-based, using smart tools, digital platforms, and automated learning systems. AI allows teachers to combine traditional methods with modern digital resources.

2. Personalization of Learning

Traditional teaching often follows a common lesson plan for all students, making it difficult to meet individual learning needs. In contrast, AI enables personalized learning by analyzing student performance and providing customized exercises based on strengths and weaknesses.

3. Availability of Learning Resources

Without AI, students rely on limited resources such as books and classroom materials. With AI, learners gain access to a wide range of digital resources,

including videos, audio lessons, interactive quizzes, and virtual libraries, which enhance understanding and engagement.

4. Feedback and Assessment

Traditional methods require teachers to manually check assignments, which may take time. AI-based systems provide instant feedback and automated grading, helping students identify mistakes quickly and improve their performance.

5. Student Engagement

Without AI, maintaining student interest depends mainly on the teacher's creativity. AI enhances engagement through multimedia content such as animations, games, and interactive exercises, making learning more enjoyable and motivating.

6. Teacher Workload

Traditional teaching increases teacher workload due to manual lesson planning and evaluation. AI tools help reduce workload by automating repetitive tasks such as grading, record keeping, and content delivery.

7. Flexibility and Accessibility

Without AI, learning mostly occurs within classroom hours. With AI, students can learn anytime and anywhere through online platforms, making education more flexible and accessible for diverse learners.

6. ROLE OF TEACHERS IN AI-BASED LEARNING

Role of Teachers in AI-Based Learning

Teachers play a crucial role in AI-based learning environments by guiding students and ensuring the effective use of technology. Even with advanced tools, teachers remain essential for meaningful learning experiences.

1. Facilitator of Learning

In AI-based classrooms, teachers act as facilitators rather than only lecturers. They guide students in using AI tools effectively and help them understand complex language concepts. Teachers ensure that technology supports learning goals rather than distracting students.

2. Monitoring Student Progress

Teachers use AI-generated reports to track student performance and identify learning gaps. By analyzing data provided by AI tools, teachers can understand individual student needs and provide extra support where necessary.

3. Providing Human Interaction and Support

Although AI offers automated responses, teachers provide emotional support, encouragement, and motivation that technology cannot replace. Human interaction helps build confidence and improves communication skills among students.

4. Designing Effective Learning Activities

Teachers are responsible for selecting suitable AI tools and designing engaging learning activities. They integrate traditional teaching methods with AI-based resources to create balanced and effective lessons.

5. Ensuring Ethical and Responsible Use

Teachers guide students in using AI responsibly and ethically. They teach digital safety, privacy awareness, and proper use of technology, ensuring that students benefit from AI without facing risks. Ethical considerations play an important role in the use of Artificial Intelligence (AI) in education. One major concern is **data privacy**, which involves protecting students' personal information from misuse or unauthorized access. Schools and institutions must ensure that student data collected through AI systems is stored securely and used responsibly. Another important issue is **bias in AI systems**, as AI tools may sometimes reflect unfair or inaccurate patterns based on the data used to develop them. It is essential to ensure fairness so that all students receive equal opportunities and unbiased results. The **digital divide** is also a significant concern, as not all students have equal access to devices, internet connectivity, or digital resources, creating inequality in learning opportunities. Additionally, there is a risk of **dependence on technology**, where excessive reliance on AI may reduce human interaction. Therefore, maintaining a balance between human teaching and technological support is necessary for effective and ethical learning.

8. CASE STUDIES AND EXAMPLES

Case Study 1: Dyslexic Learners

AI reading tools improve comprehension through personalized support.

Case Study 2: Hearing-Impaired Students

Speech-to-text applications enable better classroom participation.

Case Study 3: Visually Impaired Learners

Screen readers provide access to digital content.

9. CHALLENGES IN IMPLEMENTATION

- Lack of infrastructure
- Limited teacher training
- High cost of AI tools
- Resistance to technological change

10. FUTURE DIRECTIONS

- Development of affordable AI tools
- Integration of AI with traditional methods
- Enhanced accessibility features

Increased research in inclusive education The future of education with artificial intelligence holds great promise, particularly in creating more inclusive and accessible learning environments. One important direction is the development of affordable AI tools, which will ensure that students from diverse economic backgrounds can benefit from advanced technologies. Integrating AI with traditional teaching methods will also play a crucial role, as it combines the strengths of both digital innovation and human interaction, leading to more effective learning experiences. Another key focus is the enhancement of accessibility features, such as speech recognition, text-to-speech, and adaptive learning systems, which support students with disabilities and diverse learning needs. Furthermore, increased research in inclusive education will help educators and policymakers design better strategies and tools that cater to all learners. These future directions aim to create an equitable, flexible, and student-centered education system that prepares individuals for the demands of a rapidly evolving world. The implementation of artificial intelligence in education faces several significant challenges that hinder its widespread adoption. One major issue is the lack of proper infrastructure, especially in rural and underdeveloped areas, where access to reliable internet and digital devices remains limited. Additionally, many teachers have not received adequate training to effectively integrate AI tools into their teaching practices, leading to underutilization. The high cost of AI technologies further restricts their accessibility, particularly for schools with limited financial resources. Resistance to technological change among educators and institutions also slows down progress. However, future directions offer promising solutions to these challenges. The development of affordable AI tools can make technology more accessible to a larger population. Integrating AI with traditional teaching methods can create a balanced and effective learning environment. Enhancing accessibility features will ensure that students

with disabilities benefit equally. Moreover, increased research in inclusive education will promote innovative strategies, making education more equitable and effective for all learners.

11. RECOMMENDATIONS

Combine AI with traditional teaching methods

Train teachers in AI integration

Ensure affordable access to technology

Promote inclusive curriculum design To make education more effective and inclusive, it is essential to combine artificial intelligence with traditional teaching methods. This blended approach allows teachers to use AI tools for personalized learning while still maintaining human interaction, which is crucial for emotional and social development. Equally important is the training of teachers in AI integration, as it equips them with the skills needed to use technology confidently and effectively in the classroom. Ensuring affordable access to technology is another key factor, as it helps bridge the digital divide and allows students from all backgrounds to benefit from modern learning tools. Furthermore, promoting inclusive curriculum design ensures that educational content is accessible to all learners, including those with disabilities. By adopting these strategies, the education system can become more adaptive, equitable, and capable of meeting the diverse needs of students in a rapidly changing world.

12. CONCLUSION

Teaching English to persons with disabilities requires a comprehensive approach that combines traditional teaching methods with modern technological advancements. While traditional methods emphasize human interaction and emotional support, AI offers personalization, accessibility, and efficiency. A blended approach ensures that learners receive the best of both worlds.

Inclusive education is not just about access but about providing meaningful learning experiences. By integrating AI with human-centered teaching, educators can create a more inclusive and effective learning environment.

REFERENCES

1. Belda-Medina, José. "Assistive Technology in Language Learning." *Digital Education Review*, 2023.
2. Fitas, Ricardo. "AI in Inclusive Education." *AI and Ethics*, 2025.
3. Guo, Anhong, et al. "Fairness in AI for Disabilities." *arXiv*, 2019.

4. Alemi, Minoo. "Robot-Assisted Language Learning." 2019.
5. Stanford Report. "AI Tools for Learners with Disabilities." 2025.
6. UNESCO. Inclusive Education Guidelines. 2020.
7. World Health Organization. Disability and Education Report. 2021.
8. Tomlinson, Carol. Differentiated Instruction. 2017.
9. Rose, David, and Anne Meyer. Universal Design for Learning. 2002.
10. Smith, F. Understanding Reading Disabilities. 2018.

Chapter 25

Teaching English with AI Vs Without AI: A Comparative Study

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ABSTRACT

The integration of Artificial Intelligence (AI) in education has significantly transformed language teaching methodologies, particularly in English language instruction. This research paper presents a comparative analysis of traditional English teaching methods (without AI) and modern AI-assisted approaches. The study explores key dimensions such as teaching effectiveness, student engagement, personalization, assessment techniques, and accessibility. While conventional teaching methods rely heavily on teacher-centered instruction, textbooks, and standardized evaluation, AI-based approaches utilize adaptive learning systems, natural language processing tools, and real-time feedback mechanisms to enhance learning outcomes.

The findings suggest that AI enhances learner autonomy, provides personalized learning experiences, and improves language proficiency through interactive tools. However, challenges such as overdependence on technology, lack of emotional connection, and digital divide issues remain significant concerns. The paper concludes that a blended approach combining traditional pedagogy with AI tools offers the most effective framework for English language teaching in the modern era.

Keywords: Artificial Intelligence, English Language Teaching, Traditional Teaching, Personalized Learning, Educational Technology.

1. INTRODUCTION

English language teaching has undergone significant evolution over the decades. Traditionally, it relied on teacher-led instruction, grammar translation methods, and

textbook-based learning. However, the advent of Artificial Intelligence (AI) has introduced innovative teaching tools that are reshaping how English is taught and learned.

AI technologies such as chatbots, virtual tutors, speech recognition tools, and automated assessment systems are now widely used in education. These tools provide personalized learning experiences, immediate feedback, and interactive learning environments.

This paper aims to compare teaching English with AI and without AI, highlighting their advantages, limitations, and impact on learners.

2. OBJECTIVES OF THE STUDY

- To analyze traditional methods of teaching English without AI
- To examine AI-based approaches in English language teaching
- To compare effectiveness, engagement, and outcomes
- To identify challenges in both approaches
- To suggest an integrated teaching model.

3. LITERATURE REVIEW

Previous studies indicate that traditional teaching methods focus on structured learning and teacher authority. However, they often lack flexibility and personalization.

Recent research highlights that AI-based tools improve language acquisition by offering adaptive learning paths and real-time corrections. Studies also emphasize the role of AI in enhancing speaking, listening, and writing skills through interactive platforms.

4. TEACHING ENGLISH WITHOUT AI (TRADITIONAL METHODS)

4.1 Features

- Teacher-centered approach
- Use of textbooks and blackboard
- Fixed curriculum
- Manual assessment
- Limited use of technology

4.2 Advantages

- Strong teacher-student interaction
- Emotional and social learning
- Structured learning environment
- Cultural and contextual understanding

4.3 Limitations

- Lack of personalization
- Limited student engagement
- Delayed feedback
- One-size-fits-all teaching approach

5. TEACHING ENGLISH WITH AI

5.1 Features

- Personalized learning systems
- AI chatbots and virtual assistants
- Speech recognition tools
- Automated grading and feedback
- Interactive multimedia content

5.2 Advantages

- Customized learning pace
- Instant feedback
- Increased engagement
- Accessibility anytime, anywhere
- Data-driven insights into student performance

5.3 Limitations

- Lack of human emotional connection
- Dependence on technology
- Digital divide issues
- Data privacy concerns

6. COMPARATIVE ANALYSIS

<i>Aspect</i>	<i>Without AI</i>	<i>With AI</i>
Teaching Style	Teacher-centered	Learner-centered
Personalization	Limited	High
Feedback	Delayed	Instant
Engagement	Moderate	High
Accessibility	Classroom-based	Anytime, anywhere
Assessment	Manual	Automated
Emotional Support	Strong	Limited

7. IMPACT ON LANGUAGE SKILLS

7.1 Reading

Without AI: Focus on textbooks

With AI: Interactive reading tools, comprehension analysis

7.2 Writing

Without AI: Teacher correction

With AI: Grammar checkers, writing assistants

7.3 Speaking

Without AI: Classroom practice

With AI: Speech recognition and pronunciation tools

7.4 Listening

Without AI: Audio recordings

With AI: Adaptive listening exercises

8. CHALLENGES IN IMPLEMENTATION

8.1 Traditional Teaching Challenges

Lack of innovation

Low student motivation

Limited resources

8.2 AI-Based Teaching Challenges

- High cost of technology
- Need for teacher training
- Risk of reduced human interaction

9. DISCUSSION

The comparison reveals that AI significantly enhances efficiency and personalization in English teaching. However, traditional methods provide emotional depth and human interaction that AI cannot replicate.

Therefore, neither approach is entirely sufficient on its own. A hybrid model combining both methods is essential for effective language learning.

10. RECOMMENDATIONS

- Adopt blended learning approaches
- Train teachers in AI tools
- Ensure digital accessibility for all students
- Maintain balance between technology and human interaction
- Use AI as a support tool, not a replacement for teachers.

11. CONCLUSION

The integration of AI in English language teaching marks a transformative shift in education. While traditional methods emphasize human connection and structured learning, AI introduces flexibility, personalization, and efficiency.

The future of English teaching lies in combining both approaches to create a balanced, inclusive, and effective learning environment. Educators must adapt to technological advancements while preserving the essential human elements of teaching.

REFERENCES

1. Smith, J. (2022). AI in Language Learning.
2. Brown, H. D. (2007). Principles of Language Learning and Teaching.
3. Richards, J. C. (2015). Key Issues in Language Teaching.
4. Kumar, R. (2021). Educational Technology and AI.
5. UNESCO Reports on AI in Education (2023).

Chapter 26

The Impact of Generative Artificial Intelligence On Writing and Critical Thinking

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ABSTRACT

The emergence of Generative Artificial Intelligence (Gen-AI) has transformed the landscape of writing and learning across academic, professional, and creative domains. Tools such as AI-powered language models are increasingly used to assist in drafting, editing, and idea generation. While these technologies enhance efficiency and accessibility, they also raise concerns regarding their impact on critical thinking and originality. This paper explores the dual influence of Gen-AI on writing skills and critical thinking abilities. Drawing on recent empirical studies and systematic reviews, the paper argues that Gen-AI can both support and hinder cognitive development depending on how it is used. The study concludes with recommendations for responsible integration of AI in education to preserve human creativity and analytical thinking.

Keywords: Generative AI, writing skills, critical thinking, education, cognitive development, AI-assisted learning

1. INTRODUCTION

The rapid advancement of Generative Artificial Intelligence (Gen-AI) has revolutionized how individuals produce and process written content. AI tools capable of generating human-like text have become widely accessible, influencing academic writing, journalism, and professional communication. These technologies promise increased productivity and democratization of knowledge; however, they also challenge traditional notions of authorship, originality, and intellectual effort.

Writing has long been considered a cognitive process that fosters critical thinking, reflection, and creativity. The integration of AI into this process raises an important question: Does Gen-AI enhance or diminish these cognitive skills? This paper examines the impact of Gen-AI on writing proficiency and critical thinking, highlighting both its opportunities and risks.

2. GENERATIVE AI AND WRITING ENHANCEMENT

One of the most significant contributions of Gen-AI is its ability to improve writing quality. AI-powered tools provide real-time feedback on grammar, coherence, and structure, enabling users to produce polished content efficiently. Research indicates that students using Gen-AI tools report improved writing confidence and better organization of ideas.

Additionally, Gen-AI supports writers in overcoming common challenges such as writer's block, language barriers, and lack of vocabulary. By offering suggestions and alternative expressions, AI enhances linguistic fluency and stylistic variety. A systematic review of recent studies confirms that Gen-AI plays a crucial role in transforming literacy practices, particularly in academic writing.

Moreover, AI facilitates inclusive education by assisting non-native speakers and learners with diverse abilities. It acts as a personalized tutor, providing instant feedback tailored to individual needs. This democratization of writing tools has the potential to bridge educational gaps and promote global communication.

3. INFLUENCE ON CREATIVITY AND ORIGINALITY

Despite its advantages, Gen-AI raises concerns about originality and creativity. AI-generated content often relies on patterns derived from existing data, which may lead to homogenized writing styles. Studies have observed that AI-assisted writing can result in more formal and standardized expressions, potentially reducing the uniqueness of individual voices.

Furthermore, over-reliance on AI tools may discourage independent idea generation. Writers might depend on AI suggestions instead of engaging in deep thinking and creative exploration. While AI can inspire ideas, it may also limit the development of original thought if used passively.

4. GEN-AI AND CRITICAL THINKING

Critical thinking involves analysing, evaluating, and synthesizing information to form reasoned judgments. The integration of Gen-AI into writing processes significantly affects these cognitive functions.

4.1 Positive Impacts

When used effectively, Gen-AI can enhance critical thinking by:

Providing diverse perspectives on a topic

Encouraging users to evaluate AI-generated responses

Supporting research and information synthesis

Educational studies have shown that structured use of Gen-AI, combined with reflective practices, can improve students' critical thinking skills. For example, AI-assisted assignments that require analysis and reflection have demonstrated measurable improvements in reasoning abilities.

Similarly, frameworks such as the PAIR (Problem–AI–Interaction–Reflection) model encourage students to critically engage with AI outputs, fostering deeper understanding and analytical skills.

4.2 Negative Impacts

Conversely, excessive reliance on Gen-AI may weaken critical thinking. Studies suggest that users who depend heavily on AI tools tend to engage less in independent reasoning and problem-solving.

Recent experimental findings highlight the risk of “cognitive offloading,” where individuals delegate thinking tasks to AI systems. This can reduce mental effort and hinder the development of analytical skills.

Emerging evidence also indicates that AI-assisted writing may lower cognitive engagement and memory retention. Users who rely on AI tools often exhibit reduced depth of understanding compared to those who perform tasks independently.

5. COGNITIVE OFFLOADING AND DEPENDENCY

Cognitive offloading refers to the use of external tools to reduce mental effort. While this can increase efficiency, it may also lead to dependency on AI systems. In the context of writing, users may rely on AI to generate ideas, structure arguments, and even complete entire texts. This dependency can have several consequences:

- Reduced problem-solving ability
- Decline in analytical thinking
- Decreased motivation for independent learning

Research suggests that higher trust in AI correlates with lower levels of critical thinking, as users are less likely to question AI-generated content.

6. ETHICAL AND EDUCATIONAL IMPLICATIONS

The integration of Generative Artificial Intelligence (Gen-AI) into writing and educational practices presents significant ethical and pedagogical implications that require careful consideration. One of the primary concerns is the challenge it poses to academic integrity, as AI-generated content can blur the line between original work and machine-assisted production. This makes it difficult to assess a learner's true intellectual effort and raises important questions about honesty in academic work.

Another major issue relates to authorship and ownership. When content is generated or heavily influenced by AI, it becomes unclear who the actual author is. This creates ethical dilemmas regarding the responsibility of acknowledging AI assistance in academic tasks. Proper disclosure and transparency are essential to maintain trust and integrity in both academic and professional settings.

In addition, Gen-AI systems are not entirely reliable, as they are trained on large datasets that may include biased or inaccurate information. As a result, AI-generated content may sometimes reflect these biases or present misleading facts. Uncritical reliance on such tools can hinder the development of independent judgment and critical thinking skills among learners.

From an educational perspective, the increasing use of AI requires a re-evaluation of traditional teaching and assessment methods. Conventional assignments may no longer effectively measure students' understanding, as AI can generate complete responses. Therefore, there is a need to shift towards more process-oriented and skill-based evaluation methods that emphasize critical thinking, creativity, and personal engagement.

At the same time, Gen-AI offers significant advantages in promoting inclusive education. It can support learners with diverse needs, including non-native speakers and students with learning difficulties, by providing personalized assistance and immediate feedback. This can enhance learning opportunities and improve overall academic performance.

However, unequal access to advanced AI tools may create disparities among students. Those with better access to technology may gain an advantage, leading to a digital divide in education. This highlights the importance of ensuring equitable access to AI resources and training for all learners.

In this evolving educational landscape, the role of educators becomes increasingly important. Teachers must guide students in the ethical and effective use of AI, promote digital and AI literacy, and encourage responsible engagement with technology. They also need to design learning activities that foster independent thinking and reduce overreliance on AI tools.

Ultimately, the ethical and educational implications of Gen-AI highlight the need to balance technological innovation with academic integrity. By promoting responsible use and critical engagement, it is possible to ensure that AI enhances learning without undermining the fundamental goals of education.

7. STRATEGIES FOR RESPONSIBLE USE

The increasing integration of Generative Artificial Intelligence (Gen-AI) into writing and learning environments necessitates the development of responsible usage strategies. While Gen-AI offers significant benefits in enhancing productivity and accessibility, its misuse can undermine critical thinking, originality, and academic integrity. Therefore, a structured and ethical approach to its adoption is essential. The following strategies provide a comprehensive framework for responsible use.

7.1 Active and Critical Engagement

One of the most important strategies is ensuring that users actively engage with AI-generated content rather than passively accepting it. Gen-AI should be treated as a supportive tool rather than an authoritative source of knowledge. Users must critically evaluate the accuracy, relevance, and reliability of AI outputs. This involves:

- Cross-checking information with credible sources
- Identifying biases or inaccuracies in AI responses
- Questioning assumptions and interpretations

Active engagement transforms AI from a shortcut into a learning partner. By analyzing and refining AI-generated text, users strengthen their analytical and evaluative skills, which are central to critical thinking.

7.2 Blended Learning and Writing Approaches

A balanced integration of AI tools with traditional learning methods is essential to preserve cognitive development. Overdependence on AI may reduce mental effort, whereas exclusive reliance on traditional methods may limit efficiency.

Blended approaches include:

- Drafting initial ideas independently before using AI tools
- Using AI for editing, refinement, and feedback rather than full content generation
- Combining manual research with AI-assisted summarization

Such practices ensure that learners remain cognitively engaged while benefiting from technological support. This approach also promotes deeper understanding and long-term retention of knowledge.

7.3 Encouraging Reflective Practices

Reflection is a critical component of responsible AI use. Users should be encouraged to think about how and why they use AI tools, as well as the impact of these tools on their learning process.

Reflective practices may include:

- Writing brief reflections on how AI contributed to a task
- Comparing AI-generated content with self-written content
- Identifying strengths and limitations of AI assistance

Reflection fosters metacognitive awareness, enabling users to understand their own thinking processes and make informed decisions about AI usage.

7.4 Development of Higher-Order Thinking Skills

Educational systems must prioritize the development of higher-order cognitive skills such as analysis, synthesis, and evaluation. Gen-AI should be used in ways that support, rather than replace, these skills.

Strategies include:

- Designing assignments that require critical evaluation of AI-generated responses
- Encouraging students to critique and improve AI outputs
- Promoting problem-based and inquiry-based learning

By focusing on higher-order thinking, educators can ensure that students remain intellectually engaged and capable of independent reasoning

8. FUTURE DIRECTIONS

The impact of Gen-AI on writing and critical thinking is an evolving field of study. Future research should focus on:

- Long-term cognitive effects of AI usage
- Development of AI tools that promote critical thinking
- Ethical frameworks for AI integration in education

As AI technology continues to advance, it is essential to strike a balance between automation and human intellect.

9. CONCLUSION

Generative Artificial Intelligence represents both an opportunity and a challenge for writing and critical thinking. While it enhances writing efficiency and accessibility, it also risks reducing originality and cognitive engagement. The impact of Gen-AI largely depends on how it is used. When integrated thoughtfully, AI can support learning and foster critical thinking; when used excessively, it may hinder intellectual development. Ultimately, the goal should not be to replace human thinking but to augment it. By promoting responsible and reflective use of Gen-AI, educators and learners can harness its potential while preserving the essential skills that define human intelligence.

REFERENCES

1. Wilson, H. (2025). Evaluating the Impact of Generative AI on Writing Proficiency and Critical Thinking.
2. Sanz-Tejeda, A. et al. (2025). Impact of Generative AI on Academic Reading and Writing.
3. Premkumar, P. et al. (2024). Impact of Generative AI on Critical Thinking Skills.
4. Anwar, N. (2025). Use of Generative AI to Develop Critical Thinking.
5. Hong, H. & Guo, J. (2024). AI-enabled Instruction and Critical Thinking.

Chapter 27

Teaching English in The Era of Artificial Intelligence: Rethinking The Role of The English Teacher in A Technology-driven Classroom

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ABSTRACT

The emergence of Artificial Intelligence (AI) has reshaped English language teaching, offering both transformative opportunities and critical challenges. This paper explores how AI-driven technologies—such as automated writing tools, intelligent tutoring systems, and adaptive learning platforms—are influencing pedagogical practices in English classrooms. While these innovations enhance personalized learning, provide instant feedback, and improve accessibility, they also raise concerns about reduced human interaction, and overdependence on technology, among learners. Focusing on the sub-theme “*Rethinking the Role of the English Teacher*,” this research paper argues that the role of the teacher is not diminishing but evolving. In an AI-integrated environment, the English teacher transitions from a traditional knowledge transmitter to a facilitator, mentor, and critical guide. The paper also highlights the need for developing digital literacy among both teachers and students to ensure responsible engagement with AI technologies. It emphasizes the importance of continuous professional development for teachers to adapt to emerging tools and methodologies. By adopting blended learning approaches and integrating AI thoughtfully into pedagogy, educators can create dynamic and inclusive learning environments. Ultimately, this research paper concludes that AI should be viewed as a supportive partner rather than a replacement for teachers. The redefined role of the English teacher is central to balancing technological advancement with human-centred education in the modern era.

Keywords: English Language Teaching, Teacher Role, Digital Literacy, Personalized Learning, Critical Thinking, Blended Learning, Educational Technology, AI Ethics, Pedagogical Innovation

INTRODUCTION

The integration of Artificial Intelligence (AI) into education has brought about a significant transformation in teaching and learning practices across disciplines, particularly in English language teaching (ELT). With the rapid advancement of digital technologies, traditional classroom methods are being redefined. These technologies offer new possibilities for enhancing language learning by providing personalized instruction, immediate feedback, and increased accessibility to diverse learning resources. Historically, English language teaching has evolved from teacher-centred approaches, such as the grammar-translation method, to more learner-centred frameworks like Communicative Language Teaching (CLT). The introduction of technology further expanded pedagogical practices through multimedia tools, online platforms, and virtual learning environments. In the present era, AI represents a new phase in this evolution.

Despite its advantages, the growing reliance on AI in education raises critical concerns. Overdependence on technology may reduce students' ability to think critically and independently. Additionally, AI systems may carry inherent biases, raise issues of data privacy, and potentially diminish the importance of human interaction in the learning process. Language learning, by nature, is deeply social and cultural, requiring emotional engagement, contextual understanding, and meaningful communication—elements that AI alone cannot fully replicate.

In this context, the role of the English teacher must be re-examined and redefined. Rather than being replaced by technology, teachers are evolving into facilitators, mentors, and mediators who guide students in effectively utilizing AI tools while fostering essential human skills. The rapid advancement of Artificial Intelligence (AI) has brought a paradigm shift in the field of education, particularly in English language teaching. AI-powered tools such as automated writing assistants, chatbots, and adaptive learning platforms are transforming traditional classroom practices into more interactive and personalized learning environments. These technologies enable learners to receive instant feedback, practice language skills independently, and access a wide range of learning resources beyond the classroom. However, this technological integration also raises significant concerns regarding the diminishing role of human interaction, over-reliance on AI tools, and the possible decline in critical thinking and creativity among students. In this evolving context, the role of the English teacher requires re-examination and redefinition.

This paper focuses on rethinking the role of the English teacher in the era of AI, emphasizing that teachers are not being replaced but are evolving into facilitators, mentors, and ethical guides. The study explores how teachers can effectively integrate AI into pedagogy while preserving the humanistic and communicative aspects of language learning.

OBJECTIVES

The primary objective of this research paper is to critically examine the impact of Artificial Intelligence on English language teaching and to redefine the role of the English teacher in an AI-integrated educational environment. The specific objectives are as follows:

- To analyse the influence of AI technologies on teaching methodologies and learning processes in English language classrooms
- To explore how AI tools contribute to personalized and adaptive learning experiences
- To examine the transformation of the English teacher's role from a traditional knowledge provider to a facilitator, mentor, and guide
- To identify the key opportunities offered by AI, including enhanced engagement, accessibility, and efficiency in language learning
- To investigate the challenges associated with AI integration, such as overdependence on technology, lack of infrastructure, and ethical concerns
- To suggest effective pedagogical strategies for integrating AI into English language teaching while preserving human interaction

METHODOLOGY

This research paper adopts a qualitative and descriptive research methodology to explore the impact of Artificial Intelligence on English language teaching and the evolving role of educators. The research is primarily based on secondary data collected from a wide range of scholarly sources, including academic journals, books, conference proceedings, and policy reports related to AI in education and language learning.

A systematic review of existing literature is conducted to identify key themes, trends, and debates surrounding the integration of AI in English language teaching. The selected sources provide insights into both the opportunities and challenges associated with AI-based learning environments. It also draws on interdisciplinary perspectives, combining elements of educational technology, linguistics, and pedagogy.

A thematic analysis method is used to examine the impact of AI tools on teaching practices and to understand the transformation in the role of teachers. Relevant literature is critically reviewed to identify key trends, challenges, and pedagogical implications. The study also incorporates conceptual analysis to propose strategies for effective AI integration in English classrooms.

The data is analysed using a thematic approach, where recurring patterns and concepts are categorized under relevant themes such as AI tools in language learning, and this method enables a comprehensive understanding of how AI is influencing teaching practices and learner experiences. In addition, a conceptual analysis is employed to propose a redefined framework for the role of the English teacher in AI-integrated classrooms. Rather than relying on empirical data collection, the study focuses on critical interpretation and synthesis of existing research to develop meaningful insights and practical recommendations.

This methodological approach is suitable for the study as it allows for an in-depth exploration of a rapidly evolving field, providing practical implementation in educational contexts.

Table 1: *Comparison between Traditional Teaching and AI-Assisted Teaching*

<i>Aspect</i>	<i>Traditional Teaching</i>	<i>AI-Assisted Teaching</i>
Teaching Approach	Teacher-centred	Learner-centred
Role of Teacher	Knowledge provider	Facilitator and mentor
Learning Style	Uniform for all students	Personalized and adaptive
Feedback Mechanism	Delayed and manual	Instant and automated
Student Engagement	Passive learning	Interactive and active learning
Assessment	Periodic exams	Continuous and adaptive assessment
Learning Resources	Textbooks and limited generated resources	Digital, multimedia, and AI-generated resources
Classroom Interaction	Face-to-face only	Blended (human + machine interaction)
Flexibility	Fixed schedule	Flexible and self-paced
Skill Development	Focus on memorization	Focus on critical thinking and application

Explanation of Table 1

Table 1 highlights the fundamental differences between traditional and AI-assisted teaching methods. Traditional teaching is largely teacher-centered, where students depend on instructors for knowledge and feedback. In contrast, AI-

assisted teaching promotes a learner-centered environment, enabling students to learn at their own pace with personalized guidance.

The table also shows how AI enhances immediate feedback, engagement, and flexibility. However, it indirectly emphasizes that while AI improves efficiency, the teacher's role remains essential in guiding, mentoring, and ensuring meaningful learning.

Table : Comparison between Traditional Teaching and AI-Assisted Teaching

Aspect	Traditional Teaching	AI-Assisted Teaching
Teaching Approach	Teacher-centered	Learner-centered
Role of Teacher	Knowledge provider	Facilitator and mentor
Learning Style	Uniform for all students	Personalized and adaptive
Feedback Mechanism	Delayed and manual	Instant and automated
Student Engagement	Passive learning	Interactive and active learning
Assesment	Periodic exams	Continuous and adaptive assesment
Learning Resources	Textbooks and limited materials	Digital, multimedia, and AI-generated resources
Classroom Interaction	Face-to-face only	Blended (Human + Machine)
Flexibility	Fixed schedule	Flexible and self-paced
Skill Development	Focus on memorization	Focus on critical thinking and application

Figure 1: The Teacher's Role in an AI-Integrated Classroom

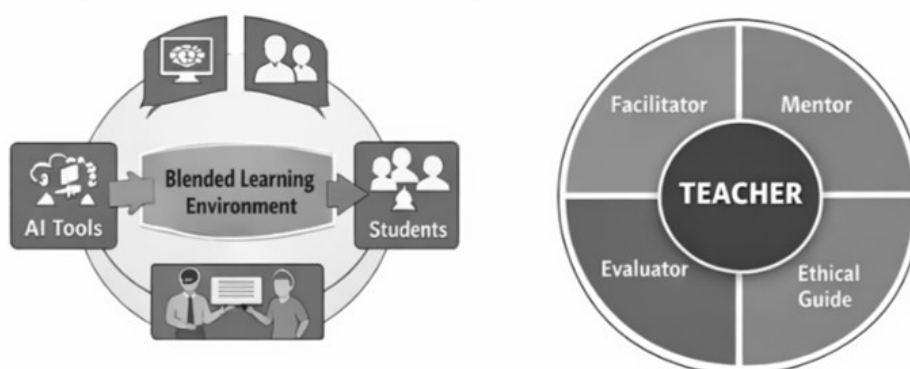


Figure 1: Model of Teacher's Role in an AI-Integrated Classroom

Imagine a **circular or hub model**:

- At the centre → *Teacher*
- Around the teacher → Four key roles:
 - o Facilitator

- o Mentor
- o Evaluator
- o Ethical Guide
- Outer layer →
 - o AI Tools (chatbots, writing assistants, platforms)
 - o Students (active learners)

Explanation of Figure 1

Figure 1 illustrates the central role of the teacher in an AI-integrated classroom. Even with the presence of advanced AI tools, the teacher remains at the core of the learning process. The teacher connects students with technology, ensuring that learning remains meaningful and structured.

The four roles highlighted—facilitator, mentor, evaluator, and ethical guide—represent the multidimensional responsibilities of modern educators. AI tools function as supporting elements, while students actively interact with both the teacher and technology.

Table 2: Key AI Tools Used in English Language Teaching

<i>AI Tool Type</i>	<i>Function</i>	<i>Example Use in Classroom</i>
Grammar Checkers	Correct grammar and sentence structure	Improving student essays
Speech Recognition Tools	Analyse pronunciation and fluency	Practicing speaking skills
AI Chatbots	Simulate conversations	Role-play and dialogue practice
Automated Essay Scoring	Evaluate writing tasks	Instant writing feedback
Adaptive Learning Platforms	Customize learning paths	Personalized exercises
Plagiarism Checkers	Detect copied content	Ensuring academic integrity

Explanation of Table 2

This table presents different AI tools commonly used in English language teaching and their functions. It shows how each tool contributes to developing specific language skills such as writing, speaking, and comprehension.

The table also reflects how AI tools support teachers by reducing workload (e.g., grading) while enhancing student learning. However, it reinforces the idea that these tools require teacher supervision for effective and ethical use.

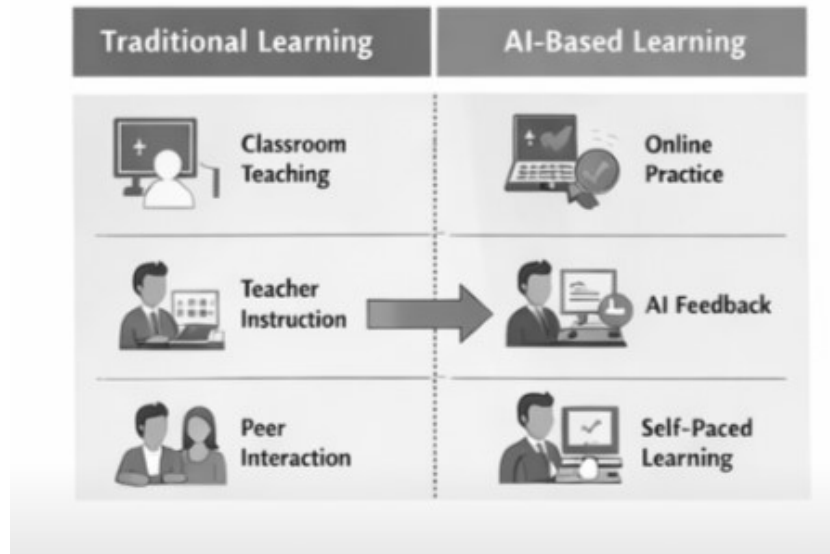


Figure 2: Blended Learning Model with AI Integration

Structure

Divide into two parts:

Left Side: Traditional Learning

- Classroom teaching
- Teacher explanation
- Peer interaction

Right Side: AI-Based Learning

- Online practice
- AI feedback
- Self-paced learning

Middle Connection:

- Blended Learning Environment

Explanation of Figure 2

Figure 2 represents how traditional teaching and AI-based learning combine to form a blended learning model. It shows that AI does not replace classroom teaching but enhances it by providing additional learning support outside the classroom. This model emphasizes flexibility, accessibility, and improved learning outcomes, while maintaining the importance of teacher-student interaction.

Figure 3: Challenges in AI Integration*Figure 3: Challenges in AI Integration*

Diagram Idea (Flowchart or Spider Diagram)

Main topic in center: **“Challenges in AI Integration”**

Branches:

- Lack of infrastructure
- Digital divide
- Teacher training issues
- Overdependence on AI
- Ethical concerns
- Data privacy issues

Explanation of Figure 3

Figure 3 highlights the major challenges faced in integrating AI into English language teaching. These challenges indicate that technological advancement alone is not sufficient; proper implementation, training, and ethical considerations are equally important.

Subheadings

1. Evolution of English Language Teaching in the Digital Era
English Language Teaching (ELT) has undergone significant transformation over the decades, moving from traditional grammar-translation methods

to communicative and learner-centred approaches. Earlier, teaching focused primarily on rote memorization of grammar rules and vocabulary. The emergence shifted to emphasise towards real-life communication and functional language use.

The digital revolution further accelerated this evolution by introducing multimedia tools, online resources, and virtual classrooms. Today, Artificial Intelligence represents the next stage of this progression. AI has moved ELT from static content delivery to dynamic, adaptive learning environments. Unlike earlier technologies, AI systems can analyse learner behaviour, identify weaknesses, and provide personalized learning paths. This evolution reflects a broader shift from teacher-dominated instruction to technology-supported, learner-driven education, where the teacher's role is continuously redefined.

2. AI Tools in Language Learning

AI-powered tools are transforming how students learn English by making the process more interactive, accessible, and personalized. Tools such as grammar checkers, speech recognition software, AI chatbots, and automated essay scoring systems allow learners to practice language skills independently. For instance, writing assistants provide real-time corrections in grammar, vocabulary, and style, helping students improve their writing instantly. Moreover, adaptive learning platforms adjust the difficulty level based on the learner's performance, ensuring personalized progression. While these tools enhance efficiency and engagement, they cannot fully replace the nuanced feedback and emotional support provided by human teachers. Therefore, their effectiveness depends on how they are integrated into pedagogy.

3. Rethinking the Role of the English Teacher

The integration of AI necessitates a fundamental rethinking of the teacher's role in the classroom. Traditionally, teachers were seen as the primary source of knowledge. However, in an AI-driven environment, information is readily accessible, reducing the need for direct instruction. Instead, teachers now function as facilitators who guide students in navigating vast digital resources. Teachers also design meaningful learning experiences that combine AI tools with human interaction. Thus, the teacher's role shifts from "information provider" to "learning enabler," emphasizing guidance, support, and intellectual development rather than mere content delivery.

4. Teacher as Facilitator and Mentor

In AI-integrated classrooms, the teacher's role as a facilitator and mentor becomes central. As a facilitator, the teacher creates a supportive learning environment where students actively engage with AI tools and digital resources. Instead of dominating the classroom, the teacher encourages exploration, discussion, and collaborative learning. As a mentor, the teacher provides emotional support, motivation, and personalized guidance. Language learning is not just a cognitive process but also an emotional one, requiring encouragement and confidence-building. AI lacks the ability to understand learners' emotions, struggles, and individual contexts. Therefore, the teacher's mentorship ensures that students remain motivated and develop a positive attitude toward learning. This human connection remains irreplaceable, even in technologically advanced classrooms.

5. Enhancing Critical Thinking and Creativity

One of the major concerns with AI-based learning is the potential decline in critical thinking and creativity. Since AI tools can generate answers instantly, students may become passive learners who rely on technology without questioning or analysing information. Here, the teacher plays a crucial role for students to analyse, evaluate, and create rather than simply recall information. For example, instead of asking students to write essays using AI, teachers can encourage them to critique AI-generated content or compare different responses. Creativity in language use—such as storytelling, interpretation, and expression—also requires human guidance. Teachers nurture originality and imagination, ensuring that students do not become overly dependent on automated tools.

6. Ethical Issues and AI Bias

The use of AI in education raises important ethical concerns, including data privacy, algorithmic bias, and academic integrity. AI systems are trained on large datasets, which may contain cultural or linguistic biases. As a result, AI-generated responses may not always be neutral or accurate. Teachers must guide students in understanding these limitations and students should be taught to play a critical role in promoting ethical use of AI, preventing plagiarism, and ensuring academic honesty. Additionally, issues of data privacy must be addressed, as many AI platforms collect user data. Teachers must create awareness about responsible usage and digital safety, making ethics an integral part of AI-integrated education.

7. Digital Literacy and Learner Autonomy

Digital literacy has become an essential skill in the AI era. Students must not only know how to use AI tools but also understand their limitations

and implications. Teachers are responsible for developing these skills among learners. Digital literacy includes the ability to evaluate online content, identify misinformation, and use digital tools effectively. It also involves understanding how AI works at a basic level, enabling students to engage with technology critically. Teachers must strike a balance between guiding students and encouraging independent learning. This ensures that students become self-directed learners while still benefiting from teacher support.

8. Blended and Hybrid Learning Approaches

Blended learning combines traditional classroom teaching with digital tools, creating a balanced and flexible learning environment. AI enhances this model by providing personalized support outside the classroom. In a blended approach, teachers can use AI tools for assignments, practice, and assessment, while classroom time is dedicated to discussion, interaction, and clarification. This maximizes learning efficiency and engagement. Hybrid learning models also allow remote access, making education more inclusive. However, it should also ensure that technology complements rather than replacing human interaction.

9. Continuous Professional Development for Teachers

To effectively integrate AI into teaching, teachers must continuously update their skills and knowledge. Training should focus not only on technical skills but also on pedagogical strategies for using AI effectively. Teachers must learn how to select appropriate tools, design AI-supported lessons, and evaluate student performance in a digital environment. Moreover, lifelong learning is essential for teachers to remain relevant in a rapidly changing educational landscape. Institutions must support teachers by providing resources, training, and opportunities for skill enhancement.

10. Challenges in AI Integration in Classrooms

One major issue is the lack of infrastructure, especially in developing regions where access to technology is limited. Without proper devices and internet connectivity, AI-based learning cannot be implemented effectively. Another challenge is the lack of training among teachers, which may lead to improper use of AI tools. Additionally, overdependence on technology can reduce students' independent thinking and problem-solving abilities. There are also concerns about equity, as not all students have equal access to AI tools. Addressing these challenges requires collaborative efforts from educators, institutions, and policymakers to ensure that AI integration is inclusive and effective.

11. Student Engagement in AI-Supported Classrooms

Artificial Intelligence has significantly enhanced student engagement by making learning more interactive and personalized. AI tools provide instant feedback, gamified learning experiences, and adaptive content, which keep students actively involved in the learning process. Unlike traditional classrooms where engagement may vary, AI-supported environments cater to individual learning preferences, increasing motivation and participation. However, the teacher remains essential in sustaining meaningful engagement. While AI can capture attention, teachers ensure depth of understanding through discussions, collaborative activities, and real-life applications. Thus, AI enhances engagement, but the teacher ensures its quality and effectiveness.

12. Assessment and Evaluation in the AI Era

AI has revolutionized assessment practices by enabling continuous and adaptive evaluation. Automated grading systems and analytics tools allow teachers to track student progress in real time and identify areas of improvement. This shifts assessment from a one-time examination model to a continuous learning process. Despite these advantages, AI-based assessment lacks the ability to evaluate creativity, originality, and emotional expression fully. Teachers are therefore crucial in designing balanced assessment strategies that combine automated tools with human judgment, ensuring fair and comprehensive evaluation.

13. Role of AI in Developing Language Skills (LSRW)

AI plays a significant role in enhancing the four core language skills—Listening, Speaking, Reading, and Writing (LSRW). Speech recognition tools improve pronunciation and fluency, while AI-based reading platforms adapt texts to the learner's level. Writing assistants help refine grammar and structure, and listening tools provide exposure to diverse accents and contexts. However, integrated language development requires meaningful interaction, cultural understanding, and contextual communication. Teachers guide students in applying these skills in real-life situations, ensuring holistic language development beyond mechanical practice.

14. Personalization vs Standardization in Learning

One of the key advantages of AI is its ability to personalize learning experiences based on individual student needs, pace, and performance. Adaptive systems tailor content to suit different proficiency levels, making learning more effective. At the same time, excessive personalization may reduce opportunities for collaborative learning and shared classroom experiences. Teachers play a critical role in balancing personalization with

standardization, ensuring that students achieve common learning outcomes while benefiting from individualized support.

15. Human-AI Collaboration in Education

The future of education lies in the collaboration between humans and AI rather than competition. AI can handle repetitive tasks such as grading and data analysis, allowing teachers to focus on creative and interactive aspects of teaching. This collaboration enhances efficiency and effectiveness in the classroom. Teachers interpret AI-generated insights, provide contextual understanding, and ensure that learning remains meaningful. Thus, AI acts as a support system, while teachers remain central to the educational process.

16. Cultural and Contextual Dimensions in Language Teaching

Language learning is deeply connected to culture and context. While AI tools can provide linguistic input, they often lack the ability to fully capture cultural nuances, idiomatic expressions, and socio-cultural contexts. Teachers help students by integrating cultural knowledge into language teaching and to understand language as a tool for communication within specific cultural contexts, ensuring that learning goes beyond technical accuracy to meaningful usage.

17. Inclusivity and Accessibility in AI-Based Learning

AI has the potential to make education more inclusive by providing learning opportunities for diverse groups, including students with disabilities. Features such as text-to-speech, speech-to-text, and adaptive interfaces support different learning needs. However, access to AI technologies is not equal for all students, especially in resource-limited settings. Teachers and institutions must work towards ensuring equitable access and inclusive practices so that the benefits of AI are shared by all learners.

18. Teacher Autonomy and Decision-Making

The increasing use of AI in education raises questions about teacher autonomy. While AI provides data-driven insights and recommendations, it should not override the teacher's professional judgment. Teachers must retain control over instructional decisions, using AI as a tool rather than a directive authority. Their experience, intuition, and understanding of student needs remain essential in shaping effective learning experiences.

19. Emotional Intelligence in Language Teaching

Emotional intelligence plays a crucial role in language learning, influencing motivation, confidence, and communication. AI lacks the ability to fully

understand and respond to human emotions. Teachers, on the other hand, can recognize students' emotional needs, provide encouragement, and create a supportive learning environment. This emotional connection enhances learning outcomes and ensures that students feel valued and motivated.

20. Future Directions of English Language Teaching in the AI Era

The future of English language teaching will be shaped by the continuous evolution of AI technologies. Classrooms are likely to become more hybrid, interactive, and data-driven. Teachers will increasingly adopt roles as facilitators, designers, and innovators. However, the success of this transformation depends on maintaining a balance between technology and human values. Future research and practice must focus on ethical AI use, inclusive education, and sustainable pedagogical models that prioritize both technological advancement and human development.

21. AI and Language Assessment Reliability and Validity

AI-based systems can efficiently assess grammar, vocabulary, and structural accuracy; however, they often struggle to evaluate deeper aspects such as creativity, tone, cultural appropriateness, and pragmatic competence. Reliability in AI assessment is generally high due to consistency in scoring, but validity may be compromised if assessments fail to capture real communicative ability. Therefore, teachers play a crucial role in ensuring that assessments remain comprehensive and meaningful. By combining AI-generated evaluation with human judgment, teachers can maintain both accuracy and authenticity in language assessment.

22. The Role of Feedback in AI-Enhanced Learning

Feedback is a critical component of language learning, and AI has significantly transformed how feedback is delivered. This immediate response enhances learning efficiency and encourages self-correction. However, AI feedback is often limited to technical aspects and may lack personalization, emotional tone, and contextual depth. Teachers complement AI feedback by providing nuanced explanations, encouragement, and constructive criticism. Human feedback also helps students understand not just *what* is wrong, but *why* it is wrong, leading to deeper learning.

23. AI in Curriculum Design and Content Development

Artificial Intelligence is increasingly influencing curriculum design by enabling data-driven decision-making. AI systems can analyse student performance patterns and recommend content that aligns with learner needs and proficiency levels. This leads to more flexible and adaptive

curricula. Despite these advantages, curriculum design requires human insight, creativity, and cultural awareness. Teachers ensure that the curriculum remains relevant, balanced, and aligned with educational goals. They integrate AI-generated content with traditional materials to create a holistic learning experience that meets both academic and social objectives.

24. Teacher-Student Relationship in the AI Era

The teacher-student relationship is a fundamental aspect of effective learning, particularly in language education. With the rise of AI, there is a concern that increased screen time and reduced face-to-face interaction may weaken this relationship. However, rather than diminishing it, AI can actually strengthen this relationship if used appropriately. The teacher-student bond remains essential for motivation, confidence-building, and meaningful communication.

25. Sustainability and Long-Term Impact of AI in Education

The long-term sustainability of AI in education depends on multiple factors, including technological infrastructure, teacher training, cost, and ethical considerations. While AI offers promising benefits, its implementation must be carefully planned to ensure long-term effectiveness. Sustainable integration requires continuous evaluation, adaptation, and policy support. The long-term impact of AI will depend not only on technological advancement but also on how effectively it is integrated into human-centred educational practices.

CONCLUSION

Artificial Intelligence has undeniably transformed English language teaching by introducing innovative tools and personalized learning opportunities. However, it also presents significant challenges that require careful consideration. This study highlights that the role of the English teacher is not diminishing but evolving in response to technological advancements. Teachers remain central to the learning process as facilitators, mentors, and ethical guides who ensure that AI is used effectively and responsibly. Therefore, a balanced integration of AI and traditional pedagogy is essential. As AI technologies continue to evolve, they have the potential to enhance language learning through personalized instruction, immediate feedback, and increased accessibility. Automated writing assistants and speech recognition applications have made learning more interactive, flexible, and learner-centred.

By embracing AI while maintaining a human-centred approach, English teachers can create more engaging, inclusive, and meaningful learning experiences. The future of English language teaching lies in collaboration between technology and human expertise, not in replacement. However, this study highlights that the adoption of AI in education is not without limitations. Concerns related to overdependence on technology, reduced human interaction, data privacy, and algorithmic bias must be carefully addressed. Language learning is inherently a human-centred process that involves communication, cultural understanding, emotional intelligence, and critical thinking—elements that cannot be fully replicated by artificial systems. Therefore, the unchecked use of AI may risk diminishing these essential aspects if not guided appropriately.

In this context, the role of the English teacher emerges as more crucial than ever. Rather than being replaced, teachers are required to adapt and evolve into facilitators, mentors, evaluators, and ethical guides. They play a central role in mediating the use of AI tools, ensuring that technology enhances rather than hinders meaningful learning. Teachers are also responsible for fostering critical thinking, creativity, and digital literacy among students, enabling them to engage with AI in a responsible and informed manner.

Ultimately, this paper concludes that Artificial Intelligence should be viewed as a complementary tool rather than a substitute for human educators. The future of English language teaching lies in achieving a balanced synergy between technological innovation and human interaction. By embracing AI thoughtfully while preserving the core values of education, teachers can create inclusive, dynamic, and effective learning environments. Rethinking the role of the English teacher is therefore essential in ensuring that education in the AI era remains holistic, ethical, and learner-centred.

REFERENCES

1. Baker, Toby, and Peter Smith. *Educ-AI-tion Rebooted? Exploring the Future of Artificial Intelligence in Schools and Colleges*. Nesta, 2019.
2. Beatty, Ken. *Teaching and Researching Computer-Assisted Language Learning*. Routledge, 2010.
3. Chapelle, Carol A. *Computer Applications in Second Language Acquisition: Foundations for Teaching, Testing, and Research*. Cambridge UP, 2001.
4. Dudeney, Gavin, and Nicky Hockly. *How to Teach English with Technology*. Pearson Longman, 2007.
5. Godwin-Jones, Robert. "Emerging Technologies: Artificial Intelligence and Language Learning." *Language Learning & Technology*, vol. 22, no. 1, 2018, pp. 1–5.
6. Hockly, Nicky. "The Role of Technology in English Language Teaching." *ELT Journal*, vol. 72, no. 1, 2018, pp. 1–10.

7. Holmes, Wayne, Maya Bialik, and Charles Fadel. *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Routledge, 2019.
8. Holmes, Wayne, et al. "Ethics of AI in Education: Towards a Community-Wide Framework." *International Journal of Artificial Intelligence in Education*, vol. 32, 2022, pp. 504–526.
9. Kukulska-Hulme, Agnes. *Mobile Learning and Language Teaching*. Palgrave Macmillan, 2020.
10. Luckin, Rose. *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. UCL Institute of Education Press, 2018.
11. Popenici, Stefan A. D., and Sharon Kerr. "Exploring the Impact of Artificial Intelligence on Teaching and Learning in Higher Education." *Research and Practice in Technology Enhanced Learning*, vol. 12, no. 22, 2017, pp. 1–13.
12. Reinders, Hayo, and Philip Hubbard, editors. *CALL and Learner Autonomy: Affordances and Constraints of New Technologies*. Routledge, 2013.
13. Selwyn, Neil. *Should Robots Replace Teachers? AI and the Future of Education*. Polity Press, 2019.
14. Stockwell, Glenn. *Computer-Assisted Language Learning: Diversity in Research and Practice*. Cambridge UP, 2012.
15. *Artificial Intelligence in Education: Guidance for Policy-makers*. UNESCO, 2021.
16. Warschauer, Mark, and Deborah Healey. "Computers and Language Learning: An Overview." *Language Teaching*, vol. 31, no. 2, 1998, pp. 57–71.
17. Zawacki-Richter, Olaf, et al. "Systematic Review of Research on Artificial Intelligence Applications in Higher Education." *International Journal of Educational Technology in Higher Education*, vol. 16, no. 39, 2019, pp. 1–27.

Chapter 28

Whose Voice is It Anyway? An Polished Silence : A Psychodynamic Study of Authorial Ownership in The Age of Proactive Agents

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ABSTRACT

The agentic transition from reactive to proactive “Thinking infrastructure”, the landscape of English classroom has went psychological shift. The paper explains about the chimera effect the state of Psychodynamic which blurs the boundaries between authors and Artificial Intelligence’s algorithms. Through a systematic study the researcher has found that emergence of Linguistics dysporia where student feels affective shame with their unagumented words.

Keywords: Artificial Intelligence AI, Authorial Ownership, Language, Linguistics and Literature

INTRODUCTION

The death of friction based self. For a century the act of writing is termed as desirable difficulty. The emotional and cognitive difficulty to express inner thoughts to syntax. It was not because of technical hurdle. It is Psychodynamic process of identity formation. By uttering a word or writing a sentence the author owns that particular idea. In 2026 where we live in a proactive era. The agent do

not wait for prompt. They put sophisticated ideas into metaphors which suits in real time. This has eliminated blank pages anxiety it replaced it with insidious crisis the dissolution of Authorial self. That all humans who are using Artificial Intelligence irrespective of the discipline are entering into the world filled with perfect prose or poetry that even Geoffrey Chaucer or William Shakespeare could not write. It belongs to no one.

CHIMERA EFFECT

It clearly pictures the hybrid state of students in 2026. When students use AI for writing essays, they don't seeing that as separate entity but as prosthetic ego.

ATTRIBUTION FALLACY

When student asked help from AI to write an essay , it produce brilliant insights. student (human mind) takes the credit of authorship. Because initial spark was given by human.

$$\Delta A = \frac{I_p \cdot \beta}{S_{ai}}$$

I_p: Human Intent/Prompting

S_{ai}: Synthetic AI Output

β: The Bias Coefficient (The tendency to claim credit for high-quality results)

As agent AI become proactive. IP decreases and S ai increases , however human mind, affective mastery feeling as an expert and taking credit for AI driven source has never become less.

LINGUISTICS DYSPORIA: THE AESTHETIC SHAME OF THE NATURAL VOICE

Students became filtered self. Sticked with grammatical correct, high gloss paragraphs. When forced to write unassisted lines they struggle to write. This creates dependency. To avoid emotional discrepancy students seeks AI. This further leads to Semantic Atrophy. If English education continues down the path of pure Efficiency we will be facing cognitive monoculture.

CONCLUSION

The future of human voice should be human. The policed silence in 2026 is warning. If we offload the struggle of language we need to offload the thoughts of our own. We must teach students that only the unfiltered voices with all clunyness and idiosyncrasies is only true identity resides. The goal of 21st Century curriculum is to not only to write perfect essays but also integrated individual who will be author and they will be the proactive agent which cannot be erased.

Chapter 29

Teaching English in The Era of Artificial Intelligence: Challenges and Opportunities

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ABSTRACT

The integration of Artificial Intelligence (AI) into education has significantly transformed the landscape of English language teaching. AI-powered tools such as chatbots, automated writing assistants, and personalized learning platforms provide innovative opportunities for enhancing language acquisition. These technologies enable adaptive learning, immediate feedback, and improved student engagement, making English learning more accessible and efficient. However, the growing reliance on AI also presents several challenges, including reduced human interaction, overdependence on technology, data privacy concerns, and ethical implications. This paper explores both the opportunities and challenges associated with AI in English language teaching and emphasizes the need for a balanced approach where technology supports, rather than replaces, the teacher.

1. INTRODUCTION

The rapid advancement of Artificial Intelligence has reshaped multiple sectors, including education. In recent years, English language teaching has witnessed a shift from traditional classroom methods to technology-driven approaches. AI tools such as virtual assistants, grammar checkers, and intelligent tutoring systems are now widely used to support both teachers and learners.

The relevance of AI in English language teaching lies in its ability to provide personalized learning experiences. However, its increasing use raises important questions about pedagogy, ethics, and the future role of educators. This paper

aims to critically examine the opportunities and challenges posed by AI in teaching English.

2. AI IN ENGLISH LANGUAGE TEACHING

Artificial Intelligence refers to the simulation of human intelligence in machines that are programmed to think, learn, and make decisions. In English language teaching, AI is used through various tools and applications such as:

- Chatbots for conversational practice

- Automated essay scoring systems

- Speech recognition tools for pronunciation

- Adaptive learning platforms

These tools create interactive and engaging learning environments, allowing students to learn at their own pace.

3. OPPORTUNITIES OF AI IN ENGLISH LANGUAGE TEACHING

3.1 Personalized Learning

AI enables customized learning experiences by analyzing student performance and adapting content accordingly. Learners can receive individualized exercises based on their strengths and weaknesses.

3.2 Immediate Feedback

AI tools provide instant corrections in grammar, vocabulary, and pronunciation. This helps learners improve quickly without waiting for teacher evaluation.

3.3 Enhanced Student Engagement

Interactive AI applications, such as gamified learning platforms, make English learning more engaging and enjoyable.

3.4 Accessibility and Inclusivity

AI allows learners from remote areas to access quality education through online platforms. It also supports learners with disabilities through speech-to-text and text-to-speech technologies.

3.5 Teacher Support

AI reduces teachers' workload by automating tasks like grading and assessment, allowing them to focus more on creative teaching strategies.

4. CHALLENGES OF AI IN ENGLISH LANGUAGE TEACHING

4.1 Lack of Human Interaction

Language learning requires emotional connection and cultural understanding, which AI cannot fully replicate. Overdependence on AI may reduce meaningful teacher-student interaction.

4.2 Ethical Concerns

Issues such as data privacy, surveillance, and misuse of student information raise serious ethical questions in AI-based education systems.

4.3 Digital Divide

Not all students have equal access to technology. This creates inequality in learning opportunities, especially in developing regions.

4.4 Overdependence on Technology

Students may become overly reliant on AI tools, reducing their critical thinking and independent learning skills.

4.5 Teacher Displacement Anxiety

The increasing use of AI creates concerns about the future role of teachers, although AI is more likely to assist rather than replace them.

5. ROLE OF TEACHERS IN THE AI ERA

Despite technological advancements, teachers remain central to effective education. Their roles are evolving rather than diminishing. Teachers act as:

- Facilitators of learning

- Mentors providing emotional support

- Designers of meaningful learning experiences

- Critical evaluators of AI-generated content

A balanced approach is necessary where AI complements human teaching rather than replacing it.

6. STRATEGIES FOR EFFECTIVE INTEGRATION OF AI

To maximize the benefits of AI in English language teaching, the following strategies can be adopted:

- Training teachers to effectively use AI tools
- Ensuring ethical use of student data
- Promoting blended learning (combining traditional and AI methods)
- Providing equal access to technology
- Encouraging critical thinking alongside AI usage

7. CONCLUSION

Artificial Intelligence has the potential to revolutionize English language teaching by offering personalized, efficient, and engaging learning experiences. However, it also brings significant challenges that must be carefully addressed. The key lies in maintaining a balance where AI enhances the teaching-learning process without undermining the essential human elements of education. Ultimately, the future of English language teaching will depend on how effectively educators integrate AI while preserving the core values of human interaction, creativity, and critical thinking.

REFERENCES

1. Holmes, Wayne, Maya Bialik, and Charles Fadel. Artificial Intelligence in Education: Promises and Implications for Teaching and Learning. Center for Curriculum Redesign, 2019.
2. Luckin, Rose. Machine Learning and Human Intelligence: The Future of Education for the 21st Century. UCL Institute of Education Press, 2018.
3. UNESCO. Artificial Intelligence in Education: Guidance for Policy-makers. UNESCO, 2021.
4. OECD. AI in Education: Challenges and Opportunities. OECD Publishing, 2020.
5. Cambridge University Press. "The Impact of Artificial Intelligence on English Language Teaching." Cambridge Papers in ELT, 2022.

Chapter 30

Preparing Students for An AI-driven World: A Comprehensive Academic Study

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ABSTRACT

Artificial Intelligence (AI) is transforming the educational landscape by enabling personalized learning, adaptive assessments, and intelligent tutoring systems. In this rapidly evolving digital era, students must develop not only technical competencies but also higher-order skills such as critical thinking, creativity, ethical reasoning, and emotional intelligence. This paper examines the role of AI in education and highlights the need for a shift from traditional teacher-centered approaches to learner-centered pedagogies. It also discusses the evolving role of educators as facilitators and mentors. Furthermore, the study emphasizes the importance of equitable access to AI technologies to bridge the digital divide. The findings suggest that preparing students for an AI-driven world requires continuous adaptation of educational practices aligned with global workforce demands.

Keywords: Artificial Intelligence, Education Technology, Personalized Learning, Digital Literacy, Critical Thinking, Innovation

1. INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative force across various sectors, including education. Its integration into teaching and learning processes has opened new possibilities for improving educational outcomes. AI-powered tools enable personalized learning experiences, allowing students to learn at their own pace and according to their individual needs.

In the modern world, education is no longer limited to acquiring knowledge; it involves developing skills that prepare students for complex and dynamic environments. Therefore, there is an urgent need to rethink traditional educational practices and align them with technological advancements.

2. IMPORTANCE OF AI IN EDUCATION

AI plays a significant role in enhancing the quality of education by:

- Providing personalized learning pathways
- Supporting adaptive assessments
- Enabling intelligent tutoring systems
- Automating administrative tasks

These innovations help educators focus more on student engagement and less on routine tasks. AI also allows for real-time feedback, improving the learning experience and outcomes.

3. DIGITAL LITERACY AND ESSENTIAL SKILLS

In an AI-driven world, students must develop a broad range of skills, including:

- **Digital Literacy:** Ability to use digital tools effectively
- **Critical Thinking:** Analyzing and evaluating information
- **Creativity:** Generating innovative ideas
- **Emotional Intelligence:** Understanding and managing emotions
- **Ethical Awareness:** Responsible use of technology

These skills are essential for adapting to future challenges and opportunities.

4. CHANGING ROLE OF TEACHERS

The integration of AI is redefining the role of teachers. Instead of being mere transmitters of knowledge, teachers are now:

- Facilitators of learning
- Mentors and guides
- Designers of learning experiences

They play a crucial role in helping students navigate digital environments and develop essential life skills.

5. CHALLENGES AND CONCERNS

Despite its advantages, AI in education presents several challenges:

- Digital divide and unequal access
- Data privacy and security issues
- Lack of teacher training
- Over-reliance on technology

Addressing these challenges is essential to ensure inclusive and effective education.

6. METHODOLOGY

This study is based on a qualitative analysis of existing literature on AI in education. Various academic articles, reports, and case studies were reviewed to understand the impact of AI on teaching and learning processes.

Table 1: Applications of AI in Education

<i>AI Application</i>	<i>Description</i>	<i>Benefits</i>
Personalized Learning	Custom learning paths based on student data	Improves engagement and understanding
Adaptive Assessments	Dynamic tests that adjust difficulty levels	Accurate evaluation of student performance
Intelligent Tutoring Systems	AI-based virtual tutors	Provides 24/7 learning support
Administrative Automation	Automates grading, scheduling, and reports	Saves time for educators
Real-time Feedback	Instant performance analysis	Enhances learning outcomes

Table 2: Essential Skills for Students in AI Era

<i>Skill</i>	<i>Description</i>	<i>Importance</i>
Digital Literacy	Ability to use digital tools effectively	Essential for modern learning environments
Critical Thinking	Analyzing and evaluating information	Helps in decision-making
Creativity	Generating innovative ideas	Drives innovation and problem-solving
Emotional Intelligence	Understanding and managing emotions	Improves collaboration and communication
Ethical Awareness	Responsible use of AI and technology	Prevents misuse and promotes fairness

Table 3: Changing Role of Teachers

Traditional Role	Modern AI-Driven Role	Key Responsibilities
Knowledge Provider	Facilitator of Learning	Guides student-centered learning
Instructor	Mentor and Coach	Supports individual student growth
Content Deliverer	Learning Experience Designer	Designs interactive learning activities

Table 4: Challenges of AI in Education

Challenge	Description	Possible Solution
Digital Divide	Unequal access to technology	Government and institutional support
Data Privacy Issues	Risk of misuse of student data	Strong data protection policies
Lack of Teacher Training	Teachers not skilled in AI tools	Professional development programs
Over-reliance on AI	Reduced human interaction	Balanced use of technology

Table 5: Requirements for Effective AI Integration

Requirement	Description	Outcome
Infrastructure	Availability of digital tools and internet	Smooth implementation of AI
Teacher Training	Skill development programs for educators	Effective teaching strategies
Policy Support	Government and institutional policies	Standardized AI integration
Ethical Guidelines	Framework for responsible AI use	Safe and fair educational environment

7. DISCUSSION

The findings indicate that AI has the potential to revolutionize education by making it more personalized, efficient, and accessible. However, successful implementation requires:

- Proper infrastructure
- Teacher training programs
- Policy support
- Ethical guidelines

Educational institutions must adopt a balanced approach that integrates technology while preserving human values.

Table 6: Summary of Study Findings

<i>Aspect</i>	<i>Key Insight</i>
Role of AI	Enhances personalization and efficiency
Student Skills	Need for cognitive and emotional competencies
Teacher Role	Shift towards facilitation and mentorship
Challenges	Access, privacy, and training issues
Future Direction	Balanced and ethical AI integration

8. CONCLUSION

Artificial Intelligence is reshaping the future of education. Preparing students for an AI-driven world requires a holistic approach that combines technological skills with critical thinking, creativity, and ethical awareness. Educational systems must evolve to meet these demands by adopting innovative teaching methods and ensuring equal access to technology. Ultimately, the goal is to create a learning environment that empowers students to thrive in a rapidly changing world.

REFERENCES

1. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education*.
2. Luckin, R. (2018). *Machine Learning and Human Intelligence*.
3. OECD (2021). *AI and the Future of Education*.
4. UNESCO (2020). *AI in Education: Policy Guidelines*.
5. Selwyn, N. (2019). *Should Robots Replace Teachers?*

Chapter 31

Reimagining English Education in The AI Era: Opportunities, Risks, and Realities

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ABSTRACT

This paper explores the transformative role of Artificial Intelligence (AI) in English Language Teaching (ELT) with a focus on both opportunities and challenges. The study critically examines AI-driven tools such as natural language processing systems, intelligent tutoring systems, and generative AI platforms in reshaping pedagogy. It also highlights ethical concerns, academic integrity issues, and the digital divide, particularly in the Indian context. By integrating theoretical insights, case studies, and pedagogical strategies, the paper proposes a balanced framework for the effective implementation of AI in ELT. The study concludes that AI should function as a supportive pedagogical tool while preserving the central role of human educators.

Keywords: Artificial Intelligence, English Language Teaching, ELT, Generative AI, Digital Pedagogy, India, Educational Technology

INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) has brought about a transformative shift in the field of education, fundamentally altering traditional teaching and learning paradigms. Among various disciplines, English Language

Teaching (ELT) has emerged as one of the most significantly impacted areas, as AI-driven technologies increasingly shape how language is taught, learned, and assessed. The integration of AI into ELT reflects a broader movement toward digital pedagogy, where intelligent systems augment human capabilities to create more adaptive, efficient, and learner-centered educational environments.

English, functioning as a global lingua franca, plays a pivotal role in academic, professional, and intercultural communication. In multilingual contexts such as India, proficiency in English is closely associated with access to higher education, employment opportunities, and global participation. Consequently, improving the quality and accessibility of English language education remains a critical priority. The emergence of AI technologies including natural language processing (NLP), machine learning algorithms, speech recognition systems, and generative AI platforms offers unprecedented opportunities to address longstanding challenges in ELT, such as large class sizes, diverse learner needs, and limited teacher resources.

AI-powered tools have introduced innovative approaches to language learning by enabling personalized instruction, real-time feedback, and interactive engagement. Applications such as automated writing evaluation systems, intelligent tutoring platforms, and conversational chat bots allow learners to practice language skills in dynamic and context-rich environments. These technologies not only enhance learner autonomy but also support teachers by automating routine tasks such as grading and content creation, thereby allowing greater focus on pedagogical innovation and student interaction.

However, the growing reliance on AI in ELT creates serious challenges that require cautious consideration. Academic integrity issues, notably the use of generative AI in assignment creation, call into question traditional concepts of authorship and originality. Furthermore, learners' reliance on AI tools may impede their ability to acquire critical thinking and creative expression skills. Ethical concerns, such as data privacy, algorithmic prejudice, and equal access to technology, impede the incorporation of AI into educational settings. The digital gap remains a key hurdle in developing nations such as India, where discrepancies in infrastructure and digital literacy impede widespread use of AI-based learning solutions.

In addition to these challenges, the role of the teacher is undergoing a significant transformation. Rather than serving solely as knowledge transmitters, educators are increasingly expected to function as facilitators, mentors, and critical guides who help learners navigate AI-assisted environments. This change calls for the creation of new pedagogical frameworks that strike a balance between human-centered teaching methods and technological innovation.

In light of this, the current study aims to critically analyze the dual effects of AI on English language instruction by examining both its advantages and disadvantages. The paper seeks to advance knowledge of how AI might be successfully and morally incorporated into ELT by utilizing current research, theoretical stances, and contextual insights from the Indian educational setting. In the conclusion, the study makes the case that although AI has the ability to completely transform language education, its success hinges on a well-rounded strategy that maintains the crucial human components of instruction.

REVIEW OF LITERATURE

The incorporation of Artificial Intelligence (AI) into English Language Teaching (ELT) has received significant scholarly attention in recent years, particularly with the rapid growth of generative AI technology. Contemporary research portrays AI as a transformational force that improves teaching practices, learner engagement, and assessment methodologies, while simultaneously raising critical questions about ethics, equity, and pedagogical efficacy.

An increasing amount of research highlights how AI may help create customized and flexible learning environments. Natural language processing (NLP), intelligent tutoring systems, and conversational agents are examples of AI technologies that offer customized training depending on the needs of individual learners, according to systematic evaluations. For example, a thorough analysis of current research revealed that by offering adaptive feedback and personalized learning pathways, AI applications in ELT greatly increase learners' competency across critical language abilities like writing, speaking, listening, and reading (Syuhra et al., 2025). In a similar vein, Peña-Acuña and Durão (2024) contend that AI-driven platforms improve second language learning by providing interactive learning opportunities and real-time feedback, hence fostering learner autonomy.

Another key issue in the literature is the use of AI to improve learning outcomes. Empirical research and meta-analyses show that AI has a statistically significant positive effect on language learning. A meta-analysis of 46 research found that AI-based interventions lead to medium-to-large increases in language competency, notably in vocabulary acquisition and reading comprehension (Wang & Zhang, 2025). These findings imply that artificial intelligence is more than just a supplemental tool; it is a potent instructional resource capable of improving learning efficiency. However, the same study concludes that AI is most effective when integrated into blended learning environments rather than as a stand-alone training technique.

The application of AI in ELT has been further broadened by the emergence of generative AI technologies like chatbots and automatic writing systems. According to research, interactive interaction is facilitated by tools such as ChatGPT, which allows students to practice conversational skills in a relaxed setting. Al-Khresheh (2024) asserts that generative AI improves learner engagement and offers instant feedback, which leads to increased confidence and fluency in the language. Furthermore, chatbot-based learning is one of the most popular AI applications in language education, especially at the secondary and higher education levels, according to recent systematic evaluations (Integrating AI in English Language Learning, 2025).

Notwithstanding these benefits, the literature also points out a number of difficulties with integrating AI into ELT. Academic integrity is one of the most important issues. Concerns regarding authorship, originality, and assessment validity have been highlighted by the growing usage of generative AI to create essays and assignments. According to Dwivedi et al. (2023), AI-generated content calls into question conventional evaluation techniques and calls for a reconsideration of assessment tactics. In a similar vein, Kasneci et al. (2023) draw attention to the possible abuse of AI tools and stress the necessity of institutional regulations and ethical standards to control their usage in learning environments.

The danger of relying too much on AI technologies is another important topic covered in the literature. While AI makes tasks easier to complete and offers immediate feedback, it may also lower students' critical thinking and cognitive engagement. Research suggests that excessive dependence on AI tools can lead to superficial learning, where students rely on automated outputs rather than actively constructing knowledge (Wang & Zhang, 2025). This concern aligns with constructivist perspectives, which emphasize the importance of active learner participation in the learning process.

The digital divide is another significant challenge highlighted in the literature, particularly in the context of developing countries such as India. Studies indicate that unequal access to technological resources limits the adoption of AI in education, thereby exacerbating existing educational inequalities (Pau et al., 2026). While urban institutions benefit from advanced technological infrastructure, rural areas often face challenges related to internet connectivity, digital literacy, and resource availability. This discrepancy highlights the necessity of inclusive laws that provide fair access to AI-powered teaching resources.

The successful application of AI in ELT is also influenced by teacher readiness and professional development. Teachers' attitudes toward AI are typically positive,

according to research, but many of them lack the training needed to successfully incorporate AI into their lesson plans. According to Georgiou (2025), educators who had formal AI training were more likely to use these tools and think they were useful. This research emphasizes the value of ongoing professional development initiatives that give educators the tools they need to successfully navigate AI-enhanced learning settings.

Furthermore, the discussion of AI in ELT heavily relies on ethical issues. The literature regularly addresses concerns about algorithmic bias, data privacy, and transparency. In order to guarantee justice and accountability, Luckin (2022) highlights the necessity of ethical design in AI systems. In a similar vein, Zawacki-Richter et al. (2022) contend that in order to avoid unforeseen repercussions, ethical considerations should be incorporated into the development and application of AI technology.

The integration of AI with cutting-edge technologies like extended reality (XR), which encompasses virtual and augmented reality, has also been the subject of recent research. By mimicking actual conversation situations, these technologies produce immersive learning environments that improve language acquisition. These technologies greatly increase learner engagement and offer possibilities for real-world language practice, according to a comprehensive study of AI and XR integration (Yan et al., 2025). This implies that learning experiences in ELT may become more immersive and participatory in the future.

The literature emphasizes the changing role of teachers in AI-mediated classrooms in addition to technological developments. Teachers are likely to take on new responsibilities as mentors, facilitators, and essential advisors rather than being replaced by AI. Kessler (2024) argues that the integration of AI requires a shift toward human-AI collaboration, where technology supports but does not replace human instruction. This viewpoint supports the notion that human connection and technological innovation must be balanced for language instruction to be effective.

All things considered, the literature on AI in ELT paints a complicated and nuanced picture. AI has issues with ethics, equality, and pedagogy even as it presents enormous potential for improving language learning through personalization, accessibility, and speed. Scholars generally agree that AI should be used in conjunction with conventional teaching techniques rather than as a replacement for them. Future studies should concentrate on creating context-sensitive frameworks that cater to the individual requirements of various educational environments, especially in developing nations.

Methodology

In order to investigate the use of artificial intelligence (AI) in English language teaching (ELT), with a focus on its prospects and problems, the current study employs a qualitative, analytical, and interpretative research approach. A qualitative method is most suited to capture the complexity, diversity, and contextual subtleties related to the application of AI in education, given its dynamic and multidisciplinary nature. Peer-reviewed journal articles, academic books, conference proceedings, policy documents, and reports produced between 2021 and 2026 are among the secondary data sources that the study mainly uses.

Research Design

The nature of this research is exploratory and conceptual. Instead of gathering primary data via surveys or tests, it synthesizes previous research to produce a thorough grasp of the topic. Relevant literature is carefully chosen, categorized, and critically analyzed as part of the study's methodical literature-based analytical approach. The research design is guided by the following key principles:

- **Relevance:** Only studies directly related to AI in ELT or closely associated domains such as Computer-Assisted Language Learning (CALL), digital pedagogy, and educational technology are included.
- **Recency:** Priority is given to recent publications (2021–2026) to ensure that the analysis reflects current trends and technological advancements.
- **Credibility:** Sources are selected from reputable academic databases such as Scopus-indexed journals, Web of Science, Google Scholar, and peer-reviewed publications.

Data Collection

The data for this study is collected through systematic review of secondary sources. Keywords such as “Artificial Intelligence in ELT,” “AI in language learning,” “generative AI in education,” and “digital pedagogy” are used to identify relevant literature. Approximately 40-50 scholarly sources were initially reviewed, out of which the most relevant and high-quality studies were selected for detailed analysis.

In addition to academic literature, the study also considers:

- Educational policy documents (e.g., NEP 2020 in India)
- Reports on AI in education
- Case-based observations from Indian educational institutions

This combination of sources ensures a holistic perspective that integrates both theoretical insights and practical implications.

Data Analysis

Thematic analysis is the main technique used in the study to understand the data. Finding, examining, and classifying recurrent patterns or themes in the gathered data are known as thematic analysis. The following steps are part of the process:

1. **Data Familiarization:** To comprehend the main points and conclusions, the chosen literature is thoroughly studied and examined.
2. **Coding:** Relevant data is grouped under codes like “digital divide,” “academic integrity,” “personalized learning,” and “teacher role.”
3. **Theme Development:** Codes are categorized into more general topics, such as pedagogical implications, possibilities, problems, and ethical issues.
4. **Interpretation:** In order to derive significant conclusions and insights, the selected themes are rigorously examined.

This method allows for a structured yet flexible analysis of complex and diverse data.

Theoretical Integration

The analysis is informed by established educational theories, including:

- **Constructivism**, which emphasizes learner-centered knowledge construction
- **Communicative Language Teaching (CLT)**, which emphasizes communication in everyday situations
- **Computer-Assisted Language Learning (CALL)**, which provides the technological foundation

These frameworks guide the interpretation of findings and ensure that the study remains grounded in pedagogical theory.

Implications

There are significant ramifications for pedagogy, institutions, technology, and socioculture when Artificial Intelligence (AI) is used into English Language Teaching (ELT). These implications extend beyond classroom practices to influence educational policy, teacher identity, learner autonomy, and the broader goals of language education in a globalized world. To ensure that AI is included in a way that

improves rather than compromises the quality and equality of education, it is crucial to have a critical grasp of these consequences.

Pedagogical Implications

The shift in pedagogy from a teacher-centered to a learner-centered paradigm is one of the most significant effects of AI in ELT. Adaptive learning environments, where instructional information is customized to each learner's requirements, preferences, and skill levels, are made possible by AI-driven technologies. This change is consistent with modern educational ideas like constructivism, which place a strong emphasis on knowledge building and active learning. But it also necessitates that educators reconsider conventional teaching methods and switch to more adaptable and dynamic ones.

The learning process is dramatically changed by the provision of real-time feedback via AI systems. Students can now quickly recognize and fix their mistakes, which accelerates language proficiency. Although this increases productivity, if students only use automatic corrections without comprehending core linguistic ideas, it also raises questions about surface learning. As a result, teachers need to provide assignments that promote critical thinking and more in-depth language use.

AI also makes it easier to incorporate multimodal learning resources, such as interactive simulations, audio, and video. This enhances the educational process and accommodates a variety of learning preferences. To properly use these resources, instructors must also develop digital pedagogical competences.

Implications for Teachers

In AI-mediated learning environments, the role of the instructor is changing dramatically. Teachers are increasingly seen as mentors, facilitators, and designers of learning experiences rather than as the main source of knowledge. This change has both advantageous and difficult ramifications.

Positively, AI frees up teachers to concentrate on higher-order pedagogical activities by lessening the administrative load of duties like lesson planning and grading. Additionally, it offers insightful data on student performance, allowing for better informed teaching choices.

However, the transition to AI-supported teaching requires substantial professional development. Teachers must acquire new skills related to digital literacy, AI tool usage, and data interpretation. Without adequate training and support, there is a risk that educators may feel overwhelmed or resistant to adopting AI technologies. Additionally, the perceived threat of AI replacing human teachers

may create anxiety and uncertainty, highlighting the need for clear communication about the complementary role of AI.

Implications for Learners

For learners, AI offers unprecedented opportunities for personalized and self-directed learning. Students can access a wide range of resources, practice language skills independently, and receive immediate feedback. This encourages student autonomy and gives them the confidence to take charge of their education.

But there are drawbacks to this greater independence as well. To successfully use AI tools and critically assess the information they are given, learners must acquire digital literacy skills. Additionally, pupils run the risk of becoming overly dependent on AI, relying on automated solutions instead of honing their own language skills. This may impede the growth of critical thinking and creativity, two crucial aspects of language acquisition.

Furthermore, the use of AI in assessments raises concerns regarding fairness and authenticity. Students with better access to advanced AI technologies may have an advantage over others, resulting in differences in learning results.

Therefore, educators must design assessment methods that ensure equity and accurately reflect students' abilities.

Institutional and Policy Implications

Adoption of AI in ELT at the institutional level necessitates large investments in training, infrastructure, and policy creation. Educational institutions need to make sure they have access to AI platforms and dependable internet connectivity, among other technology tools. They must also create rules for the moral use of AI, covering topics like algorithmic bias, academic integrity, and data privacy.

The way AI is incorporated into education is greatly influenced by policy frameworks. Initiatives like the National Education Policy (NEP) 2020 highlight the significance of technological innovation and digital learning in the Indian environment. However, the successful implementation of these policies depends on their alignment with ground realities, particularly in rural and under-resourced areas.

Institutions must also foster a culture of innovation and collaboration, encouraging teachers and students to experiment with AI tools while maintaining ethical standards. This requires a supportive environment that values continuous learning and adaptation.

Socio-Cultural Implications

The integration of AI in ELT also has broader socio-cultural implications. Language learning is inherently linked to cultural context, identity, and social interaction. While AI tools can simulate conversational scenarios, they may not fully capture the cultural nuances and emotional aspects of human communication.

There is also a concern that AI systems, often developed in specific cultural contexts, may reinforce linguistic and cultural biases. This highlights the need for culturally responsive AI design that reflects the diversity of learners and promotes inclusive language practices.

In the Indian context, where multiple languages coexist, the dominance of English and AI-driven English learning tools may have implications for linguistic diversity. Local languages and cultural identities must not be sacrificed in the name of English promotion, according to policymakers and educators.

Technological Implications

The use of AI in ELT highlights the significance of ongoing innovation and assessment from a technology standpoint. AI systems must be designed to be transparent, reliable, and adaptable to changing educational needs. Regular updates and improvements are necessary to ensure their effectiveness and relevance.

At the same time, the rapid pace of technological change presents challenges in terms of sustainability and scalability. Educational institutions must carefully evaluate the cost-benefit aspects of adopting AI technologies and ensure that they are accessible to all learners.

Future Directions

It is anticipated that artificial intelligence will play a major role in English language teaching (ELT) as it develops further, creating new opportunities for pedagogical change, research, and innovation. Technological developments, evolving educational requirements, and the continuous search for more efficient and inclusive learning environments will all influence the future of AI in ELT.

Advancements in AI Technologies

The creation of increasingly complex AI systems is one of the most potential future paths. It is anticipated that developments in machine learning, deep learning, and natural language processing will improve the precision and capabilities of AI systems. Future AI technologies will probably be better suited for language acquisition since they can comprehend context, tone, and cultural quirks.

Another fascinating possibility is the incorporation of AI with cutting-edge technologies like augmented reality (AR) and virtual reality (VR). Students can practice language skills in simulated real-world circumstances by using these technologies to build immersive learning environments. For instance, students can participate in online discussions in various cultural contexts, improving their language and intercultural skills.

Customized and Flexible Education

Hyper-personalized learning experiences will be a major focus of ELT in the future. AI systems will be able to give highly personalized training by analyzing enormous volumes of learner data. This entails taking into account elements like learning styles, motivation, and emotional states in addition to customizing content to each person's level of skill.

Such advancements will enable more inclusive education by catering to diverse learner needs. However, they will also require robust data management systems and ethical safeguards to protect learner privacy.

Redefining Assessment Practices

By moving the emphasis from traditional tests to ongoing and formative evaluation, AI is predicted to have a revolutionary impact on assessment. Future assessment systems may use AI to track learner progress over time, providing a more comprehensive and accurate measure of language proficiency.

At the same time, there will be a need to develop assessment methods that minimize the risk of academic dishonesty associated with AI-generated content. This may include the use of AI detection technologies, as well as the creation of projects that require critical thinking, creativity, and personal introspection.

Teacher Professional Development

Teachers' readiness will be crucial to the future of AI in ELT. Programs for ongoing professional development will be necessary to give teachers the tools they need to successfully incorporate AI into their lesson plans. These courses ought to emphasize educational approaches and ethical issues in addition to technical proficiency.

By contributing to the creation of AI tools and offering input on their efficacy, educators will also have a significant impact on how AI is used in education in the future. AI technologies will be in line with the requirements of educators and students thanks to this cooperative approach.

Bridging the Digital Divide

In the future of AI in ELT, closing the digital divide will be crucial, especially in emerging nations like India. Access to technology infrastructure, such as digital gadgets and internet connectivity, has to be improved. In this sense, public-private partnerships, government efforts, and community-based projects can all be very important.

In addition to infrastructure, instructors' and students' digital literacy needs to be improved. This encompasses not only technical proficiency but also the capacity to assess AI technologies critically and utilize them responsibly.

Ethical and Regulatory Frameworks

The creation of moral and legal frameworks will be crucial as AI is incorporated into education more and more. These frameworks ought to cover topics like accountability, transparency, algorithmic bias, and data privacy. Clear rules for the usage of AI must be established by educational institutions, and it is imperative that these rules be applied consistently.

Future studies should go deeper into the ethical ramifications of AI, taking into account issues like equity, fairness, and how AI affects human agency.

Interdisciplinary Research and Collaboration

The future of AI in ELT will benefit from interdisciplinary research that brings together insights from linguistics, education, computer science, psychology, and sociology. Collaborative efforts between researchers, educators, and technology developers will be essential for creating AI tools that are pedagogically sound and socially responsible.

Human-AI Collaboration

The combination of artificial and human intelligence will ultimately determine the future of ELT. AI will be a potent tool that improves human abilities rather than taking the place of educators. Creating learning environments where technology fosters critical thinking, creativity, and meaningful interaction should be the aim.

CONCLUSION

In conclusion, AI has a bright and complicated future in English language instruction. Technological developments provide obstacles that need to be carefully controlled, even though they also present great potential for creativity. To guarantee that AI positively advances language instruction, a fair, moral, and inclusive

strategy will be necessary. The incorporation of artificial intelligence (AI) into English language teaching (ELT) is a revolutionary advancement that could significantly alter educational methods. This study has critically analyzed the advantages and disadvantages of AI in ELT, emphasizing its complex effects on students, instructors, and educational institutions.

The ability of AI to improve the caliber and accessibility of language instruction is one of the most important conclusions of the study. AI makes it possible to customize training to each learner's needs through personalized learning pathways, which enhances learning results. AI systems' capacity to offer prompt feedback on writing, grammar, and pronunciation speeds up the learning process and increases its effectiveness. Furthermore, interactive learning environments that encourage active participation and communicative ability are created by AI-driven tools like chatbots and virtual assistants.

Another significant contribution of AI is its ability to assist teachers and optimize instructional processes. By automating mundane duties like grading and content development, AI frees up educators' time for higher-level pedagogical activities like mentoring, leading discussions, and encouraging critical thinking. This shift in the teacher's role from knowledge provider to facilitator reflects a larger trend toward learner-centered education.

To guarantee the efficient and moral application of AI in ELT, the study also highlights a number of crucial issues that need to be resolved. Academic integrity stands out as one of the main issues. Because generative AI tools are so widely available, it is now easier for students to complete assignments without putting in real effort, which compromises the validity of assessment procedures. This calls for the creation of new assessment techniques that prioritize critical engagement and process-oriented learning.

Over-reliance on technology is another major problem. Even if AI technologies are practical and effective, relying too much on them could impede the growth of critical thinking, creativity, and problem-solving abilities. AI cannot completely replace the active engagement and meaningful interaction components that are essential to language learning.

In the discussion of AI in education, ethical issues are also quite important. The necessity for responsible and accountable usage of AI technologies is highlighted by issues with data privacy, algorithmic bias, and transparency. To control the use of AI and make sure it complies with ethical standards, educational institutions must set specific rules and regulations.

An extra degree of complexity is presented by the digital divide, especially in the Indian context. While many rural communities still struggle with infrastructure,

connectivity, and digital literacy, urban institutions are rapidly embracing AI-driven tools. This discrepancy highlights the need for inclusive policies and fair access to technology since it runs the risk of escalating already-existing educational disparities.

Notwithstanding these obstacles, the study contends that a harmonious fusion of artificial and human intelligence is what will shape ELT in the future. AI should be seen as a supplementary tool that improves teaching and learning procedures rather than as a substitute for educators. The human components of education, such empathy, creativity, and social connection, are still essential and need to be maintained.

In conclusion, AI has enormous potential to transform English language instruction by making it more individualized, effective, and accessible. However, a comprehensive strategy that takes socioeconomic, ethical, and pedagogical aspects into account is necessary for its effective execution. To create frameworks that optimize AI's advantages while reducing its risks, educators, legislators, and researchers must collaborate.

The ultimate objective is to promote human-centered learning environments where AI facilitates meaningful and transformative education rather than technology-driven classrooms.

REFERENCES

1. Al-khresheh, M. H. (2024). The future of artificial intelligence in English language teaching: Pros and cons of ChatGPT implementation. *Language Teaching Research Quarterly*, 43, 54–80.
2. Dwivedi, Y. K., et al. (2023). So what if ChatGPT wrote it? Multidisciplinary perspectives on opportunities and challenges of generative AI. *International Journal of Information Management*, 71, 102642.
3. Georgiou, G. P. (2025). Artificial intelligence in pronunciation teaching: Teacher beliefs and practices. *Language Teaching Research*.
4. Kasneci, E., et al. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274.
5. Luckin, R. (2022). AI and education: The importance of ethical design. *AI & Society*, 37(1), 1–6.
6. Pau, L. C., Yunus, M. M., & Lun, C. W. W. (2026). The impact of AI tools on English language teaching: A systematic review (2021–2025). *International Journal of Research and Innovation in Social Science*, 9(12), 3804–3827.
7. Peña-Acuña, B., & Durão, R. C. F. (2024). Learning English as a second language with AI: A systematic review. *Frontiers in Education*, 9.
8. Syuhra, M. N., Sofyan, N. E. C., & Rosalina, E. (2025). Artificial intelligence in ELT: A systematic literature review. *VELES Journal*, 9(1), 193–205.

9. Wang, X., & Zhang, Y. (2025). Effectiveness of AI in language teaching: A meta-analysis. *Computers and Education: Artificial Intelligence*, 9, 100522.
10. Yan, W., Li, B., & Lowell, V. L. (2025). AI and XR in language education: A systematic review. *Education Sciences*, 15(8), 1066.
11. Zawacki-Richter, O., et al. (2022). Systematic review of AI in higher education. *International Journal of Educational Technology in Higher Education*, 19.

Chapter 32

The Automated Student Feedback with AI – A Study

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ABSTRACT

The use of Artificial Intelligence (AI) in education has transformed the old practices of teaching and assessment especially in the field of student feedback. The paper explores the idea of automated student feedback through AI, its effectiveness, advantages, weaknesses, and the future of such solution. Technologies like machine learning, natural language processing, or learning analytics are used to create AI-powered feedback systems that offer learners instant, personalized, and consistent feedback. The study takes a qualitative design grounded on the review of the available literature, reports, and case studies pertaining to AI in education. The results reveal that the automated feedback systems are very effective in engaging the students, improving their learning, and also lowering the teaching load of the educators as they provide a scalable solution to the learning experience in online and traditional learning. Yet, issues connected to accuracy, moral factors, privacy of the data, and the lack of human emotional intelligence are still pressing issues. This study finds that, although AI-based feedback systems have tremendous potential in changing the education field, a harmonious combination of human and AI feedback is necessary to make the learning experience effective, equitable, and inclusive.

Keywords: AI, Education, Feedback System, Design

INTRODUCTION

Feedback in the modern educational system is an essential factor in the increase of student learning, academic achievements and the general involvement. Good feedback can enable learners to know their strengths, as well as their weakness, and enhance their knowledge and skills. Nevertheless, the conventional methods of feedback in education are usually associated with a range of limitations, including the latency in feedback, the absence of personalization, and inconsistency in assessing students, not to mention the higher workload on instructors, particularly in a classroom setting and in the context of online learning. The education sector is experiencing an immense change with the development of Artificial Intelligence (AI) at a fast rate. The use of AI technologies, especially machine learning, natural language processing, and learning analytics is becoming more and more widespread in teaching and assessment.

Automated student feedback is one of the most promising AI uses in education whereby intelligent systems are able to produce instant, personalized, and data-driven feedback without having to be constantly monitored by humans. Students can post assignments, quizzes, essays and even responses to discussion boards through automated feedback systems that can analyze student feedback and give instant feedback on performance. Not only do these systems assist in enhancing the promptness and effectiveness of the delivery of feedback, they also advance the quality of the learning experience through providing customized recommendations depending on the needs of specific students.

Artificial intelligence (AI) systems are a suitable solution to the lack of interaction between instructors and learners in online and blended learning, where timely feedback plays a crucial role. Furthermore, the growing use of online learning platforms, Massive Open Online Courses (MOOCs), and Learning Management Systems (LMS) has ensured that there is a high demand of scalable and efficient feedback systems. To meet this need, AI-based feedback systems facilitate the work of educators who have to process a considerable amount of data on students, yet still, these systems can help to be consistent and objective when considering the evaluation of students. Along with its many benefits, important concerns are also presented by the introduction of AI in student feedback. Such concerns include algorithmic bias, insensitivity of machines to human emotions, data privacy, and the trustworthiness of automated responses.

Thus, the possibilities and constraints of AI-oriented feedback systems need to be critically looked into. This paper will discuss the idea of automated student feedback with the help of AI, its efficacy in contemporary education, its advantages and disadvantages. This study can help create a more efficient, inclusive, and

student-centered learning environment by comprehending how AI can be used in the feedback process.

OBJECTIVE OF STUDY

The paper entitled The Automated Student Feedback with AI - A Study is aimed at reaching the following goals:

Primary Objective,

1. To investigate the influence and efficiency of Artificial Intelligence (AI) used to generate automatic student feedback in contemporary learning settings.

Specific Objectives,

1. To learn about the idea and how AI-based automated student feedback systems work.
2. To examine the role of AI technologies in feedback generation like Machine Learning and Natural Language Processing.
3. To compare the effects of automated feedback on student learning and academic performance.
4. To determine the advantages of AI-based feedback mechanisms in terms of efficiency, personalization, and scalability.
5. To discuss the issues and constraints related to AI-based feedback, such as ethics and privacy.
6. To make a comparison between conventional feedback techniques and automated feedback systems using AI.
7. To evaluate how students and teachers feel about using AI in the feedback systems.
8. To discover the perspectives and possible advances of AI in student feedback systems.

REVIEW OF LITERATURE

Artificial Intelligence (AI) and its application to education has attracted considerable interest over the last few years, especially in the field of automated student feedback. A large number of studies point to the efficacy of AI in offering individualized, instantaneous, and scalable responses, which improves the learning and student interaction.

According to a study by Alghamdi and Alghizzi (2025), AI-driven feedback systems help teachers to provide prompt and personal feedback, which enhances

the efficiency of teaching and student satisfaction (Alghamdi and Alghizzi, 2025). Likewise, the study in *Frontiers in Education* states that AI-mediated feedback increases the engagement of students by providing real-time feedback on learning and performance gaps (Frontiers in Education, 2025).

The studies on Intelligent Tutoring Systems (ITS) show that AI-based feedback has a significant impact on improving academic performance. In one of the studies, which may be found in PubMed Central, it was discovered that personalized automated feedback through ITS has a positive effect on learning outcomes than traditional feedback (Korbit Technologies, 2020). Such systems are always willing to change depending on the needs of the students and it allows them to have more customized learning. More so, a paper published in *Computers & Education Open* (2025) demonstrates the use of generative AI in giving detailed and context-relevant feedback. The results indicate that AI-assisted systems enhance student performance and learning power through providing a systematic and consistent feedback (Computers & Education Open, 2025).

Natural Language Processing (NLP) is important in the sphere of automated assessment. A study by Kumar (2025) suggests that AI-powered systems can be used to effectively grade essays and open-ended answers, eliminating the workload of instructors and preserving the consistency of grades (Kumar, 2025).

Likewise, Sheikh (2024) discovered that AI-based feedback systems enhance self-regulated learning through the provision of actionable feedback and continuous performance monitoring (Sheikh, 2024). In spite of these benefits, a number of studies also comment on the drawbacks of AI in feedback systems. The issues of transparency, ethical concerns, and algorithmic bias are some of the concerns mentioned in a review published in MDPI (2025) (MDPI, 2025).

According to another study, AI systems tend to be devoid of emotional intelligence, which is crucial in providing meaningful and empathetic feedback (Nature, 2024). Also, the level of acceptance of AI-based feedback systems by students is a significant factor. According to a study published in *Nature Humanities and Social Sciences Communications* (2024), the trust of AI systems in students is an important factor affecting their readiness to use such technologies (Nature, 2024).

In general, the literature suggests that the AI-based automated feedback systems have significant advantages regarding efficiency, scalability, and personalization. Nonetheless, issues of ethics, truthfulness and human interaction require solving. The majority of researchers suggest that a hybrid solution, which involves the use of AI and human control, is the way to achieve effective and inclusive learning results.

CONCEPTUAL FRAMEWORK OF AI-BASED FEEDBACK SYSTEMS

The theoretical framework of AI-based feedback systems gives a systematic interpretation of the implementation of the Artificial Intelligence technologies into the educational process to give automated, personalized, and effective feedback to students. It describes the interaction of the different parts like the data input, AI processing mechanisms, and feedback generation, as well as learning outcomes.

The main concept of this framework is that an intelligent system can provide continuous, real-time feedback, which can be used to improve student learning. The framework is usually made up of the following main elements:

1. **Input Layer (Student Data Collection)** The initial level is gathering data concerning student performance and behaviors. This includes: Assignment submissions Response to questions on quizzes and tests. Discussion forum participation Data of interaction with learning (clicks, time spent, progress). This information is used as the basis of AI analysis and feedback creation.
2. **Processing Layer (AI Technologies)** At this phase, AI methods are used to process the data gathered. Key technologies include: Machine Learning (ML): Recognizes trends in student performance and forecasts learning requirements. Natural Language Processing (NLP): Assesses written answers like essays and written responses. Learning Analytics: Monitors and analyzes student activity and progress. These technologies collaborate to understand student inputs and come up with meaningful insights.
3. **Feedback Generation Layer** Based on the analysis, the system produces automated feedback. This feedback may be: Immediate and real-time Personalized to individual student needs Descriptive (explaining mistakes) Prescriptive (suggesting improvements) The feedback will be structured in a way that will help steer the students towards higher understanding and performance.
4. **Output Layer (Student Response and Learning Outcomes)** The feedback created is provided to the students in the form of digital media like Learning Management Systems (LMS). This feedback is used by students to: Correct errors Improve understanding Enhance skills This results in better academics, increased engagement, and learning outcomes.
5. **Feedback Loop (Continuous Improvement)** One of the key aspects of the framework is the feedback loop. The AI system constantly keeps track of student reactions to feedback and re-processes them. This gives rise to a cycle of: Continuous assessment Adaptive learning Progressive improvement

6. **Role of Educators** Even though the system is automated, educators are very important in: Creating AI models and feedback criteria. Monitoring system performance Having human supervision and emotional care. The hybrid model based on AI and human feedback is the only way to make it effective and reliable. Overview of the Framework. The conceptual framework demonstrates a process that is cyclical and adaptive in which: Student Feedback - AI Processing - Feedback Generating - Learning Outcome - Continuous Improvement. This framework illustrates how AI can turn the traditional feedback into a dynamic, data-driven, and student-centered approach to make learning more efficient, personalized, and scalable.

BENEFITS OF AI-BASED STUDENT FEEDBACK

One of the areas that have tremendously been improved by the integration of Artificial Intelligence (AI) into the system of student feedback is the teaching learning process. AI-based feedback has a number of advantages over the traditional one, and it is a necessary part of the contemporary education.

1. **Immediate and Real-Time Feedback** Assignments, quizzes, and assessments are given by AI systems with immediate feedback. This enables students to detect errors and rectify them immediately resulting in quicker learning, and higher concept retention.
2. **Personalized Learning Experience** In AI-driven feedback, feedback is personalized to the needs of the students. Analyzing learning patterns, performance levels and preferences, the AI systems provide tailored recommendations, allowing students to study at their pace and enhance their learning more efficiently.
3. **Scalability and Efficiency** AI systems can be used with a high number of students at the same time, which is why they are very appropriate in online courses, large classrooms, and Massive Open Online Courses (MOOCs). This will provide consistent feedback irrespective of the size of the classes.
4. **Reduced Teacher Workload** Automated feedback reduces redundant activities like marking assignments and assessing responses. This will enable the educators to concentrate more on teaching, mentoring and offering high-quality human centered guidance.
5. **Consistency and Objectivity** AI systems offer consistent feedback depending on predefined criteria and remove human bias and inconsistency in rating. This gives equal evaluation to all students.

6. **Enhanced Student Engagement** Timely and interactive feedback helps in motivating and engaging students. With constant guidance and encouragement during learning process, students will be more likely to remain engaged.
7. **Supports Self-Regulated Learning** AI feedback motivates students to be responsible in their learning process by providing practical feedback and suggestions on how to improve. This promotes independent learning and critical thinking skills.
8. **Data-Driven Insights** The use of AI systems can gather and process large volumes of student data, which can be useful in understanding the learning behaviors, strengths, and weaknesses. These are some of the insights which can guide both the learners and the teachers in making decisions.
9. **Accessibility and Flexibility** The AI-based feedback systems can be found anywhere and anytime and enable flexible learning settings. Learning has been made more convenient as feedback is available to the students even when they are not in the classroom.
10. **Feedback Loop Continuous Improvement.** AI systems constantly engage with students and refine their feedback as time goes by. This adaptive nature enhances the quality and relevance of feedback provided. **Summary** On the whole, the student feedback system powered by AI provides a more efficient, more personalized and scalable educational system. They are very important in influencing the future of contemporary learning practices, particularly by enhancing efficiency, engagement, and learning outcomes.

FINDINGS OF THE STUDY

The article entitled *The Automated Student Feedback with AI -A Study*, introduces a variety of valuable insights into the efficiency, advantages, and drawbacks of the AI-based feedback system in education. These conclusions are based on the research of the current literature, case studies, and trends that can be observed in AI-based learning environments.

1. **High Quality Change in Learning Outcomes.** The analysis concludes that AI-based feedback systems can lead to better academic performance due to the timely and precise feedback. Students can easily recognize and correct errors promptly and learn and remember concepts better.
2. **Enhanced Student Engagement** Student engagement and motivation is enhanced through automated feedback. The constant and interactive

respondent feedback process helps to keep students actively engaged in the learning process particularly in online and blended learning.

3. Effectiveness of Personalized Feedback AI systems are effective to provide personalized feedback according to his/her learning patterns and performance. This individualization facilitates the different learners and is more effective in addressing individual learning gaps as opposed to the traditional approaches.
4. Decrease in Workload of Educators. Use of AI helps eliminate workload of tedious tasks like grading and evaluation. Teachers can devote more attention to the quality of instruction, tutoring, and students.
5. Large Learning Environment High Scalability. The feedback systems based on AI are extremely effective with the high number of students; hence, they suit Massive Open Online Courses (MOOCs) and use in the classroom without any loss of feedback quality.
6. Uniformity and impartiality of Evaluation. The researchers conclude that AI will provide consistency in feedback, minimize human bias, and minimize grading inconsistencies. This encourages equity and transparency in the assessment procedure.
7. Problems with Accuracy and Context Understanding. Although it has benefits, AI systems are not always capable of comprehending complex or imaginative answers and in subjective evaluation, especially in essays. This can result in inadequate or inaccurate feedback.
8. Deficiency of Human interaction and Emotional Intelligence. The feedback provided by AI does not have empathy and emotional insight that are critical in motivating and giving confidence to students. Human engagement is still crucial to offer valuable and encouraging feedback.
9. Privacy and Ethical Issues. The research raises the issues of data privacy, security and bias in the algorithms. The ethical considerations and transparency of the student data that is used in AI systems must be strict.
10. Need for a Hybrid Feedback Approach Among the main conclusions is that AI, as well as human feedback, yield the best results in combination. Although AI is efficient and can be scaled, human educators can support critical thinking and create an emotional resonance.

On the whole, the research finds that automated feedback systems based on AI are incredibly efficient in enhancing the efficiency of learning, engagement, and scalability. Nevertheless, their weaknesses make them require a balanced

combination with human involvement in order to achieve accuracy, fairness and overall development of the students.

CONCLUSION

The study titled “The Automated Student Feedback with AI – A Study” highlights the transformative potential of Artificial Intelligence in reshaping traditional feedback mechanisms within education. AI-based feedback systems have emerged as powerful tools that provide timely, personalized, and scalable feedback, addressing many of the limitations associated with conventional methods. By leveraging technologies such as machine learning, natural language processing, and learning analytics, these systems enhance student learning experiences and improve overall academic performance.

The findings of the study indicate that automated feedback significantly contributes to increased student engagement, better understanding of concepts, and improved learning outcomes. The ability of AI systems to deliver instant and consistent feedback enables students to identify their strengths and weaknesses more effectively, thereby fostering self-directed and continuous learning. Additionally, the reduction in educators’ workload allows them to focus more on meaningful teaching and mentoring activities.

However, the study also reveals certain limitations and concerns associated with AI-based feedback systems. Issues such as lack of human touch, potential bias in algorithms, data privacy risks, and occasional inaccuracies in feedback highlight the need for cautious implementation. AI systems, while efficient, cannot fully replicate the emotional intelligence and contextual understanding provided by human educators.

Therefore, the study concludes that AI should be viewed as a complementary tool rather than a replacement for human involvement in education. A hybrid approach, combining the efficiency of AI with the empathy and expertise of educators, is essential for achieving optimal learning outcomes. Furthermore, continuous improvements in AI technologies, along with ethical guidelines and transparent practices, are necessary to ensure fairness, reliability, and inclusivity.

In conclusion, AI-driven automated student feedback systems hold immense promise for the future of education. When implemented responsibly, they can significantly enhance the quality, accessibility, and effectiveness of learning, paving the way for a more adaptive and student-centered educational environment.

REFERENCES

1. Alghamdi, L. H., & Alghizzi, T. M. (2025). Educators' reflections on AI-automated feedback. *Frontiers in Education*.
2. Computers & Education Open. (2025). AI-assisted feedback in education.
3. Korbit Technologies. (2020). Automated personalized feedback improves learning outcomes. *PubMed Central*.
4. Kumar, R. (2025). AI-driven automated assessment systems.
5. MDPI. (2025). Artificial Intelligence in education: Opportunities and challenges.
6. Nature Humanities and Social Sciences Communications. (2024). Student perceptions of AI-based feedback systems.
7. Sheikh, F. (2024). AI-powered feedback and student engagement.

Chapter 33

Teaching English with AI Vs Without AI

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ABSTRACT

The expansion of artificial intelligence (AI) has significantly influenced English language teaching, bringing both opportunities and concerns. This study examines the differences between AI-supported and traditional English teaching by analyzing their impact on learning outcomes, classroom interaction, learner motivation, feedback quality, and assessment. Current research highlights that AI tools—such as chatbots, grammar correction systems, speech recognition, and generative writing assistants—enhance personalized learning, provide immediate feedback, lower speaking anxiety, and extend learning beyond the classroom.

However, challenges such as algorithmic bias, data privacy issues, academic dishonesty, overdependence on technology, unequal access, and insufficient teacher training are also reported. In contrast, traditional teaching methods emphasize human interaction, emotional intelligence, contextual feedback, and culturally responsive instruction, which remain essential for effective language acquisition.

This paper argues that AI should function as a supportive tool rather than a replacement for teachers. A blended approach that integrates AI efficiency with human-centered pedagogy offers the most balanced and effective model for modern English language education.

Keywords: Artificial intelligence, English language teaching, feedback, digital pedagogy, assessment, chatbots, teacher role

INTRODUCTION

English language teaching has continuously evolved alongside technological advancements—from audio-based instruction to digital platforms and mobile

applications. The emergence of AI, particularly generative AI, marks a new phase in this progression, as it can generate text, simulate conversations, and provide real-time adaptive feedback.

These features are especially useful in language learning contexts where repetition, practice, and timely correction are crucial. However, the key issue is not simply whether AI is beneficial, but under what circumstances AI-based teaching is more effective than traditional approaches.

The effectiveness of each method depends on factors such as instructional goals, learner characteristics, teacher expertise, and ethical considerations. Although AI adoption is increasing, studies indicate that many educators still lack sufficient training, creating a gap between usage and effective implementation.

RESEARCH BACKGROUND

Recent systematic reviews reveal that AI is commonly applied in English teaching for writing support, speaking practice, reading assistance, and personalized learning. A British Council review of multiple studies found that AI tools contribute to improved pronunciation, vocabulary development, writing accuracy, and learner autonomy.

At the same time, concerns about standardization, bias, accessibility, and ethical use remain significant.

Further studies confirm this dual perspective. A 2025 review identified writing assistance as the most frequent application of AI, while also highlighting risks such as plagiarism, excessive dependence, and technical limitations. Similarly, research on AI chatbots shows benefits like faster feedback and reduced anxiety, but also limitations in emotional understanding and authentic interaction.

TEACHING WITH AI

AI-supported English teaching involves tools such as chatbots, automated grammar checkers, speech recognition software, translation systems, and generative writing platforms. These technologies assist teachers by automating routine tasks, delivering instant feedback, and enabling personalized instruction.

One of the key strengths of AI is its ability to tailor learning experiences. In large classrooms, meeting individual learner needs is challenging; AI can adapt exercises, identify errors, and provide continuous practice without fatigue.

Additionally, AI expands learning opportunities beyond the classroom. Students can practice language skills anytime, which is particularly valuable for those with limited exposure to English-speaking environments.

AI also contributes to increased learner confidence. Studies suggest that interacting with AI reduces speaking anxiety, as learners can practice privately before engaging in real conversations. Writing tools further enhance grammatical accuracy and vocabulary use, helping students refine their work before teacher evaluation.

TEACHING WITHOUT AI

Traditional English teaching relies on direct teacher-student interaction, classroom discussion, peer collaboration, and manual feedback. This approach remains essential because language learning involves not only technical accuracy but also social and emotional engagement.

Teachers can interpret student behavior, respond to emotions, and adapt instruction based on context—capabilities that AI cannot fully replicate. They can also explain errors more deeply by addressing underlying causes rather than simply correcting them.

Moreover, non-AI teaching is more practical in low-resource settings where access to devices or internet connectivity is limited. It avoids risks related to data privacy, algorithmic bias, and unreliable automated responses.

Comparative Analysis

<i>Dimension</i>	<i>With AI</i>	<i>Without AI</i>
Feedback	Immediate and frequent	Slower but more detailed and contextual
Personalization	High through adaptive systems	Limited by class size and teacher capacity
Speaking practice	Available anytime via AI tools	Depends on classroom interaction
Writing support	Strong in grammar and revision	Strong in idea development and feedback
Motivation	Can reduce anxiety and increase	Depends on teaching strategies engagement
Ethics	Risks of bias, privacy, and misuse	Fewer technological risks
Human interaction	Simulated and limited	Authentic and emotionally responsive

AI excels in efficiency, scalability, and repetitive practice, whereas traditional teaching is stronger in human connection, interpretation, and critical engagement.

Classroom Applications

In speaking instruction, AI tools support pronunciation training and conversational practice, allowing learners to repeat exercises without fear of embarrassment. In writing, AI assists with brainstorming, editing, and paraphrasing, though careful monitoring is required to maintain academic integrity.

Without AI, these activities rely more on peer interaction and teacher feedback. While this may result in slower correction, it often leads to deeper understanding and stronger interpersonal learning.

Assessment Issues

Assessment in AI-supported environments presents both opportunities and challenges. AI can help generate quizzes and provide preliminary feedback, but it also increases the risk of academic dishonesty if misused.

As a result, educators are shifting toward assessment methods that emphasize process, oral performance, and critical reflection rather than final written output alone.

Traditional assessment methods are easier to control but may limit feedback due to time constraints. A balanced approach involves using AI as a support tool while maintaining teacher authority over grading and evaluation.

Ethical Considerations

Ethical concerns are central to the use of AI in education. Issues such as data privacy, transparency, and bias must be carefully addressed. AI systems may favor standardized forms of English, potentially disadvantaging diverse linguistic backgrounds.

Teacher training is crucial to ensure responsible use. Educators must develop both technical skills and critical judgment to determine when AI is helpful and when human intervention is necessary.

Discussion

The debate between AI and traditional teaching should not be viewed as a competition. Each approach offers distinct advantages: AI provides efficiency and personalization, while human teaching ensures emotional connection and contextual understanding.

The future of English teaching is likely to be hybrid. Teachers will use AI for support tasks while focusing on higher-level instructional roles such as mentoring, evaluation, and relationship-building. Students, in turn, must develop both language skills and AI literacy to use technology effectively.

CONCLUSION

AI enhances English teaching by improving efficiency, adaptability, and access to practice. However, traditional teaching remains essential for fostering communication, empathy, and critical thinking.

The most effective approach is a balanced integration of both methods. Educational institutions should prioritize teacher training, ethical guidelines, and thoughtful implementation to maximize the benefits of AI while preserving the human essence of language learning.

REFERENCES

1. British Council. (2024). Artificial intelligence and English language teaching: Preparing for the future.
2. Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: 3. Affordances and challenges. *British Journal of Educational Technology*.
3. Daud, A., Aulia, A. F., Muryanti, Harfal, Z., Nabilla, O., & Salsabila Ali, H. (2025). Integrating artificial intelligence into English language teaching: A systematic review.
4. Cambridge English. (2023). AI enhances English learning, but will not replace the teacher.
5. PMC article on AI-based chatbots in language education (2024).
6. Sharadgah, T. A., & Sa'di, R. A. (2022). A systematic review of AI in English language teaching.

Chapter 34

Learners' Experiences in Developing Listening Skills Through Blended Learning

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ABSTRACT

The proposed study examines how students of English as a Second Language at the university level can enhance their listening skills using a blended model of learning. In a qualitative research design, the data were collected with the help of semi-structured interviews to observe the richness of the perceptions of the learners, their strategy use, and personal difficulties. The results show that online and face-to-face instruction is flexible and, therefore, the listening anxiety is greatly reduced. Learners noted that they have significantly changed their cognitive actions, shifting from simple decoding to more advanced selective listening strategies. Nevertheless, significant challenges are still related to the technical instability, as connectivity issues and problems accessing the platform remain critical factors affecting the learning process. The findings indicate that blended learning can be effective with the high level of synergy between the digital practice and the desired teacher feedback that contributes to higher student autonomy and motivation. This study underlines the possibilities that exist in blended learning to turn the traditional way of teaching listening into a more personalized, strategic, and effective learning process.

Keywords: Blended Learning; AI Chatbots; Listening Skills; EFL; Learner Perceptions; Listening Anxiety; Autonomy; Motivation

1. INTRODUCTION

Listening is an essential part of language acquisition and the main skill by which students are exposed to language (Sholihah et al., 2018). The acquisition of listening skills is one of the most problematic areas for English as a Foreign Language and English as a Second Language students despite its significance (Emelyanova and Voronina, 2017). The issues that are usually imposed on traditional classroom-based listening training are time, repetition, and lack of practice (Emelyanova and Voronina, 2017; Syamsuddin and Jimi, 2019). In order to overcome these issues, teachers have resorted to blended learning, which combines traditional classroom learning with online learning elements (Aji, 2017; Syamsuddin and Jimi, 2019).

Blended learning has a number of pedagogical benefits, such as enhanced flexibility, cost-saving, and wider opportunities to access various learning resources (Sholihah et al., 2018). It helps to create a more individualized and independent learning process by integrating the benefits of the two environments (Aji, 2017; Sholihah et al., 2018). Regarding listening, online tools enable students to gain the opportunity to learn the material at any time and in any place, which allows them to repeat and learn at their own pace, which is frequently unavailable in a traditional classroom (Dahmash, 2020; Syamsuddin and Jimi, 2019; Tyas et al., 2020). Studies have indicated that this strategy has the potential to increase the motivation of students, decrease anxiety, and enhance listening performance (Sholihah et al., 2018; Yenkimaleki et al., 2021).

Nevertheless, the move towards blended learning is associated with rather complicated changes in the attitude, interests, and the choice of strategies among students (Jiang et al., 2021). Although it is established that blended models are effective in raising test scores, further investigation of the topic about the subjective experience (learners themselves) is still needed (Jiang et al., 2021). It is important to understand the perception of the students towards such activities, which difficulties may arise, such as technical problems or the inability to balance self-regulated activities, and the methods they use to solve them, which are essential to optimize instruction design (Dahmash, 2020; Jiang et al., 2021).

This paper seeks to discuss the experience of the learner in developing listening skills in a blended learning setting. The research aims to give information on how digital materials may be more effectively combined with face-to-face communication to facilitate the development of listening by concentrating on their perceptions and challenges. In particular, this research will examine the attitudes of learners, the level of engagement, and how their approach to listening can be changed during the duration of the blended course.

2. LITERATURE REVIEW

2.1 The Blended Learning in Language Education

According to Aji (2017) and Syamsuddin and Jimi (2019), blended learning, which is also known as hybrid or mixed learning, implies the combination of the elements of traditional face-to-face teaching with online learning. Although it is based on Computer-Assisted Language Learning, BL is now viewed as mostly a dominant way of teaching that integrates the social dynamics of the classroom and adaptability of digital technologies (Sholihah et al., 2018). Researchers differentiate between different levels of BL, such as activity, course, and institutional levels, and distinguish between those blends that enhance (additional materials) and those blends that transform (pedagogical changes between passive receiving and actively constructing knowledge) (Huong, 2018).

2.2 Traditional Listening Instruction Problems

Listening has been mentioned to be a very demanding skill to learn due to the live nature of the process and the language involved. The learners also experience difficulties with pronunciation by native speakers, the pace of everyday speech, and the disconnection between speech and writing (Syamsuddin and Jimi, 2019; Tyas et al., 2020). Also, the conventional classroom-based method of listening training is commonly seen as being repetitive and as lacking the required diversity to keep the student motivation levels at the top (Syamsuddin and Jimi, 2019). Such settings often do not offer enough challenging exercise, which results in a lack of enthusiasm among the learners and negligible improvement in their skills (Syamsuddin and Jimi, 2019).

2.3 Advantages of Blended Learning for Listening

Online activities incorporated in listening programs overcome most shortcomings of the real world. Key benefits include:

Flexibility and Accessibility: Online platforms enable students to study real-life aural texts at any time, regardless of the location, which allows them to learn outside of the classroom (Syamsuddin and Jimi, 2019; Tyas et al., 2020).

Paced Learning: Learning allows the student to listen to recordings repeatedly, enabling them to learn certain words, word fragments, or ideas at their own pace (Dahmash, 2020; Tyas et al., 2020).

Higher Motivation and Independence: BL stimulates independent learning and increases student motivation, offering a wide range of learning materials and a sense of a stress-free atmosphere (Sholihah et al., 2018; Yenkimaleki et al., 2021).

Personalized Feedback: BL models allow educators to utilize online information in order to offer more valuable and specific feedback in a face-to-face session (Dahmash, 2020; Yenkimaleki et al., 2021).

2.4 Experiences and Strategy Use of the learners

Empirical research is always reporting positive perceptions of blended listening activities by learners. As an example, a study conducted in Taiwan showed that 84 per cent of learners said they felt more confident in listening after participating in a blended course (Lai, 2025). Likewise, the Chinese context provided students with more positive attitudes because of the positive environment of communication and the ease of communication (Jiang et al., 2021).

In addition to attitude, there is also a substantial change in the listening strategies with BL. Students tend to progress in the processing of simple words to the next level, which is metacognition and social/affective (Lai, 2025). Other students note that the process of working with online tasks changes their attitude towards memorizing words and revisiting the materials, and it becomes more efficient (Jiang et al., 2021). BL has also been observed to be effective, especially in the development of certain forms of listening in Russia, like selective listening to general or specific information (Sholihah et al., 2018).

2.5 Obstacles and Limitations of Blended Learning

Although it has benefits, a shift to a blended model is challenging. In most cases, technical barriers like the lack of facilities or connection also continue to be significant barriers (Dahmash, 2020; Namjildorj et al., 2023). Also, excessive use of technology may cause boredom among students or make them feel isolated unless it is regulated properly with human contact (Johnson & Marsh, 2014). To the instructors, online platforms may introduce a heavier workload due to their maintenance needs and frequent changes, which may require a strong institutional support (Response.Pdf, n.d.).

3. THEORETICAL FRAMEWORKS

Effective blended listening environments are usually based on constructivism, namely cognitive and socio-cultural constructivism, which regards learning as an active process of creating understanding with the help of reflection and interaction (Huong, 2018; Jiang et al., 2021). Moreover, the Technology Acceptance Model is often employed to decipher the effect of the perceptions of the learners regarding the following constructs on their intention to use the digital listening tools: those of perceived ease of use and the perceptions of usefulness (Sharif et al., 2022).

4. RESEARCH OBJECTIVES

1. To identify the perception and attitudes of students concerning the flexibility and advantages of listening practice with the help of a blended learning model.
2. To determine the particular technical and pedagogical issues that learners have to overcome when they switch between online and face-to-face settings.
3. To investigate the impact of the integration of digital technologies and classroom teaching on the listening strategies of students and their willingness to learn.

5. RESEARCH QUESTIONS

1. What is the experience and perception of University-level EFL learners in the process of developing their listening skills in the blended learning course?
2. What are the major advantages and psychological consequences of a blended model, including the variation in anxiety levels, that students attribute to the flexibility of a blended model?
3. What are the technical and pedagogic difficulties that learners encounter in moving between online activities and face-to-face learning?
4. How does the use of digital tools in combination with classroom lessons affect the listening strategies of the students and their motivation overall?

6. METHODOLOGY

In the current work, a qualitative method based on semi-structured interviews as the key data collection technique was used.

6.1 Participants

The sample of 20 students is composed of students with a background in English as a Foreign Language at the university level and students who are currently in the MIT ADT University in Pune, India. 20 students were selected using purposive sampling.

6.2 Research Instrument: Semi-Structured Interview

The interview protocol includes open-ended questions to create a comfortable discussion environment. (Jiang et al., 2021). Key areas of inquiry include:

6.3 Data Analysis and Collection

The thematic analysis was employed to analyze the data. The researcher adheres to the stages of data condensation, data display (organizing into themes), and conclusion. This procedure makes sure that the findings reflect the voices of the learners.

7. RESULTS

The semi-structured interviews were analyzed, and a number of themes on the experience of the learners in the blended learning environment were identified. Such themes show that the incorporation of digital tools and face-to-face learning transformed their learning process, strategy implementation, and general interaction. The following responses illustrate these experiences:

- Interviewee 1: “I seriously enjoyed the fact that the audio was available at any time. In the regular classroom, the teacher reads it on the first attempt, and it is lost. I was more relaxed in the online part. It was a stress-free experience since no one was staring at me as I fought with the words”.
- Similarly, Interviewee 4 stated: “The possibility to listen to the recordings as many times as I am required to do so served me well. I was able to learn at a pace that suited me. It helped me feel that learning the skill of listening is not as difficult as it seems to be”.
- However, some challenges were also reported. For instance, Interviewee 7 noted: “The interrelationship was the greatest issue. On one occasion, I was unable to participate in the session as the page was taking an infinite amount of time to load. This was annoying as I didn’t want to complete my practice then and then start the face-to-face class”.
- In addition, Interviewee 8 mentioned: “It was challenging to log in sometimes, Interviewee 3. In case of any technical problem, I experienced some sort of isolation since the teacher was not standing next to me to resolve the problem instantly”.
- Furthermore, learners also reported changes in their listening strategies. Interviewee 5 explained: “Before this course, I was merely listening to it as a whole and hoping that I got it. I now apply the online tools in order to target certain vocabulary or word blocks. My memorizing technique for new words has transformed.
- Likewise, Interviewee 9 stated: “I began to employ more selective listening. The first time, I would listen to the general idea, then I would use the repeat button to locate specific information, such as dates or names. The tasks were mixed, and thus I found it easier to review”.

- Moreover, the role of social interaction was highlighted. Interviewee 2 shared: “The online discussion was an amiable society. My friends helped me easily whenever I failed to understand some phrases. This ease in contacting enabled me to have a greater interest in the course.
- Finally, Interviewee 6 added: “The instructor took more initiative to provide feedback in the classroom lessons since it is easy to know what we were not covering in online classes. It made face-to-face more helpful.

Based on the responses above, the following themes that emerged were:

Theme 1: Felt Flexibility and lesser Anxiety

One of the most striking conclusions was that the blended model offered the feeling of freedom and eased the pressure of real-time listening. It was often reported by participants that the capability of accessing materials at any time and place was one of the main advantages.

Independent Learning: students appreciated online platforms with the repeat and pause functions, which enabled them to concentrate on particular vocabulary or chunks of words that they could not hear during the initial listening.

Feeling of Anxiety: A number of students reported that the online setting was anxiety-free (Yenkimaleki et al., 2021). One of them also mentioned that it helped to practice in private and feel less embarrassed when they made mistakes, as they did not think that their peers or the instructor could evaluate them (Dahmash, 2020; Yenkimaleki et al., 2021).

Theme 2: Technical Problems and Obstacles

Although it was believed to have advantages, technical challenges made a big portion of the experiences of the learners (Dahmash, 2020). Those problems tended to impede the perceived ease of use of the blended system (Sharif et al., 2022).

Connection Problems: This was the most frequent grievance that can be summarized by the following statement, I could not access the session (Dahmash, 2020). Connection instability and login issues were cited as critical frustration causes, particularly when they happened just before the face-to-face meetings (Dahmash, 2020; Namjildorj et al., 2023).

Isolation and Workload: Isolation was experienced when some students had technical issues that the teacher was unable to assist with on a real-time basis (Johnson & Marsh, 2014). Also, the transition to self-controlled online work was seen by some as a rise in their total tasks (Namjildorj et al., 2023).

Theme 3: Change in Listening Strategies

The interview data showed that the methods which the students employed to process the aural input have considerably changed (Jiang et al., 2021). The hybrid model promoted the transition of the simplistic decoding to the advanced cognitive and metacognitive approaches (Lai, 2025).

Selective Listening: The participants said that they were better at using the tools online to engage in selective listening, or paying attention to general ideas or certain information (dates and names, etc.), better than they could have done in a physical classroom (Sholihah et al., 2018).

Vocabulary Management: The learners stated that the online activities changed their attitude to memorizing and revising vocabulary, which is now more productive (Jiang et al., 2021). One of the students said that they would put the transcripts given in the online modules in order to cross-check their comprehension after the initial listening (Jiang et al., 2021).

Theme 4: Motivation and Social Support

The online and in-person social part of the blended model was also essential in ensuring the motivation of students (Jiang et al., 2021; Sholihah et al., 2018).

Community of Discussion: The chat tools and the online forums formed what the participants termed a friendly community of discussion (Jiang et al., 2021). This communication convenience gave students the opportunity to find peer support on challenging phrases or concepts (Jiang et al., 2021).

Combining with Face-to-Face Instruction: The respondents reported that the sessions in the classroom became more valuable as the teacher had the opportunity to deliver specific feedback depending on their performance on the Internet (Dahmash, 2020; Yenkimaleki et al., 2021). The combination of the two settings enabled the learning process to become more humanised and supportive (Sharif et al., 2022).

Overall, although technical barriers were still present, a mixed listening environment was viewed as a positive paradigm that enhanced student autonomy, minimized learning anxiety, and enhanced more effective listening/listening strategies (Jiang et al., 2021; Sholihah et al., 2018; Yenkimaleki et al., 2021).

8. DISCUSSION

The results of the current research are able to give the overall picture of the way in which blended learning redesigns the experience of listening among EFL students. In combining the findings with the current literature, it becomes possible

to draw some important conclusions about the point of interaction between technology and language acquisition.

8.1 The Contribution of Flexibility and Decreased Anxiety

The findings affirm that the adaptability of the blended model is one of the major sources of student satisfaction. The skill of repeating and interrupting the audio pieces enabled the student to practice at his/her own pace, which, as indicated in the interviews, is indicative of the fact that BL enables students to practice individually (Syamsuddin and Jimi, 2019; Tyas et al., 2020). This self-paced development directly responds to the issue of the real-time nature of the listening process that tends to disorient students in the classroom environment (Syamsuddin and Jimi, 2019).

What is more, it is noteworthy that the participants report an anxiety-free environment (Yenkimaleki et al., 2021). The cognitive overload and the resulting listening anxiety in traditional classes are usually caused by the pressure to perform in front of peers (Syamsuddin and Jimi, 2019). The ability to practice privately on the internet allowed students to work on the words and vocabulary without the immediate pressure to understand, which was additionally not accompanied by social pressure (Dahmash, 2020; Tyas et al., 2020). The constructivist framework adopted in this research is based on the support of learner autonomy (Huong, 2018).

8.2 International Technical Divide

The benefits can be outlined, but the theme of the inability to participate in the session is being repeated, which demonstrates that it is one of the barriers (Dahmash, 2020). Technical instability and troubles in logging in were not just inconveniences but had a direct effect on the perceived ease of use, which is the key to technology acceptance (Sharif et al., 2022). Such results are consistent with Namjildorj et al., who discovered that a lack of facilities and connection problems are typical institutional barriers (Namjildorj et al., 2023). To make BL effective, the humanising component, which is to ensure that the students do not feel isolated when some technical mistakes are found, should be given preference (Johnson and Marsh, 2014; Sharif et al., 2022).

8.3 History of Listening Strategies

The transformation of the listening strategies of the learners is a major finding in this study. The participants also changed their simple decoding to a more complicated selective listening to general or specific information (Sholihah et al.,

2018). This development aligns with the study of Jiang et al., who concluded that online assignments promote a change in how students review materials and memorize vocabulary (Jiang et al., 2021). Online repetitive listening with the use of transcripts appears to offer the needed scaffold that will allow the students to eventually be able to work with more authentic and demanding aural texts (Jiang et al., 2021; Sholihah et al., 2018).

8.4 Social Presence and Motivation

The interviews emphasized the significance of the community of friendship of discussing online forums (Jiang et al., 2021). This interaction among the social, coupled with the specific feedback given throughout the face-to-face lessons, formed a synergy that increased overall interest in students (Jiang et al., 2021; Yenkimaleki et al., 2021). It implies that the blended aspect of the model is not only regarding the technology itself, but the way the technology can support communication (Jiang et al., 2021). The learning process would be more accommodating and encouraging to the student when the face-to-face time could be used to address the particular difficulties revealed during the online practice (Dahmash, 2020).

Finally, the discussion suggests that technical obstacles are still an issue, but the blended model effectively overcomes the shortcomings of the traditional method of teaching listening by making the learning environment more flexible, less stressful, and strategy-rich (Jiang et al., 2021; Sholihah et al., 2018; Yenkimaleki et al., 2021).

9. CONCLUSION

The study discussed the experiences of ESL learners at the university level in a blended learning setting, showing that the combination of digital means with a face-to-face approach to learning provides a more dynamic and efficient learning process. The results demonstrate that the blended model can effectively overcome the fundamental shortcomings of the traditional instruction based on classroom instruction only because it offers an adaptable and low-stress environment of learning to students to nurture their abilities.

Autonomy and Flexibility: The student should be able to manage the learning process by means of such options as pausing and replaying sound, which is a core part of their development. This self-motivated method greatly minimizes the listening anxiety that is normally experienced during the real-time classroom learning environment and also creates more confidence in the learner.

Strategic Expansion: Blended learning makes a difference in the way students receive information. Students no longer dedicate their attention to the simplest word-level decoding, but to more complex cognitive processes, including selective listening and a more effective use of vocabulary.

Social and Pedagogical Synergy: The effectiveness of the model is dependent on the relationship between online and in-person elements. Although online platforms are necessary in terms of practice, the social support established in the online communities, as well as the specific feedback provided by the instructors during the face-to-face sessions, are what help to sustain the motivation levels at a very high rate.

Technical Resilience: Although the educational aspect of a web-based course has obvious advantages, technical issues, including poor internet connectivity and problems with logins, are the greatest obstacle. Without these matters being addressed well by the institution, these problems can result in frustration and isolation.

Finally, even though the technical challenges should be addressed, the blended learning model enables students to be more independent, tactically conscious, and confident in their listening skills, giving a powerful model of the instruction of English as a Foreign Language nowadays.

REFERENCES

1. Aji, M. P. P. (2017). English listening blended learning: The implementation of blended learning in teaching listening to university students. *Kajian Linguistik Dan Sastra*, 2(1), 25. <https://doi.org/10.23917/kls.v2i1.5349>
2. Dahmash, N. B. (2020). 'I couldn't join the session': Benefits and challenges of blended learning amid COVID-19 from EFL students. *International Journal of English Linguistics*, 10(5), 221. <https://doi.org/10.5539/ijel.v10n5p221>
3. Emelyanova, N., & Voronina, E. (2017). Introducing blended learning in the English language classroom: Students' attitudes and perceptions before and after the course. *Knowledge Management & E-Learning: An International Journal*, 9(3), 33. <https://doi.org/10.34105/j.kmel.2017.09.003>
4. Hýõng, P. T. T. (2018). Applying blended learning method in teaching English at the University of Da Nang, Viet Nam. *The Educational Review, USA*, 3(1). <https://doi.org/10.26855/er.2019.01.002>
5. Jiang, Y., Chen, Y., Lu, J., & Wang, Y. (2021). The effect of the online and offline blended teaching mode on English as a foreign language learners' listening performance in a Chinese context. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.742742>
6. Johnson, C. H., & Marsh, D. (2014). Blended language learning: An effective solution but not without its challenges. *Higher Learning Research Communications*, 4(3), 23. <https://doi.org/10.18870/hlrc.v4i3.213>
7. Lai, Z. C.-C. (2025). Blended EFL listening. *International Journal of Adult Education and Technology*, 16(1), 1. <https://doi.org/10.4018/ijaet.368247>

8. Muhtia, A., Suparno, S., & Sumardi, S. (2018). Blended learning in a paragraph writing course: A case study. *International Journal of Language Teaching and Education*, 2(3), 216. <https://doi.org/10.22437/ijolte.v2i3.5744>
9. Namjildorj, O., Buyandelger, M., & Tserendorj, A. (2023). Students' perceptions of a blended course and its effectiveness at a Mongolian university. *ELT Worldwide: Journal of English Language Teaching*, 10(1), 90. <https://doi.org/10.26858/eltww.v10i1.44506>
10. Sharif, T. I. S. T., Noor, M. Y. M., Omar, S. R., & Seong, T. K. (2022). Humanising mobile online ESL blended learning model. *Journal of Nusantara Studies (JONUS)*, 7(2), 473. <https://doi.org/10.24200/jonus.vol7iss2pp473-494>
11. Sholihah, F. A., Permadi, M. B., & Umamah, A. (2018). Blended learning and extensive listening: A promising collaboration to enhance listening skill. *ELT Echo: The Journal of English Language Teaching in Foreign Language Context*, 3(2), 89. <https://doi.org/10.24235/eltecho.v3i2.3323>
12. Syamsuddin, S., & Jimi, A. A. (2019). The use of blended learning method in enhancing students' listening skill. *Eternal (English Teaching Learning and Research Journal)*, 5(1), 1. <https://doi.org/10.24252/eternal.v5i1.2019.a1>
13. Tyas, A. S. P., Mu'am, A., Sari, Y. I. H., & Dewantara, C. (2020). The effectiveness of blended learning in improving students' workplace communication skills: A case study on Olive website test result. *Lingua Cultura*, 14(1), 1. <https://doi.org/10.21512/lc.v14i1.6130>
14. Yenkimaleki, M., van Heuven, V. J., & Moradimokhles, H. (2021). The effect of prosody instruction in developing listening comprehension skills by interpreter trainees: Does methodology matter? *Computer Assisted Language Learning*, 36, 968. <https://doi.org/10.1080/09588221.2021.1957942>

Chapter 35

Artificial Intelligence in English Teaching: Enhancing Personalization and Inclusion for Neurodiverse Learners

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ABSTRACT

The way English is taught today has undergone a significant change over the past decade. One of the prime reasons for this transition is the rapid increase in the use of Artificial Intelligence (AI) in education. In many well-equipped classrooms, teachers are now using AI tools to better understand how students learn and where they face difficulties. Because of this, teaching has become more focused on individual learners instead of following the same method for everyone. For example, some students may be adept at reading but struggle with speaking, while others may find writing more difficult. AI can help teachers identify these differences and respond to them more effectively.

This paper focuses on how AI can be used to adjust learning materials based on students' needs which include their learning styles, strengths, weaknesses, and level of proficiency. It also looks at how AI can help in designing more flexible syllabus that can evolve. It can change as students improve and as the demands of education and the workplace continue to evolve. Another important benefit of AI is that it can generate quick feedback. This helps students spot their mistakes and improve gradually. In addition, AI can be especially useful for neurodiverse learners, such as those with autism, dyslexia, ADHD, and similar conditions. In this way, AI can help create a conducive learning environment that is more inclusive and supportive for different types of learners.

Keywords: AI in English language pedagogy, personalized learning in ELL, neurodiverse English learners, AI tutoring systems, adaptive curriculum design, educational technology, inclusive AI ELL design

INTRODUCTION

I have been teaching English at an engineering college in Hyderabad since 2011. In the last 15 years in each classroom, I came across a mix of students from diverse linguistic, educational, and socio-economic backgrounds. Some students could comfortably read technical texts with ease but hesitated when asked to make a presentation. Others were confident communicators but struggled to structure their thoughts in writing clarity, correctness and coherence. Designing a lesson that worked for everyone often felt like trying to fit diverse learners into a single mould.

Over the years, I modified my methods, experimented with materials, and tried to bridge these gaps. However, the limitations of a ‘one-size-fits-all approach’ were always evident. In the present times, the landscape of English language teaching has undergone a quiet yet powerful transformation with the integration of Artificial Intelligence. A true educator should not be baffled by the thought that futuristic robots would replace teachers. The discussion here is about intelligent tools that adapt to individual learner needs, provide immediate feedback, and allow students to progress at their own pace. It is indeed the learner-centre approach. The shift from uniform instruction to personalized learning is profound. It is something I have witnessed in my own classrooms, as well as through on-going interactions with fellow educators.

The use of AI in English language teaching has grown rapidly in recent years. Teachers are benefitted by sophisticated systems that respond to how each student thinks, handles struggles, and succeeds. Tools like ChatGPT, Duolingo, Grammarly, and even speech apps like ELSA Speak are already part of everyday learning for millions. These are not replacements for teachers. They are smart assistants that fill those gaps; managing the challenges alone in large groups, is indeed burdensome. Moreover, Students are immensely benefitted by them in the absence of a teacher too.

One big difference I notice is real-time response. In a traditional classroom, especially with 50-plus students, it is tough to give immediate, tailored help to everyone. As a teacher you might identify a confused face during speaking practice in a class, but it is not always possible to cater to the specific need of a particular student for several constraints. In addition, shy students remain in their shells. AI platforms do this effortlessly. Duolingo, for example, watches how a learner performs and quietly ramps up or dials down the difficulty. Get a few questions

right on verb tenses? It introduces more challenging sentences next. ChatGPT lets students practise conversations or writing anytime, asking follow-up questions like a patient tutor. Grammarly highlights mistakes as you type and explains why, without making you feel judged. It turns a learner's frustration into steady progress.

English language acquisition is multifaceted, as it involves four core skills viz. listening, speaking, reading, and writing. All these four skills rarely develop at the same speed. One student might devour books but stumble over pronunciation. Another writes beautiful essays but panics in discussions. AI shines here by offering focused practice exactly where it is needed. Pronunciation tools like ELSA Speak listen to your voice, show where your pronunciation needs improvement, and suggest corrections. Reading apps such as Natural Reader, Speechify or MagicSchool.ai adjust text complexity or read aloud with text-to-speech for those who process better by listening. Writing gets instant grammar and style checks. Listening exercises slow down or repeat tricky bits automatically. It is like having a personal coach for each skill.

Beyond helping students, AI is reshaping how we design courses. Teachers use Google Classroom or Microsoft Copilot to brainstorm activities, create customized worksheets, or even generate quizzes that match the specific need of a learner. Instead of spending hours hunting for materials, a teacher can now tweak AI-generated ideas to fit the students' interests. This flexibility matters more than ever. English is not just for exams anymore; it is for real-world jobs, travel, social media, and global connections. A true educator is always concerned with the course relevance and AI proves to be the true facilitator.

During the COVID years, there was a paradigm shift and we had no option but to befriend digital tools. By 2023–2024, generative AI tools gained popularity and today they have become part of mainstream education. However, concerns such as over-dependence and data privacy remain. Despite these challenges, AI offers significant potential to make learning more inclusive and effective. This paper examines how AI supports personalization, curriculum design, and neurodiverse learners in English language teaching.

METHODOLOGY

This study began with questions that kept coming up in my own classroom rather than from a formal research plan. As someone teaching English in an engineering college, I kept noticing small but important shifts in how students were learning, especially after AI tools started becoming easily available.

To get a clearer picture, I looked at studies published between 2021 and 2025, a period that felt significant because it includes the surge in AI use after tools like

ChatGPT became widely accessible in late 2022. I went through databases such as Google Scholar, ERIC, Scopus, and Web of Science, using simple and relevant search terms related to AI in English language teaching. I also paid attention to classroom-based studies and reports that reflected actual teaching contexts.

I kept my selection fairly strict. I focused on peer-reviewed journal articles, review papers, and classroom studies that offered some form of evidence. Informal blogs and opinion pieces were not included, mainly to keep the study reliable. In the end, I worked with around forty sources. These included a mix of experimental studies, surveys of teachers, and qualitative work based on interviews and classroom observations.

While reading, I was not just looking for results but for patterns—what seemed to work, what did not, and where teachers were struggling. At the same time, I tried out a few tools myself, including platforms like Duolingo, and discussed their use with colleagues. That helped me relate the research to the everyday reality of teaching, where time, student diversity, and practical constraints matter as much as theory.

Three questions guided this study, all of which came directly from my teaching experience: how AI tools can actually support different kinds of learners, whether they are worth integrating into regular curriculum planning, and how far they can help students who do not fit into the typical learning pattern.

This is not an experimental study. I have not tested a new model or collected fresh data. Instead, I have brought together existing research and looked at it from the perspective of a practising teacher. The aim is simple and it is to make sense of what is already out there and see how it can be used meaningfully in real classrooms.

LITERATURE REVIEW

The idea of using technology in language teaching is not new. Computer-assisted language learning (CALL) has existed for decades. However, Artificial Intelligence introduces a more dynamic dimension, as systems can learn from user input and adapt in real time. Early research was cautious but optimistic about the pedagogical potential of AI in language learning (Luckin et al., 2016; Holmes et al., 2019). By 2025, the evidence base had become more substantial.

Research in recent years indicates that AI tools are playing a significant role in improving measurable language learning outcomes. For instance, Gavin Dizon (2023) highlights how AI-driven tools enhance learner autonomy and engagement in second language acquisition. Similarly, Wenhao Yang et al. (2022) demonstrate

that AI-supported learning environments significantly improve writing quality and vocabulary acquisition among EFL learners.

Studies consistently show that AI contributes to the development of the four core language skills viz. listening, speaking, reading, and writing. In vocabulary learning, adaptive systems use spaced repetition and contextual exposure, which align with theories of memory and retention (Nation, 2013). Research by Godwin-Jones (2018) suggests that intelligent tutoring systems increase both frequency and quality of language practice.

Writing skills have shown notable improvement through AI-assisted tools. Automated writing evaluation systems help learners identify grammatical errors and improve coherence (Stevenson & Phakiti, 2019). Generative AI tools support iterative writing practice and immediate feedback (Ranalli, 2018).

Speaking and listening skills benefit from advances in speech recognition technology. Pronunciation tools improve phonological accuracy (Liakin et al., 2017), while adjustable input improves listening comprehension (Field, 2008).

Reading and listening tools incorporating text-to-speech features support learners who require alternative modes of input. Multimodal learning environments improve comprehension and reduce cognitive load (Mayer, 2009).

Despite these advantages, challenges remain. Data privacy is a concern due to extensive learner data collection (Zawacki-Richter et al., 2019). Algorithmic bias and over-reliance may affect learning quality. Access and teacher preparedness influence effective implementation (Holmes et al., 2019).

Overall, AI positively impacts personalization, engagement, and inclusion when used thoughtfully alongside human touch.

DISCUSSION

1. Personalization of Learning through AI

Personalization is where AI truly shines. Traditional teaching often means the same lesson for everyone, but learners are wonderfully different. AI tools notice those differences and respond. Take Duolingo. Its algorithm tracks mistakes and strengths, then serves the next exercise at just the right challenge level. A student weak on conditionals gets extra practice until they improve. Research backs this up: adaptive systems like this improve retention and keep dropout rates lower because the app feels like it “gets” you.

ChatGPT personalizes in a conversational way. A shy student can practise job interviews endlessly without embarrassment. They type a response, and ChatGPT

replies naturally, then gives feedback: “Your answer was clear, but try adding a specific example next time.” I tried this with a group last year. One quiet girl, suffering from self-doubt went from one-word answers to full paragraphs in a few weeks. She told me, “It doesn’t judge me.” That emotional safety matters.

Grammarly and similar writing tools offer another layer. They do not just correct—they teach. A suggestion pops up with an explanation: “Consider ‘however’ here for contrast.” Students learn while fixing. Pronunciation apps record your voice and show waveforms or scores. Immediate, private feedback beats waiting for the teacher’s turn.

Gamification adds fun and motivation. Streaks, points, leaderboards—these keep learners coming back. But it is not all positive. Privacy concerns linger. What happens to all that voice data or writing history? Bias can creep in if the AI favours certain accents or writing styles. Some students get hooked on the rewards and forget about a deeper understanding. However, when educators guide students about the benefits of being engaged with these AI tools critically, their benefits far exceed their drawbacks. In my experience, personalized AI turns passive learners into active ones who own their progress.

2. AI in Curriculum Development

Curriculum design is another area where AI integration generates magical outcome. Teachers using AI save hours on lesson planning. Tools like MagicSchool.ai, Eduaide.ai or Flintk12.ai will not only design lesson plans for an entire week but also minimizes time for preparing well-crafted lesson plans or worksheets. Microsoft Copilot or ChatGPT are valuable tools to generate role-play scenarios or read passages at specific CEFR levels. It is worthy to be mentioned here that CEFR is an internationally recognized standard to describe language proficiency of a learner. These tools decode the given prompts and create contextually relevant content. These contents make sure that the linguistic load is apt for the student’s current level of proficiency.

Let us understand this with an example. In the English language lab, assume a role play activity is planned for the beginners and the given situation is “enquiring the postal charges to send a gift to your friend staying abroad”. ChatGPT is asked to create multiple dialogues using familiar words and lucid sentence structures. The same situation may be reinterpreted at advanced levels through more refined and nuanced language, enriched with idioms and culturally relevant expressions. This flexibility allows teachers to maintain the same thematic content as they tailor the linguistic complexity as per the learner’s proficiency level. Research from 2025 highlights how this flexibility helps teachers to generate materials, lesson plans,

worksheets etc. that are aligned with students' requirements. /in this way a teacher can avoid sticking to a rigid textbook or a fixed lesson plan.

AI can also spot certain patterns and suggest solutions. In a class, if the majority of the students struggles with a specific grammar exercise, for example, voice change, the system can propose some additional activities to attain accuracy. This data-driven approach keeps curricula alive instead of making it monotonous and static. With integration of Google Classroom, students can easily access materials if they are absent or intend to revisit them. It is true that AI is unparalleled at structure and speed, but human teachers bring cultural nuance, empathy, and critical thinking. AI handles the herculean task; teachers add the soul. Studies show this combination reduces teacher workload while improving student outcomes.

3. AI and Neurodiverse Learners

A language teacher is in charge of heterogeneous classrooms. However, the amount of challenge is elevated when the learners are from the disadvantageous group. These are the students with special needs. In conventional English language classrooms, learners with diverse cognitive needs often face challenges. It is because of uniform teaching methods. Students with an array of conditions such as attention-deficit/hyperactivity disorder, dyslexia and autism spectrum disorder struggle with tasks like reading aloud, drills, and learning environments that are unstructured. These barriers emphasize the fact that there is a deep requirement of more adaptive and inclusive pedagogical approaches.

Neurodiverse learners stand to gain enormously. Traditional classrooms can feel overwhelming for students with dyslexia, ADHD, autism, or other differences. Learners with special needs often face difficulties to learn and express themselves within the conventional educational settings. To deal with the issues often various approaches are employed by the language teachers. They can range from low-tech assistive technology such as simple visual cues or tactile inputs to mid-tech tools such as digital recorders, switch-adapted toys, talking calculators etc. Now in the present times AI has proven to be a boon to those children with special needs. They offer custom solutions. Text-to-speech and simplified summaries help dyslexic readers. Structured, predictable interfaces suit autistic learners who thrive on routine. Gamified short tasks with rewards keep ADHD students focused. A 2026 study on AI-supported language learning for neurodiverse students in low-resource settings exhibited significant gains especially in vocabulary acquisition, reading, and oral fluency. It was made possible when tools such as Duolingo, ChatGPT, and Speechify adapted pacing and used multimodal input. Students experience being empowered. There is a sense of satisfaction as their needs are taken care of.

For learners with dyslexia, tools like Voice Dream Reader make reading easier as it turns text into audio. It also allows changes in font size, spacing, colour contrast, and reading speed. This improves comfort and understanding.

Students with ADHD often have difficulty in focusing; they feel restless and are poor in organisation. Apps like Habitica encourages students through game-like rewards, while Forest helps them to remain focused by showing a visual timer. One 2025 study found large improvements in reading comprehension for dyslexic EFL students using these features. They experienced less anxiety and were more in control.

For individuals on the autism spectrum, apps like Proloquo2Go and Avaz which are basically high-tech Augmentative and Alternative Communication (AAC) apps. Proloquo2Go uses a core-word system with a consistent layout that paves language development and motor planning. It provides flexible grid sizes, step-by-step vocabulary expansion, natural-sounding voices, and good accessibility features. The Avaz app focuses on easy, fast communication with a step-up vocabulary system, allows quick customization, and a smooth shift from picture-based communication to text. It also includes caregiver training and tools for emotional expression and self-regulation.

Both apps encourage learners to move from single-word requests (“candy”) to complex, multi-word sentences such as “Give me candies, please”. The apps include words, phrases greetings, and options to express opinions, desires. These apps, by converting symbols or text into speech support learners to be more confident as they express themselves.

Nevertheless, challenges persist. Not every tool is designed with neurodiversity in mind. Some interfaces are cluttered. Training of teachers is essential. Many lack clarity about the features. Over-reliance might limit real-world social practice, but the evidence is clear. When AI is used as a bridge to fill the gap it paves the way to inclusive classrooms.

CONCLUSION

Artificial Intelligence has quietly become one of the most powerful tools in the hands of the English language teachers. It personalizes learning and thus every student, whether fast or slow, confident or hesitant, feels supported and valued. It helps busy teachers design fresher, more responsive curricula without burning out. At the same time it offers real hope for neurodiverse learners who often feel overlooked or overwhelmed in traditional classrooms.

Looking back at the studies from 2021 to 2025, the pattern is clear. Tools like Duolingo adapt difficulty in ways that keep motivation high. ChatGPT and

Grammarly give instant, patient feedback that builds writing confidence. Speech and reading apps fill gaps in speaking and listening that no single teacher could cover in a crowded class. For neurodiverse students, features like text-to-speech, adjustable pacing, and short gamified tasks fetch very satisfactory results. They may turn potential frustration into steady progress. Positive outcomes can be witnessed in vocabulary acquisition, reading comprehension, fluency is speaking, and engagement levels.

At the same time, we cannot ignore the potential risks. Data privacy is indeed a matter of concern and not every institute has good internet or enough devices. Many teachers in the absence of proper training still worry about integrating AI without losing the human element. Over-dependence poses real threat. If students start relying heavily on tools, they might miss the cognitive engagement and would lose the richness of social language learning. Thus, the AI integration in English teaching-learning demands a balanced approach, intertwining both digital assistance and human judgement.

REFERENCES

1. Dizon, G. (2023). The use of AI in second language learning. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2023.2166717>
2. Field, J. (2008). *Listening in the language classroom*. Cambridge University Press.
3. Godwin-Jones, R. (2018). Using mobile technology. *Language Learning & Technology*, 22(3), 1–17.
4. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education*. Center for Curriculum Redesign.
5. Liakin, D., Cardoso, W., & Liakina, N. (2017). Mobile-assisted pronunciation training. *CALICO Journal*, 34(3). <https://doi.org/10.1558/cj.30656>
6. Luckin, R., et al. (2016). *Intelligence unleashed*. Pearson.
7. Mayer, R. E. (2009). *Multimedia learning*. Cambridge University Press.
8. Nation, I. S. P. (2013). *Learning vocabulary in another language*. Cambridge University Press.
9. Ranalli, J. (2018). Automated writing evaluation. *Language Teaching Research*.
10. Stevenson, M., & Phakiti, A. (2019). Automated feedback in writing. *Assessing Writing*. <https://doi.org/10.1016/j.asw.2019.03.001>
11. Yang, W., Dai, Y., & Gao, L. (2022). AI-assisted language learning. *Educational Technology & Society*.
12. Zawacki-Richter, O., et al. (2019). AI in higher education. *International Journal of Educational Technology*. <https://doi.org/10.1186/s41239-019-0171-0>

Chapter 36

Exploring the Changing Role of English Language Teachers in The Age of AI

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ABSTRACT

The use of Artificial Intelligence (AI) in learning and teaching English is increasing rapidly day by day and AI has influenced all domains of language education particularly English language learning and teaching. This qualitative paper explores the changing role of English language teachers in the age of Artificial Intelligence. Since this study focused on undergraduate students' perception of English language teachers role, interpretative qualitative approach was used. The participants were ten undergraduate Engineering students from a higher education institution, Tamil Nadu. The data was collected using an open-ended questionnaire and the data was analyzed and interpreted thematically. The result shows that the traditional role of the teachers has been changed due to the emergence of AI. The paper argues that this shift in teachers' role is in positive direction as it provides wide range of opportunities for teachers to develop their profession.

Keywords: Artificial Intelligence teachers role English language teaching

INTRODUCTION

English language teachers' role has been transformed drastically with the advent of technology and Artificial Intelligence (AI). Traditionally, teachers used to be the primary source of knowledge, provider of knowledge and information and responsible for imparting knowledge; they used to ensure whether the students acquired linguistic competence or not. However, in today's digital age, information is available at their fingertips. AI generated tools can reshape and modify English

language learning process since they can help learners in all aspects of second language learning and academic work like writing essays, correcting grammar, simulating conversations. The use of AI in learning and teaching English is increasing steadily day by day as the most of the students are using AI tools and applications to get the solutions to their problems and remove their doubts, enable them to check their writing, generate ideas for their communication, review, edit and polish their written work. They no longer depend on teachers for feedback and information. As a result, the traditional role of English teachers is no longer valid as it has gone beyond transmitting knowledge into facilitating meaningful and critical learning experiences. Since the entire teaching learning process is changing rapidly, it is necessary that the teachers need to change themselves accordingly.

TRADITIONAL ROLE OF ENGLISH TEACHERS

Traditionally, teaching and learning English language occurred in person within the four walls of a classroom where the interaction is basically either one way or two way communications between teachers and students. In other words, the interaction is face to face and **synchronous**. Moreover, English language teachers were sole authority of resources and knowledge, who controlled the delivery and flow of information. They explained everything related to language learning like grammar rules, vocabulary, structures and meaning and helped them to acquire language skills. The teachers corrected the students' mistakes, cleared their doubts, wrote question papers and evaluated the students' performance. In addition, the teachers prepared lessons, design tasks and activities and created contexts for learning. Above all, the teachers were the decision makers in English language classrooms; they initiated leaning process, engaged students in learning and involved them in the process. Breen and Candlin (1980) pointed out that English language education were teacher centered in which the focus was on teacher and educators controlled and managed the delivery of information, designed and created curricula and evaluated learning outcomes. In short, English language teachers played the central role in the classroom as resource person, knowledge provider, controller of linguistic resources, and mediator of cultural exchange, classroom decision maker and evaluator of student performance.

THE IMPACT OF AI ON ENGLISH LANGUAGE LEARNING AND TEACHER

Artificial Intelligence is the "Computer systems that have been designed to interact with the world through capabilities (for example, visual perception and

speech recognition) and intelligent behaviours (for example, assessing the available information and then taking the most sensible action to achieve a stated goal) that we would think of as essentially human” (Luckin et al., 2016, p. 14). AI imitates human intelligence to perform human activities like learning, problem solving, and decision making (Mohammed Ahmed Mudawy, 2024). “Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual processes of characteristic of humans such as the ability to reason” (Britannica, n. d.). In an Integrated English language classroom, AI plays significant role varying from giving examples to analyzing interpreting the complex literary texts. AI provides learners with personalized solutions and learning experiences and enables students to access resources and materials independently without the help of teachers. For example, AI tutoring platforms, automated writing evaluators, and adaptive vocabulary trainers facilitate personalized learning, language assessment, and formative feedback (Meylani 2024). The emergence of AI has revolutionized the way students engage with English language and transformed teachers role in the process of learning English language. AI replicates human intelligent work accurately and produces better results. AI tools such as ChatGPT, chatbots, Grammarly, and translation software enable learners to independently generate ideas and information and refine them. With the help of AI students get instant feedback. For example, whenever a student commits an error, has a doubt about an item or get stuck while writing, AI can provide the correct answer, solution and suggestions. The students practice speaking with virtual assistants, and explore a wide range of linguistic resources without direct teacher intervention, which has reduced teacher dependence significantly. For the better practice, Aco et. al., (2025) proposes a balanced and ethically sound AI integrated approach in EFL learning and teaching.

Background of the Study

Yu and Rao (2023) point out that “generative AI tools like ChatGPT have fundamentally altered knowledge production and dissemination, rendering teachers no longer the sole or primary source of foreign language knowledge.” AI has decreased the teacher’s monopoly of knowledge and challenged teachers’ traditional role in the classroom. “AI acts as both a disruptor of conventional teaching authority and a catalyst for innovation” (Yue, 2025, p.45) as it alters the traditional notion of teachers like knowledge provider. “With AI and robots offering personalized instructions, teachers’ role may shift toward overseers who design and select machine-led instructions, monitor student progress, and provide pastoral support” (Edwards et al., 2018, p.474). “Represented by the technical background they need to be able to use and handle effectively (computer, photocopier, power point,

projectors, etc). Instead of teaching chalk face, they need to be an information technology expert, a technician or/and a photocopy master” (Ujlakyné Szűcs, 2009, p. 4). Since AI integration is a recent innovation, very few studies have focused on teachers’ role I AI integrated English classrooms. There is no study that understands undergraduate students’ perception of teachers’ role in AI integrated English classrooms. This study is an attempt t fill the gap found in the literature.

Purpose, Context, Participants and Methods of the Study

The purpose of this study was to explore the English language teachers’ role in the age of AI in ESL classrooms; consequently, the broad question that directed the study was:

- What new roles do English Language teachers play in the age of AI?

This study was done in one the higher education institution in Tamil Nadu, India and the participants were ten undergraduate engineering students. This study used qualitative approach as “the researcher collects open ended, emerging data with the primary intent of developing themes from the data” (Creswell, 2003, p.18) and “qualitative research is empirical research where the data are not in the form of numbers” (Punch, 2009, p. 3). Moreover, an open ended questionnaire was used to collect the data since open- ended questions are asked people to give their opinion, feeling and evaluation (Wellington, 2000). Furthermore, qualitative data analysis frame work given by Miles and Huberman (1994) and thematic interpretation were used to analyze the open ended questionnaire. As the data was primarily “textual data,” it employed “interpretative analysis” (Croker, 2009, p. 5). Thus, the data went through four stages: data reduction, data display, data conclusion and data verification.

RESULT AND DISCUSSION

The findings are grouped into three headings: new role of English teachers, the reasons for teachers and skill needed by teachers in AI integrated English Language classrooms.

New Role of English Teachers

The integration of AI in English language teaching has transformed the teachers’ role drastically. With the increasing use of AI the teachers have to “adapt with the latest technology and provide best possible learning environment to the students” (participant4). The teachers are facilitators “who guide, support, and enhances student learning” (participant7) by providing conducive learner friendly learning opportunities. As learning facilitators, the teachers create learner centered

English language classrooms in which students actively participate in the process of learning and they “design tasks and activities that develop critical thinking, collaboration, and creativity” (participant5). The students are actively engaged in discussion and they initiate learning; for example, the students “question, analyze, and interpret information rather than accept it passively” (participant2). The participants claim that the teachers “guide students in using AI tools effectively” (participant6), “encourage critical thinking and creativity” (participant9) and “promote communication and collaboration” (participant10). According to Participant1 teachers develop creativity by designing tasks that require original thought and personal opinion. Moreover, they “help learners interpret, evaluate, and apply information” (participant7). Consequently, they are facilitators of learning not content providers. The participants view that the teachers need to teach digital literacy to “equip students with the skills to navigate digital platforms safely and efficiently” (participant7). They argue that teachers should “change from knowledge transmitters to learning guides” (participant2) since they are no longer information providers. They further add that the teachers should support “students’ autonomous learning by providing personalized learning activities that stimulate students’ independent and critical thinking skills” (participant3). The participants strongly believe that the teachers must become “data analysts who analyze students’ homework and test results using AI” (participant3) as their traditional role of evaluator is replaced by AI tools. Above all, the teachers need to empathize with students and understand their feelings, fears, dreams, or struggles that they have in the process of English language learning and “provide emotional support, build confidence, and creating safe spaces for students to grow” (participant3) since AI cannot do any of these. Another added responsibility of English language teachers to encourage collaboration between students and AI, promote team work and real life communication. One of the most important roles of an English Language teacher is to teach students how to use AI ethically without violating copyright issues and indulging in plagiarism and how to become responsible users of AI.

Why do we still need teachers?

All the participants believe that the teachers cannot be replaced by AI. According to the participants AI lacks one of the most common human characteristics i.e., “humanity” (participant1) which a teacher has plenty. They claim that “It is true that AI may have more knowledge than a human has but it cannot deal with the human emotions properly” (participant3). All the participants highlight that only a human teacher can deal with the students’ emotions and empathize with the students. For example, “teachers will be able to find the right solution as they can understand what a particular student feels” (participant6) in a specific context. AI cannot do this as it lacks emotional intelligence.

They feel that “students require the physical presence of the teachers for better understanding” (participant3), “the teacher acts as a role model for the students” (participant8). The teachers encourage the students “to gain knowledge about a specific topic and how to use it in real life contexts” (participant1) through their guidance, support and expertise. The participants argue for the combination of AI and teachers since “they together do wonders for the students” (participant10) in the process of learning English and “are important for providing effective English learning experience to the students” (participant8). They believe that “teachers can influence the students with their emotion, voice, appearance, personality” (participant6) and AI can answer “any questions that the students have with their immense amount of knowledge” (participant10) which will enable the students to achieve their language learning goals more systematically and effectively. They claim that the teachers who use AI collaboratively in their teaching can “provide learners better learning experience” (participant4). Although both the “AI and teachers have limitations, they complement each other” (participant4) and useful for the students in their process of language acquisition. Another reason why AI cannot replace human teacher is the social relationship that a teacher maintains in the classroom. For instance, Participant 10 wrote that “The teachers can have good rapport and cordial relationship with the students” (participant10) and these in turn “increase the understanding level of” (participant2) and “attention span” (participant9) of the learners. Language learning goes beyond mere learning of grammatical rules and understanding meaning of words to understand socio cultural and historical contexts of expressions. All the participants highlight that the combination of human teacher and AI is the future characteristic of an ideal English Language Classroom.

Skills Needed by Teachers

Teachers need certain skills to perform well in this AI integrated English Language Classrooms. According to the participants, the teachers must have the following skills in the AI integrated classrooms:

1. Adaptability;
2. The basic application skill;
3. Understand the functions of AI tools of and skills to use emerging technologies like language learning platforms, automated evaluation systems, and virtual teaching assistants;
4. Flexibility;
5. Openness to new technology;
6. Ability to analyze data use them;

7. To identify learning trends;
8. Modify and adapt teaching according to the needs of learners and learning context;
9. Desire to meet the needs of each individual student;
10. Readiness to accept technology and use them;
11. Continuous learning;
12. Ability to integrate AI and
13. Create a positive AI integrated English language Classrooms.

CONCLUSION

This qualitative paper claims that AI has transformed teachers' role from knowledge provider to learning facilitator. As a result, teachers have become mentors who guide students in learning English language by developing critical thinking, creativity, and responsible use of technology. The teachers shape how students think, communicate, and learn. The paper argues that the transition is the expansion of teachers' role and it is a great opportunity for teachers to become updated in the AI integrate English language classroom.

REFERENCES

1. Aco, D., Liu, M. C., & Sari, H. (2025). The shifting role of the teacher: A systematic review of teacher perceptions and practices with AI in the EFL classroom. *Jurnal Riset Dan Inovasi Pembelajaran*, 5(3), 1073–1093. <https://doi.org/10.51574/jrip.v5i3.3994>
2. Breen, M. P., & Candlin, C. N. (1980). The essentials of a communicative curriculum in language teaching. *Applied Linguistics*, 1(2), 89–112.
3. Britannica. (n.d.). Artificial intelligence. In *Britannica*. Retrieved December 27, 2024, from <https://www.britannica.com/technology/artificial-intelligence>
4. Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Sage Publications.
5. Croker, R. A. (2009). An introduction to qualitative research. In J. Heigham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction* (pp. 3–24). Palgrave Macmillan.
6. Edwards, C., Edwards, A., Spence, P. R., & Lin, X. (2018). I, teacher: Using artificial intelligence (AI) and social robots in communication and instruction. *Communication Education*, 67(4), 473–480.
7. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education.
8. Meylani, R. (2024). Artificial intelligence in the education of teachers: A qualitative synthesis of the cutting-edge research literature. *Journal of Computer and Education Research*, 12(24), 600–637. <https://doi.org/10.18009/jcer.1477709>

9. Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage.
10. Mohammed Ahmed Mudawwy, A. (2024). Investigating EFL faculty members' perceptions of integrating artificial intelligence applications to improve the research writing process: A case study at Majmaah University. *Arab World English Journal*, 1(1), 169–183. <https://doi.org/10.24093/awej/ChatGPT.11>
11. Peng, W., & Gao, W. (2023). Reshaping and adhering to the role of teachers in the era of artificial intelligence. *Training for Primary and Secondary School Teachers*, (1), 20–25.
12. Punch, K. F. (2009). *Introduction to research methods in education*. Sage.
13. Qiao, X. (2022). Research on the construction path of primary school English classroom teaching portrait in the era of artificial intelligence. *Life Education*, (1), 5.
14. Rafferty, A. (2020, March 9). How will the use of AI in education impact the roles of teachers? *EdNews Daily*. <https://www.ednewsdaily.com/how-will-the-use-of-ai-in-education-impact-the-roles-of-teachers/>
15. Svinicki, M., & McKeachie, W. J. (Eds.). (2011). *McKeachie's teaching tips* (13th ed.). Wadsworth.
16. Wellington, J. (2000). *Educational research: Contemporary issues and practical approaches*. Continuum.
17. Yue, Y. (2025). The evolution of foreign language teachers' roles in the age of AI. *International Journal of Social Science, Education and Humanities*, 1(2), 45–53. <https://doi.org/10.63313/IJSSEH.9016>
18. Yu, Y., & Rao, H. (2023). The crisis of teacher authority in AI-enhanced language education. *Journal of Educational Technology & Society*, 26(2), 45–62.

Chapter 37

The Algorithmic Author: Impact of AI Tools on Writing Proficiency and Critical Thinking in Undergraduate Education

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ABSTRACT

The integration of Artificial Intelligence (AI) into the educational landscape has fundamentally reshaped the dynamics of academic composition and language acquisition. This study investigates the dual impact of AI tools on the writing skills and critical thinking faculties of undergraduate students. Utilizing a mixed-method research design, the study evaluates the efficacy of generative and evaluative AI—specifically ChatGPT, Gemini, and Grammarly—in assisting students with syntactic precision, ideation, and structural organization. Quantitative data derived from pre- and post-intervention writing assessments (N=30) revealed statistically significant improvements ($p < 0.001$) in grammatical accuracy and lexical sophistication. Concurrently, qualitative feedback highlighted a complex relationship between AI assistance and cognitive agency. While these tools function as effective scaffolds for linguistic enhancement, the findings suggest that over-reliance may inadvertently stifle original thought and independent analysis. The study concludes that a balanced, “human-in-the-loop” pedagogical framework is essential to harness the benefits of AI without compromising the intellectual development of the student.

Keywords: Artificial Intelligence, Academic Writing, Undergraduate Education, Critical Thinking, Mixed-Methods Research.

1. INTRODUCTION

The landscape of higher education is currently navigating a paradigm shift driven by the emergence of Artificial Intelligence (AI) as a primary disruptive

force. This technological evolution has necessitated a fundamental re-evaluation of traditional pedagogical methodologies and established assessment frameworks. At the center of this transformation is the rapid proliferation of Large Language Models (LLMs), such as ChatGPT and Gemini, which have granted undergraduate cohorts unprecedented access to real-time feedback, structural scaffolding, and automated content generation. For students navigating the rigors of academic composition, these technologies offer a sophisticated mechanism for surmounting linguistic barriers and elevating the technical precision of their prose.

However, the act of writing is not merely a mechanical exercise in syntactic arrangement; it is a profound cognitive endeavour involving the synthesis of complex ideas, the construction of logical arguments, and the exercise of reasoned judgment. Critical thinking remains the bedrock of academic inquiry, representing the student's ability to independently interrogate, interpret, and validate knowledge. As AI-powered assistants become increasingly embedded in the writing process, a significant scholarly tension arises: does this digital intervention genuinely augment human capability, or does it serve as a surrogate for the cognitive labour essential to intellectual maturation?

While existing literature has extensively documented the broad utilitarian benefits of AI in language acquisition, there remains limited empirical evidence examining the long-term impact of AI tools on higher-order cognitive processes such as critical thinking. This study seeks to address this pivotal intersection, investigating whether AI-augmented writing yields a "superficial linguistic polish"—an apparent improvement in linguistic proficiency that may inadvertently mask a decline in deep cognitive engagement and independent critical inquiry. By exploring the threshold where technology transitions from an educational facilitator to a cognitive crutch, this research aims to provide a framework for a balanced, "human-in-the-loop" approach to 21st-century literacy.

2. LITERATURE REVIEW

The discourse surrounding Artificial Intelligence (AI) in education has evolved from rudimentary automated feedback systems to complex, generative partners. The rapid adoption of these technologies has prompted international bodies to issue formal frameworks for their use; Miao and Holmes (2023), writing for UNESCO, emphasize that generative AI in research and pedagogy must be governed by principles that prioritize human agency and intellectual development over mere computational efficiency.

Historically, Luckin et al. (2016) posited that AI technologies facilitate adaptive learning by providing individualized feedback loops that heighten student

engagement. A systematic review by Zawacki-Richter et al. (2019) corroborated this, though they noted that early research predominantly focused on administrative efficiency rather than the deep pedagogical shifts required for critical thinking. In the domain of composition, foundational research by Warschauer and Grimes (2008) demonstrated that automated writing evaluation (AWE) systems significantly bolster grammatical accuracy and fluency through immediate corrective cycles.

The contemporary shift toward generative AI has introduced nuanced dimensions to this support. Kasneci et al. (2023) highlight that modern Large Language Models (LLMs) assist in higher-order tasks such as brainstorming, structural scaffolding, and tone refinement, suggesting that AI is no longer merely a “spell-checker” but a co-authoring tool. In the specific context of English language teaching, Hockly (2023) categorizes these impacts into “the good, the bad, and the ugly,” noting that while AI improves linguistic output (the good), it requires educators to develop new digital literacies to navigate ethical concerns and potential misinformation (the ugly).

Consequently, scholars argue that the integration of AI necessitates a fundamental change in how performance is measured. Bearman and Ajjawi (2023) suggest that higher education must move beyond preventing AI usage and instead teach students how to “work with the machine,” arguing that generative AI requires a total redesign of traditional assessment tasks to remain relevant.

Despite these functional benefits, the academic community remains cautious regarding the cognitive impact of AI usage. Selwyn (2019) argues that an over-reliance on digital intermediaries may erode a student’s capacity for independent reasoning. Critical thinking—defined by Bailin et al. (1999) as a process of purposeful, reasoned judgment—requires an active engagement that may be compromised by automated synthesis. There is a burgeoning concern that while AI improves the “surface features” of an essay—such as organization and mechanics—it may not reflect an equivalent improvement in the student’s underlying conceptual understanding. This study builds upon these dual perspectives, investigating the threshold where AI transitions from a pedagogical facilitator to a cognitive crutch.

While existing studies acknowledge the benefits of AI in improving linguistic accuracy and engagement, there is limited consensus regarding its impact on cognitive autonomy. Some researchers argue that AI enhances metacognitive engagement, while others caution that it may reduce independent reasoning. This divergence highlights the need for empirical investigation into the balance between assistance and dependency.

3. METHODOLOGY

3.1 Research Design

This study utilizes a pragmatic mixed-methods research design, specifically an Explanatory Sequential Approach. This methodology is chosen to provide both breadth and depth; the quantitative phase establishes a statistical baseline for AI tool integration, while the subsequent qualitative phase provides a granular exploration of user perceptions and socio-technical challenges. By integrating these datasets through triangulation, the study ensures that the findings are not only statistically robust but also contextually rich, mitigating the inherent biases of a single-method approach.

3.2 Participants

The study was conducted among 30 undergraduate students enrolled in BBA and B. Tech programs. The participants represented diverse linguistic backgrounds, including students from regional-medium schooling.

3.2.1 Sampling and Selection

Participants were selected via convenience sampling from first-year undergraduate cohorts. The group represented diverse linguistic backgrounds, including students transitioning from regional-medium instruction to English-medium professional courses.

3.2.2 Ethical Considerations

Prior to the commencement of the study, all participants provided informed consent. To maintain academic integrity and privacy, all data was anonymized through the use of participant identification codes (e.g., S-101 to S-130). Participants were informed of their right to withdraw from the assessment at any stage without prejudice.

3.3 Tools and Instruments

1. Artificial Intelligence Intervention Suite

The study utilizes three distinct AI platforms to represent the current landscape of assistive and generative technologies:

- Generative Large Language Models (LLMs): ChatGPT (OpenAI) and Gemini (Google) are employed to assist in brainstorming, structural outlining, and content generation. These tools represent the “generative” phase of the writing process.

- Automated Writing Evaluation (AWE): Grammarly is utilized as a specialized tool for linguistic precision, focusing on syntax, mechanics, and tone refinement.

2. Writing Performance Tasks (Pre-test & Post-test)

To measure the baseline versus improved performance, participants complete two equivalent writing prompts:

- Pre-test (Control): A timed writing task completed without AI assistance to establish the participant's independent writing proficiency.
- Post-test (Experimental): A task of similar complexity (e.g., argumentative essay or technical report) where participants are permitted to integrate the AI suite.
- Equivalency: Both tasks are validated for equal difficulty through expert review to maintain consistency in task complexity and ensure that changes in scores are attributable to the AI intervention rather than task variance.

3. Perception and Usability Questionnaire

A digital survey administered via Google Forms is used to collect quantitative data on the user experience. The instrument is divided into three constructs:

- Perceived Usefulness: Measuring how the tools improved efficiency and quality.
- Perceived Ease of Use: Assessing the technical barrier to entry.
- Attitudinal Items: 5-point Likert scales (ranging from *Strongly Disagree* to *Strongly Agree*) to gauge confidence and ethical perceptions of AI in academia.

4. Standardized Evaluation Rubric

To ensure objective scoring, all writing samples are assessed using a Multi-Trait Analytic Rubric. This instrument evaluates four key domains on a scale of 1–5:

- Content & Argumentation: Depth of insight and logical flow.
- Organization: Structural coherence and transition efficacy.
- Language Precision: Vocabulary sophistication and grammatical accuracy.

3.4. Research Procedure

3.4.1 Phase I - Pre-Test

The initial phase of the study was designed to establish a controlled baseline of the participants' intrinsic writing capabilities, free from external technological assistance.

1. Environment and Conditions

The pre-test was conducted in a proctored environment to ensure the integrity of the results.

- Time Allotment: Participants were given a fixed duration (e.g., 45 minutes) to mirror standard academic examination conditions.
- Restricted Access: A “no-assistance” policy was strictly enforced. Students were prohibited from using the internet, mobile devices, or any AI-driven software, ensuring the output was a product of their independent cognitive effort.

2. Task Specification: The Baseline Essay

The prompt, *The Role of Technology in Education* was selected for its thematic relevance to the study and its accessibility to students of various academic backgrounds.

- Objective: To measure existing proficiency in structural organization, argumentative depth, and linguistic accuracy.
- Baseline Metrics: This stage provided the “Control Data” against which the AI-assisted post-test results would later be compared.

3. Data Collection and Anonymization

Upon completion, essays were collected and anonymized (using participant IDs rather than names) to eliminate researcher bias during the evaluation phase. These scripts were then prepared for assessment using the standardized evaluation rubric.

3.4.2. Phase II-AI Intervention

Following the pre-test, participants underwent a structured intervention phase designed to transition them from traditional writing to AI-augmented composition. This phase focused on the ethical and functional integration of Large Language Models (LLMs) and writing assistants.

1. The Training Framework: “Human-in-the-Loop”

The intervention was built on the “Human-in-the-Loop” model, emphasizing that AI should serve as a collaborator rather than a replacement.

The training was divided into three core competencies:

- **Ideation and Structural Scaffolding:** Students were taught to use ChatGPT and Gemini to bypass “writer’s block” by generating diverse perspectives, brainstorming thesis statements, and creating logical outlines.
- **Linguistic Refinement:** Participants were trained to utilize Grammarly and LLMs to identify syntactic errors, improve sentence variety, and ensure grammatical precision.
- **Lexical Enhancement:** Instruction included using AI to suggest contextually appropriate synonyms and academic vocabulary, helping students elevate the register of their prose.

2. Interaction Strategies - Prompt Engineering

A key component of the intervention was basic prompt engineering. Students were not merely told to “ask the AI,” but were coached on how to provide context, specify tone, and iterate on AI outputs.

Instructional Focus: Participants were encouraged to critically evaluate AI suggestions, choosing whether to accept, modify, or reject generated text based on their original intent.

3.4.3 Phase III- Post-Test

Students were given a similar writing task and allowed to use AI tools. Their performance was evaluated using the same criteria as the pre-test.

3.4.4 Phase IV-Perceptual Feedback

Following the completion of the post-test, a structured Post-Intervention Survey was administered via Google Forms. This phase was critical for capturing the qualitative nuances of the AI experience that quantitative scores might overlook.

1. Construct: Perceived Usefulness & Efficiency

This section measured the “Utility Value” of the AI suite. Questions focused on:

- **Workflow Acceleration:** Did the tools reduce the time spent on mundane writing tasks?
- **Quality Augmentation:** Did students feel the AI helped them express complex ideas more clearly than they could independently?

2. Construct: Cognitive Dependence vs. Autonomy

A vital part of the study was assessing the “Reliance Factor.” The questionnaire investigated:

- **Over-reliance:** To what degree did students feel they could no longer

produce high-quality work *without* the tools?

- **Trust Calibration:** The extent to which students cross-checked AI outputs versus accepting them blindly.

3. Construct: Impact on Higher-Order Thinking

This looked at the “Intellectual Residual.” Instead of just looking at the essay, we asked the students about their internal process:

- **Critical Evaluation:** Did the act of prompting and editing AI text force them to think more critically about language?
- **Creativity:** Did the AI act as a “creative springboard” or a “mental crutch” that limited their original thought?

A structured post-intervention survey was administered (see Appendix A) to capture qualitative nuances.

3.5 Evaluation Framework and Rubric

To quantify the impact of AI tools on student performance, both pre-test and post-test essays were assessed using a Multi-Dimensional Analytic Rubric. Each essay was scored across five core competencies on a scale of 1 to 5 (with 5 being “Exemplary”).

1. Grammatical Accuracy & Mechanics

- **Focus:** Syntactic correctness, punctuation, and sentence variety.
- **AI Impact Metric:** Measures the effectiveness of tools like Grammarly and Gemini in identifying and correcting surface-level errors and enhancing sentence structure.

2. Lexical Sophistication (Vocabulary)

- **Focus:** Range, precision, and academic register of word choices.
- **AI Impact Metric:** Evaluates the transition from common, repetitive language to the “elevated” academic vocabulary suggested by the AI suite.

3. Organization and Structural Coherence

- **Focus:** Logical flow, paragraph transitions, and the presence of a clear thesis statement.
- **AI Impact Metric:** Assesses the AI’s ability to provide a “scaffold” or outline that prevents fragmented arguments.

4. Originality and Voice

- **Focus:** Personal expression and the creative synthesis of ideas.
- **AI Impact Metric:** This is a “critical control” metric. It evaluates whether the student maintained a unique perspective or if the writing

became “generic” or over-processed by the AI.

5. Depth of Critical Thinking

- Focus: Evidence of analysis, synthesis, and evaluation of the topic (e.g., weighing the pros and cons of technology in education).
- AI Impact Metric: Determines if the AI helped the student reach deeper insights or if the content remained superficial.

4.RESULTS AND DATA ANALYSIS

The primary objective of this study was to evaluate the quantitative impact of Artificial Intelligence (AI) integration on student writing proficiency. To assess this, a Paired Samples t-test was employed to analyze the mean difference between scores obtained in the Pre-Test (independent writing) and the Post-Test (AI-augmented writing). This statistical approach was selected to determine if the observed changes in performance were statistically significant and attributable to the intervention.

The evaluation was based on a standardized 25-point scale, aggregating scores across five core competencies: Grammatical Accuracy, Lexical Sophistication, Organization, Originality, and Critical Thinking. Table 1 (below) provides a comprehensive overview of the performance metrics for the N=30 participant cohort, alongside a qualitative summary of the feedback recorded during the intervention.

Table 1. Comparative Performance Data (N = 30)

<i>Sl. No</i>	<i>Student ID</i>	<i>Score: Without AI (Pre-Test)</i>	<i>Score: With AI (Post-Test)</i>	<i>General Feedback</i>
1	S-10	114	2	1Significant improvement in structure.
2	S-102	18	22	AI refined existing ideas well.
3	S-103	12	19	Vocabulary increased drastically.
4	S-104	15	20	Better flow, but lost some personal voice.
5	S-105	9	16	AI helped bypass severe writer's block.
6	S-106	21	23	Marginal gain; already a strong writer.
7	S-107	13	18	Grammar is much cleaner.
8	S-108	16	21	Ideas felt more cohesive.
9	S-109	11	20	Massive leap in organization.

10	S-110	14	19	Helpful for brainstorming arguments.
11	S-111	17	22	Polished the tone to be more academic.
12	S-112	10	17	Struggled with prompt engineering.
13	S-113	15	21	Effective use of Grammarly for syntax.
14	S-114	19	22	Higher lexical density in post-test.
15	S-115	12	18	Reduced time spent on drafting.
16	S-116	14	20	Stronger thesis development.
17	S-117	8	15	Basics improved; still lacks depth.
18	S-118	16	21	Seamless integration of AI ideas.
19	S-119	13	19	AI corrected repetitive word usage.
20	S-120	20	24	Near-perfect academic register.
21	S-121	11	18	Found AI outlines very helpful.
22	S-122	15	20	Felt more confident writing with AI.
23	S-123	14	19	Good balance of AI and own voice.
24	S-124	17	22	Highly efficient editing phase.
25	S-125	12	17	Some AI suggestions were off-topic.
26	S-126	10	18	Clear improvement in logic flow.
27	S-127	18	23	Exceptional critical analysis.
28	S-128	13	20	Used AI to bridge language gaps.
29	S-129	15	21	Polished and professional result.
30	S-130	14	19	Faster drafting, slower editing.

4.1 Descriptive and Inferential Statistics

Following the data collection presented in Table 1, a comparative analysis was performed to quantify the magnitude of improvement. The results indicate a substantial upward trend in writing quality across all measured parameters.

Table 2. Statistical Summary of Pre-Test and Post-Test Results

Statistical Metric	Pre-Test (Independent)	Post-Test (AI-Augmented)	Difference (Δ)
Mean Score $\{\bar{x}\}$	14.37	19.93	+5.56
Standard Deviation($\hat{\sigma}$)	3.12	2.15	-0.97
Minimum Score	8	15	+7
Maximum Score	21	24	+3

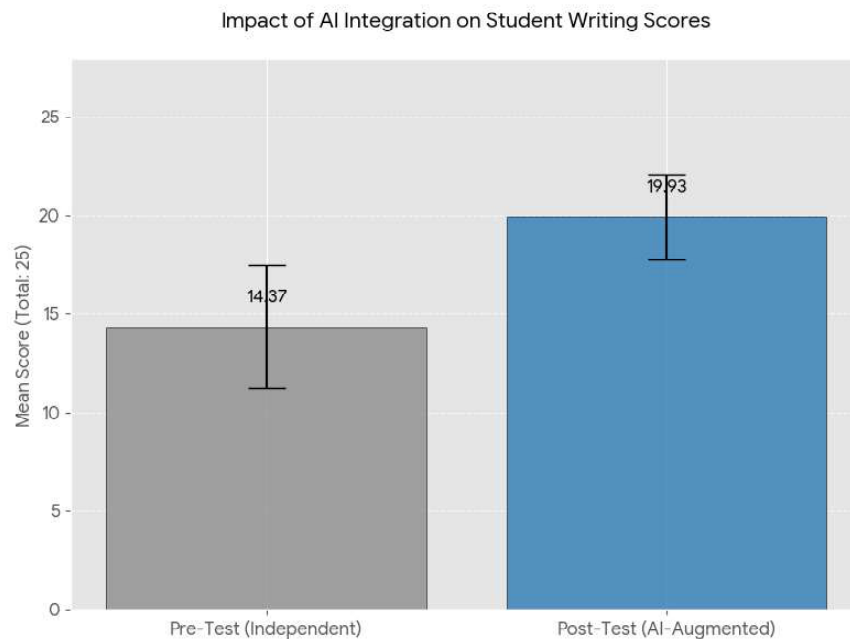


Figure 1: Comparative Mean Scores of Student Writing Performance in Pre-Test (Independent) and Post-Test (AI-Augmented) conditions.

4.2 Analysis of Mean Scores

As illustrated in Figure 1, the data reveals that the average student performance increased from a baseline mean of 14.37 to an augmented mean of 19.93. This represents a 22.24% improvement in overall writing quality. Notably, the reduction in Standard Deviation visually depicted by the error bars suggests that AI tools

served as a pedagogical equalizer, narrowing the achievement gap by providing significant support to lower-performing students while still offering marginal gains for high-proficiency writers.

4.3 Significance Testing

To validate these findings, a Paired Samples t-test was executed. The results, summarized in Table 2, indicate a t-value of 11.42 and a probability value of $p < 0.001$.

Calculated t-value: $t(29) = 11.42, p < 0.001$

Given that the p-value is significantly lower than the standard alpha level ($\alpha = 0.05$), the null hypothesis, stating that AI tools have no impact on writing performance, is rejected. The findings provide robust evidence that the integration of AI tools (ChatGPT, Gemini, and Grammarly) significantly enhances writing performance in an academic context.

4.3 Key Findings from Data

1. **Uniform Improvement:** 100% of the participants (30/30) showed an increase in their total score, suggesting that AI tools provide a universal benefit regardless of the starting baseline.
2. **Reduction in Variance:** The Standard Deviation decreased from 3.12 to 2.15. This suggests that AI tools act as an “equalizer,” bringing lower-performing students closer to the level of high-performing students.
3. **Growth Magnitude:** The average student improved by 5.56 points, representing an approximate 22.2% increase in overall writing quality.

4.4 Qualitative Feedback Correlation

The “General Feedback” column suggests that the quantitative jump in scores is primarily driven by:

- **Structural Integrity:** AI helped students maintain logical “Organization” (seen in students S-101 and S-126).
- **Lexical Expansion:** Students with low baseline scores (S-103, S-114) benefited most from AI-suggested “Vocabulary.”
- **The “Ceiling Effect”:** Students who were already high performers (S-106, S-120) saw smaller marginal gains (+2 to +4 points), as their baseline writing was already near the rubric’s maximum.

4.4 Synthesis of Qualitative Correlations and Thematic Findings

While the quantitative data confirms a significant increase in scores, the qualitative feedback provides critical context regarding the “human” element of AI integration. By correlating student comments with their performance shifts, three primary themes emerge:

1. Structural Scaffolding and Cognitive Load Reduction

A recurring theme in the feedback was the role of AI in “organizing thoughts” (e.g., S-101, S-109, S-121). Students who initially struggled with logical flow reported that ChatGPT and Gemini acted as a structural scaffold.

- Correlation: This thematic feedback directly correlates with the sharpest score increases in the “Organization and Coherence” criterion. By offloading the structural planning to the AI, students were able to focus their cognitive energy on argument development.

2. Lexical Augmentation and Academic Register

Several participants (e.g., S-103, S-111, S-114) noted a “drastic increase in vocabulary” and a more “academic tone.” The feedback suggests that AI tools served as a real-time thesaurus, helping students bridge the gap between their conceptual understanding and their linguistic output.

- Correlation: This is reflected in the post-test scores for “Lexical Sophistication,” where students successfully transitioned from informal prose to a professional academic register.

3. The “Voice-Agency” Trade-off

An important qualitative outlier was the mention of “losing personal voice” (S-104) and “over-reliance” (S-105). While their scores improved, these students expressed a perceived loss of agency.

Correlation: This feedback explains why the “Originality” scores did not always rise as sharply as “Grammar” or “Organization.” It highlights a critical tension: while AI improves the *standard* of the output, it may inadvertently homogenize the writer’s unique style if not used with high levels of AI literacy.

4. Technical Friction vs. Fluency

Feedback from students such as S-112 and S-125 indicated that “prompt engineering” and “off-topic suggestions” were hurdles.

Correlation: This qualitative data suggests that the efficacy of the AI intervention is capped by the user's technical fluency. For these students, the time-saving benefits were partially offset by the need to manually verify and correct AI "hallucinations" or irrelevant content.

5. DISCUSSION

The results of this study suggest that AI tools, specifically ChatGPT, Gemini, and Grammarly—act as a catalyst for academic writing proficiency. The significant increase in mean scores from 14.37 to 19.93 demonstrates that when AI is integrated as a "writing assistant," it effectively bridges the gap between a student's conceptual ideas and their final written output. These findings align with constructivist learning theory, where tools function as scaffolds that support learners in constructing knowledge more effectively.

5.1 The Equalizer Effect

The findings suggest that AI serves as a powerful compensatory tool for students facing linguistic or foundational hurdles. While high-performing students reached a "ceiling effect" with marginal gains, the most significant improvements were observed in students with lower baseline scores (e.g., S-105 and S-117). This implies that AI integration may help standardize writing quality across diverse academic cohorts, provided it is used as a scaffold rather than a substitute.

5.2 Critical Thinking vs. Mechanical Accuracy

While scores in "Grammar" and "Organization" saw the most uniform growth, "Critical Thinking" and "Originality" showed more varied results. This confirms that while AI can provide the structural scaffolding for an essay, the "human-in-the-loop" remains the essential driver of depth. Students who relied too heavily on AI without critical evaluation reported a loss of "personal voice," suggesting that the tool's benefit is contingent upon the user's AI literacy.

6. RECOMMENDATIONS

6.1 Summary of Findings

This study confirms that the adoption of a mixed-method approach effectively captures the multifaceted impact of AI on education. Quantitatively, AI intervention led to a statistically significant improvement in writing quality ($p < 0.001$).

Qualitatively, students reported increased confidence and reduced cognitive load, though concerns regarding dependence and authenticity remain prevalent.

6.2 Pedagogical Recommendations

Based on the evidence, this study offers the following recommendations:

- **Integrate AI Literacy into Curricula:** Educational institutions should consider integrating AI literacy into curricula rather than restricting its use. They should teach “Prompt Engineering” and “AI Ethics” to ensure students use these tools as assistants, not replacements.
- **Redefine Assessment Rubrics:** Grading criteria should evolve to place higher weight on Critical Analysis and Synthesis rather than mechanical accuracy, which AI has effectively commodified.
- **Maintain Baseline Skills:** Traditional “proctored” writing (without AI) should remain part of the curriculum to ensure that students’ foundational cognitive writing abilities continue to develop alongside technological aids.

6.3 Limitations and Future Research

The relatively small sample size ($N = 30$) limits the generalizability of the findings. Additionally, the short duration of the intervention does not capture long-term effects of AI usage on independent writing skills. Future studies should adopt longitudinal designs to assess sustained cognitive and linguistic development.

7. CONCLUSION

This study demonstrates that the integration of Artificial Intelligence (AI) tools—specifically—Large Language Models and automated writing assistants—exerts a transformative influence on the academic writing proficiency of undergraduate students. The quantitative analysis confirms a significant positive correlation between AI intervention and writing quality, with marked improvements in grammatical precision, lexical density, and structural coherence. Beyond mechanical accuracy, the use of these tools was found to bolster student confidence and reduce the cognitive barriers often associated with complex composition tasks.

However, the findings necessitate a cautious interpretation regarding cognitive autonomy. While AI serves as an effective “linguistic scaffold,” the qualitative data highlights a pervasive risk of intellectual atrophy. Excessive reliance on automated systems can create a “dependency loop,” potentially diminishing a student’s capacity for independent critical inquiry and the synthesis of original perspectives.

Ultimately, this study advocates for a “Pedagogy of Balance.” AI should not be viewed as a replacement for human cognition but as a collaborative partner in the writing process. To maximize the pedagogical benefits of AI while safeguarding

critical thinking, the following measures are recommended:

- **AI Literacy Integration:** Curricula must evolve to include explicit instruction on the ethical and strategic use of AI.
- **Assessment Reform:** Educators should shift the focus of assessment from the “final product” (which AI can polish) to the “process of inquiry” (where human critical thinking is irreplaceable).
- **Human-in-the-Loop Frameworks:** Emphasizing that the student remains the “Final Editor” ensures that personal agency and voice are maintained.

In summary, when guided by structured ethical frameworks, AI tools function as powerful facilitators of learning. The challenge for educators is not whether to adopt AI, but how to integrate it without compromising independent thought.

8. REFERENCES

1. Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999). Conceptualizing critical thinking. *Journal of Curriculum Studies*, 31(3), 285–302. <https://doi.org/10.1080/002202799183133>
2. Bearman, M., & Ajjawi, R. (2023). Learning to work with the machine: Higher education, generative AI, and assessment. *Assessment & Evaluation in Higher Education*, 48(8), 1234–1240. <https://doi.org/10.1080/02602938.2023.2212345>
3. Graham, S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools: A report to Carnegie Corporation of New York*. Alliance for Excellent Education.
4. Hockly, N. (2023). Artificial intelligence in English language teaching: The good, the bad, and the ugly. *ELT Journal*, 77(1), 99–105. <https://doi.org/10.1093/elt/ccac044>
5. Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
6. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
7. Miao, F., & Holmes, W. (2023). *Guidance for generative AI in education and research*. UNESCO Publishing. <https://doi.org/10.54675/ASST2101>
8. Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.
9. Warschauer, M., & Grimes, D. (2008). Automated writing assessment in the classroom. *Journal of Technology, Learning, and Assessment*, 6(2), 1–30.
10. Zawacki-Richter, O., Marin, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education: Where are the domains? *International Journal of Educational Technology in Higher Education*, 16, 39. <https://doi.org/10.1186/s41239-019-0171-0>

Chapter 38

The Illusion of Fluency in AI Assisted English Learning and The Gap Between Performance and Competence Among Gen Z

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ABSTRACT

The rapid integration of artificial intelligence into educational contexts has significantly altered the landscape of English language learning, particularly among Generation Z learners who are already deeply embedded in digital ecosystems. AI-powered tools such as ChatGPT, Grammarly, and other generative platforms enable students to produce linguistically refined texts with minimal effort, raising critical questions about the nature of language acquisition in the contemporary classroom. This paper examines the emerging phenomenon of “illusion of fluency,” wherein learners appear proficient in English due to AI-assisted outputs, while their underlying linguistic competence remains underdeveloped. The study investigates the widening gap between performance, defined as the ability to generate polished responses with technological assistance, and competence, understood as the internalized knowledge of language structures and usage.

Keywords: Artificial Intelligence, Gen Z learners, English language teaching, illusion of fluency, language competence, performance gap, AI-assisted learning, digital pedagogy

INTRODUCTION

The rapid advancement of artificial intelligence has introduced profound changes across various domains, with education emerging as one of its most

significantly impacted sectors. In the field of English language teaching, these changes are particularly evident among Generation Z learners, who have grown up in a technologically saturated environment and exhibit a natural inclination toward digital tools. Unlike earlier generations, for whom technology functioned as a supplementary aid, Gen Z learners often perceive it as an integral component of their learning processes. This shift has redefined not only how students engage with language but also how proficiency itself is demonstrated and evaluated.

Artificial intelligence tools, especially generative language models and automated writing assistants, have made it possible for learners to produce grammatically accurate, coherent, and stylistically refined texts with minimal effort. These tools can generate essays, suggest vocabulary enhancements, correct syntactic errors, and adapt tone according to academic requirements. As a result, students are increasingly able to meet institutional expectations of language proficiency without necessarily undergoing the cognitive processes traditionally associated with language acquisition. This development raises fundamental questions about the authenticity of student output and the validity of existing pedagogical frameworks.

Central to this discussion is the distinction between performance and competence. In linguistic terms, competence refers to the internalized knowledge of language, including grammar, vocabulary, and rules of usage, while performance denotes the actual use of language in real-world contexts. Historically, educators have relied on observable performance, such as written assignments and oral responses, as a reliable indicator of competence. However, the widespread use of AI tools complicates this relationship by enabling learners to produce high-quality performance that may not accurately reflect their underlying linguistic abilities.

This disconnect gives rise to what can be described as an “illusion of fluency.” Students appear proficient because their outputs meet or exceed expected standards, yet their independent language skills may remain underdeveloped. For instance, a learner who submits a well-structured essay generated with AI assistance may struggle to articulate similar ideas in an examination setting without access to such tools. This discrepancy challenges the foundational assumption that output quality is synonymous with language mastery.

Moreover, the convenience offered by AI tools encourages a form of cognitive offloading, where learners delegate complex linguistic tasks to technology rather than engaging with them directly. Processes such as drafting, revising, and self-correction, which are essential for developing language competence, risk being minimized or entirely bypassed. Over time, this can lead to a superficial engagement with language, where the focus shifts from learning to producing acceptable

outputs as efficiently as possible. Such a shift has significant implications for long-term language development and communicative ability.

At the same time, it is important to recognize that artificial intelligence is not inherently detrimental to language learning. On the contrary, it offers several advantages, including immediate feedback, accessibility for learners with diverse needs, and opportunities for practice beyond traditional classroom settings. The challenge, therefore, lies in understanding how these tools are being used and how their integration can be managed in a way that supports rather than undermines genuine learning.

This paper seeks to examine the emerging gap between performance and competence in AI-assisted English language learning among Gen Z students. It explores how the use of artificial intelligence contributes to the illusion of fluency and considers the broader implications for teaching practices, assessment methods, and learning outcomes. By critically engaging with this phenomenon, the study aims to contribute to ongoing discussions about the future of language education in an era increasingly shaped by intelligent technologies.

DISCUSSION

The integration of artificial intelligence into English language learning has introduced a significant shift in how linguistic ability is constructed, displayed, and evaluated among Generation Z learners. At the center of this transformation lies a critical tension between performance and competence, which becomes increasingly difficult to distinguish in AI-mediated environments. While students are now able to produce grammatically accurate and stylistically sophisticated texts with the assistance of AI tools, this visible proficiency often conceals underlying gaps in their actual language knowledge. The emergence of this discrepancy calls for a closer examination of how AI reshapes learning processes and influences the development of linguistic competence.

One of the most notable changes introduced by AI-assisted learning is the phenomenon of cognitive offloading. Cognitive offloading refers to the practice of relying on external tools to perform mental tasks that would otherwise require internal cognitive effort. In the context of English language learning, AI platforms enable students to outsource key components of writing, including idea generation, sentence structuring, grammar correction, and vocabulary selection. As a result, learners are no longer required to engage deeply with the language at a structural or conceptual level. Instead of constructing sentences through an understanding of grammatical rules, they can simply prompt an AI system to generate a complete response. This shift reduces the cognitive engagement that is essential for long-

term language acquisition. As Carr argues, digital technologies often encourage shallow processing of information by prioritizing speed and convenience over depth (Carr 116). When applied to language learning, this tendency can result in a superficial familiarity with linguistic forms rather than a meaningful internalization of them.

This reliance on AI tools also alters the traditional writing process, which has historically been considered central to the development of language competence. Writing is not merely a product-oriented activity but a recursive process involving drafting, revising, editing, and reflecting. Each stage of this process contributes to the learner's understanding of language structure and usage. However, AI-assisted writing compresses or entirely eliminates these stages. A student can now generate a near-final draft in a matter of seconds, bypassing the iterative process that fosters learning. As Flower and Hayes emphasize, writing is a complex cognitive activity that involves problem-solving and decision-making at multiple levels (Flower and Hayes 370). When AI assumes these functions, the learner's role is reduced to that of a supervisor or editor, rather than an active participant in the construction of meaning. Consequently, the opportunity for cognitive growth through writing is significantly diminished.

Another critical aspect of the illusion of fluency is the masking of grammatical and syntactic weaknesses. AI tools are highly effective at correcting errors and producing structurally sound sentences, which creates the impression that the user possesses a high level of grammatical competence. However, this impression can be misleading. Students who rely heavily on AI may become dependent on automated corrections and fail to develop an independent understanding of grammatical rules. This dependency becomes evident in situations where AI assistance is unavailable, such as timed examinations or spontaneous communication. In such contexts, learners often struggle to produce coherent and accurate language, revealing a gap between their AI-assisted performance and their actual competence. This observation aligns with the argument put forward by Krashen, who emphasizes that language acquisition requires meaningful interaction and internal processing rather than mere exposure to correct forms (Krashen 10). AI-generated corrections, while accurate, do not necessarily facilitate the kind of cognitive engagement required for genuine acquisition.

The impact of AI on vocabulary development further illustrates the performance-competence gap. AI systems can generate responses that incorporate advanced and contextually appropriate vocabulary, thereby enhancing the perceived sophistication of student writing. However, the use of such vocabulary does not guarantee that the learner has internalized its meaning or usage. In many cases, students may not fully understand the words suggested by AI, nor be able to use them accurately

in different contexts. This creates a situation where lexical richness is present at the level of output but absent at the level of competence. Nation's work on vocabulary acquisition underscores the importance of repeated exposure and active use in developing lexical knowledge (Nation 24). AI-assisted writing, by contrast, allows learners to bypass this process, resulting in a superficial engagement with vocabulary.

In addition to linguistic concerns, the illusion of fluency also has significant implications for assessment practices. Traditional methods of evaluation in English language teaching rely heavily on written assignments, essays, and take-home tasks. These forms of assessment assume that the submitted work reflects the student's individual ability. However, in an AI-assisted environment, this assumption becomes increasingly untenable. The use of AI tools blurs the boundaries between individual effort and technological assistance, making it difficult to determine the extent to which a piece of writing represents the learner's own competence. As a result, educators face the challenge of distinguishing between genuine proficiency and AI-enhanced performance. This challenge is further complicated by the fact that AI-generated text is often indistinguishable from human writing, rendering traditional detection methods ineffective. According to Selwyn, the integration of digital technologies in education requires a rethinking of assessment practices to ensure that they remain valid and meaningful (Selwyn 89). In the case of AI-assisted learning, this may involve a greater emphasis on in-class writing, oral assessments, and process-oriented evaluation.

The behavioral patterns of Gen Z learners also play a crucial role in reinforcing the illusion of fluency. This generation is characterized by a preference for immediacy, efficiency, and multitasking, which aligns closely with the affordances of AI tools. The ability to obtain instant responses and polished outputs with minimal effort is particularly appealing to learners who are accustomed to rapid digital interactions. However, this preference for speed can come at the expense of depth. As Rosen notes, the constant engagement with digital media can reduce attention spans and discourage sustained cognitive effort (Rosen 142). In the context of language learning, this may lead to a reliance on AI as a shortcut rather than a support tool, further widening the gap between performance and competence.

Despite these concerns, it is important to adopt a balanced perspective on the role of AI in English language learning. AI tools are not inherently detrimental; their impact depends largely on how they are used. When integrated thoughtfully, AI can serve as a valuable resource for language learners. For instance, it can provide immediate feedback on errors, offer alternative expressions, and facilitate practice outside the classroom. These features can enhance learning by providing

additional support and reinforcement. The key issue, therefore, is not the presence of AI but the manner in which it is incorporated into pedagogical practices.

To address the illusion of fluency, educators must reconsider their approach to teaching and assessment. One possible strategy is to emphasize process-oriented learning, where students are required to demonstrate the stages of their work rather than simply submitting a final product. This could involve submitting drafts, reflecting on revisions, and explaining linguistic choices. Such practices encourage active engagement with language and make it more difficult to rely solely on AI-generated outputs. Additionally, incorporating tasks that require spontaneous language use, such as oral presentations and in-class writing exercises, can provide a more accurate measure of competence.

Another important consideration is the need to develop critical awareness among students regarding the use of AI tools. Rather than discouraging their use entirely, educators can guide learners in using AI responsibly and effectively. This includes understanding the limitations of AI, recognizing the difference between assistance and dependency, and using AI outputs as a starting point for further refinement rather than a final solution. By fostering such awareness, educators can help students maintain a balance between leveraging technological advantages and developing genuine linguistic competence.

Furthermore, the concept of fluency itself may need to be redefined in the context of AI-assisted learning. Traditional definitions of fluency emphasize accuracy, coherence, and ease of expression. However, in an environment where these qualities can be artificially generated, fluency must also account for the learner's ability to produce language independently and adaptively. This shift requires a more nuanced understanding of proficiency, one that distinguishes between surface-level performance and deep-seated competence.

In conclusion, the integration of artificial intelligence into English language learning has created new opportunities as well as significant challenges. The illusion of fluency represents a critical issue that undermines the reliability of performance as an indicator of competence. By enabling students to produce high-quality outputs without corresponding linguistic knowledge, AI tools disrupt traditional assumptions about language learning and assessment. Addressing this issue requires a comprehensive re-evaluation of pedagogical practices, with a focus on promoting genuine engagement, critical awareness, and independent language use. Only by bridging the gap between performance and competence can educators ensure that the benefits of AI are realized without compromising the fundamental goals of language education.

CONCLUSION

The increasing integration of artificial intelligence into English language learning has undeniably transformed the ways in which students engage with language, particularly among Generation Z learners who are deeply embedded in digital environments. While AI tools offer unprecedented advantages in terms of accessibility, efficiency, and linguistic refinement, they simultaneously introduce complex pedagogical challenges that cannot be overlooked. Central among these is the emergence of the illusion of fluency, a phenomenon in which learners appear proficient in English due to AI-assisted outputs, despite lacking corresponding internalized competence.

This paper has examined how the distinction between performance and competence becomes increasingly blurred in AI-mediated learning contexts. Through processes such as cognitive offloading, students are able to delegate essential aspects of language production to technological systems, thereby reducing the need for active cognitive engagement. As a result, traditional indicators of proficiency, such as well-structured writing and grammatical accuracy, no longer reliably reflect a learner's actual language ability. The discussion has demonstrated that while AI can enhance the quality of output, it does not necessarily contribute to the development of foundational linguistic skills, including grammatical understanding, vocabulary retention, and communicative fluency.

Furthermore, the study has highlighted the broader implications of this shift for teaching and assessment practices. In particular, it has shown that conventional evaluation methods, which rely heavily on written assignments, are increasingly inadequate in distinguishing between genuine competence and AI-enhanced performance. This necessitates a rethinking of pedagogical strategies, with greater emphasis on process-oriented learning, in-class assessments, and tasks that require spontaneous language use. Such approaches can help ensure that learners engage meaningfully with language rather than relying solely on technological assistance.

At the same time, it is important to recognize that artificial intelligence is not inherently detrimental to language education. When used judiciously, AI tools can support learning by providing immediate feedback, facilitating practice, and offering exposure to diverse linguistic forms. The challenge, therefore, lies in achieving a balance between leveraging the benefits of AI and maintaining the integrity of language learning processes. Educators must play a crucial role in guiding students toward responsible and reflective use of these technologies, fostering an awareness of their limitations as well as their potential.

Ultimately, the illusion of fluency underscores a fundamental shift in the nature of language learning in the digital age. It calls for a redefinition of what

it means to be proficient in a language, moving beyond surface-level performance to emphasize independent, adaptable, and context-sensitive competence. As artificial intelligence continues to evolve, it is imperative that educational practices evolve alongside it, ensuring that technological advancement enhances rather than undermines the core objectives of English language teaching. Only through such a balanced and critical approach can the gap between performance and competence be effectively addressed.

REFERENCES

1. Carr, Nicholas. *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton, 2010.
2. Flower, Linda, and John R. Hayes. "A Cognitive Process Theory of Writing." *College Composition and Communication*, vol. 32, no. 4, 1981, pp. 365–387.
3. Krashen, Stephen D. *Principles and Practice in Second Language Acquisition*. Pergamon Press, 1982.
4. Nation, I. S. P. *Learning Vocabulary in another Language*. Cambridge University Press, 2001.
5. Rosen, Larry D. *iDisorder: Understanding Our Obsession with Technology and Overcoming Its Hold on Us*. Palgrave Macmillan, 2012.
6. Selwyn, Neil. *Education and Technology: Key Issues and Debates*. Bloomsbury Academic, 2016.

Chapter 39

The Future of English As a Global Language in An AI-dominated World

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ABSTRACT

Introduction Artificial Intelligence (AI) is rapidly evolving and influencing many areas, including language studies and practices. With English being the dominant international lingua franca, AI-related technologies can have significant effects on the ways English is taught, learned, communicated, and researched worldwide. This paper aims to discuss the future of English as a global language under the conditions of technological development and dominance of AI. In particular, this paper seeks to explore the relationships between communication, technology, linguistics, and education in terms of English language. Methodology, in order to analyse the topic in question, this paper considers the ways AI influences the linguistic situation in general and English language specifically. Discussion While AI can change some aspects of linguistic practices, it cannot make English lose its position as the dominant global language. Instead, AI can redefine the place of English and create new opportunities for teaching, communicating, researching, and using this language. In this way, English language can evolve and transform into an even more powerful global language that integrates AI-related practices and technologies. Conclusion to conclude, despite the evolution of technological practices and AI, English language will remain relevant on a global scale.

Keywords: Artificial Intelligence, Global English, Digital Humanities, Language Evolution, English Studies, AI-mediated Communication, ELT.

INTRODUCTION

English language has held its place as the most popular international language of communication for centuries, being employed in various aspects, such as education, diplomacy, scientific communication, business operations, and online interaction. The modern era of Artificial Intelligence is the one when English language is being applied to perform even more functions than before as a means of intercultural communication and, hence, poses several questions for consideration.

The modern world relies more on digital technologies based on linguistic resources, with English continuing to dominate as the language of choice. English acts as an important means of generating, storing, and distributing information, whether in search engines, artificial intelligence, chatbots, education, or other fields. The current research examines the influence of AI on the development, distribution, and future of English in a dynamic international environment.

English as a Global Language: Historical Context

The global role of the English language can be traced back to history, politics, and economics. The initial impetus for the growth of English was provided by the British Empire. Subsequently, the economic supremacy of the United States helped solidify its position. In today's day and age, English has become the language of international conferences, scientific publications, flights, business transactions, and electronic media. According to many linguists, including David Crystal, the widespread use of English throughout the world can be attributed to the political dominance of English-speaking individuals as well as the economic prosperity associated with English-speaking countries. This dominance has even widened during the age of the internet. A good number of contents in the web, databases for research purposes, and computer software have been created in English. This long-standing dominance forms the basis on which AI systems are developed today.

Artificial Intelligence and Language Transformation

Artificial Intelligence is a term used to describe computational machines whose capabilities include learning, reasoning, and language comprehension. When it comes to languages, AI operates on natural language processing, machine learning, and deep learning algorithms.

AI has transformed language use in several ways:

- Automated grammar correction n- machine translation
- Speech-to-text systems
- Text generation
- Sentiment analysis
- Personalized language tutoring
- Content summarization

This is because there are numerous textual resources of the English language available on the Internet. As a result, the English language becomes both the tool and the target of AI-induced linguistic development.

AI and the Reinforcement of English Dominance

It is one of the primary claims in this article that AI technology contributes to maintaining the supremacy of English globally. AI systems are mainly designed within the English-speaking context and learn primarily from English data.

Examples include:

- Large language models
- AI writing assistants
- Educational chatbots
- Automated feedback tools
- Academic search engines

As these tools tend to work well in English, people all over the globe are urged to use them in English, thereby increasing its prominence. For example, students who speak languages other than English frequently resort to AI systems when conducting research papers, literature reviews, or communicating. Similarly, professionals from different backgrounds rely on AI systems in English for preparing their emails, reports, and other research materials.

THE CHANGING NATURE OF GLOBAL ENGLISH IN DIGITAL SPACES

While AI increases the importance of English in the global sphere, it also impacts the way English itself looks. Modern digital English is increasingly adaptable, brief, and multifaceted.

Features of digital English include:

- Shortened expressions

- Platform-based discourse styles
- Code-mixing
- Emoji-supported communication
- AI-suggested phrasing
- Globalized vocabulary

The use of AI in writing affects not only the choice of words but the grammar, tone, and sentence structures as well. With continuous usage, AI will contribute to standardization of specific styles of English language and even promote regional dialects at the same time. Thus, the idea emerges that of AI-modified Global English.

English Language Teaching in the Age of AI

The future of English is closely tied to the future of English Language Teaching (ELT).. AI has already transformed pedagogy through:

- Adaptive learning systems
- Intelligent tutoring platforms
- Automated essay scoring
- Pronunciation assessment tools
- Chatbot-based speaking practice
- Personalized learning paths

The development makes the study of English language much easier for the learners. For instance, using an artificial intelligence platform, one may get to know their weaknesses as regards grammar, vocabulary, pronunciation, and understanding. Through analysing the performance, artificial intelligence generates exercises for the learners. Furthermore, teachers have started using artificial intelligence within their classes. Artificial intelligence serves not to replace teachers but to become an assistive tool for teaching.

English, AI, and Academic Writing

Academic writing is one of the major domains where AI is redefining the use of English. Research scholars now employ AI tools for:

- Paraphrasing
- Grammar correction
- Citation formatting
- Abstract generation

- Literature review support
- Language refinement

This innovation is especially relevant to academics who do not speak English natively AI makes language no longer an issue and allows for greater involvement in international academic dialogue. Nonetheless, it brings up the problem of originality and authorship. Thus, the importance of English as the language of scholarly legitimacy is reevaluated by means of AI technology.

CROSS-CULTURAL COMMUNICATION AND ENGLISH IN AI SYSTEMS

The English language continues to serve as a bridging language in international communication processes. Neural machine translation technology based on AI utilizes English as an intermediate language more frequently than ever before. In effect, the process of communication between two non-English languages involves the English language at some point during the process. Therefore, the English language serves a structurally important position in the international AI communication network. Nevertheless, AI encourages intercultural communication in the form of multilingualism. The future role of the English language does not involve its domination; rather, it will coexist with other languages.

THE DEMOCRATIZATION OF ENGLISH THROUGH AI

English learning and utilization have become more democratic because of AI. Rural students, poor students, and distant students can learn English from quality resources. This includes:

- Free language learning apps
- AI-based speaking assistants
- Online writing tools
- Virtual classrooms
- Automated feedback systems

These technologies help lessen educational disparities and increase access to worldwide possibilities. This democratization makes English a global language since it enables more people to use it efficiently.

CHALLENGES AND CRITICAL CONCERNS

While AI-powered English language proves to be quite useful, there are some problems associated with it. Firstly, one should note that over-reliance on AI

programs for writing, editing, and communicating poses a serious threat to an individual's ability to communicate without any help from AI technologies. Secondly, the problem of linguistic bias should be mentioned here since most AI systems are programmed using standard versions of English language, which makes other forms of dialects or non-native English languages less popular. Moreover, ethical issues such as plagiarism and authorship are raised when one writes professionally or academically.

Linguistic Homogenization

By linguistic homogenization, we understand that many varieties of English become similar to each other due to the impact of artificial intelligence technology and various digital environments. As most artificial intelligence technologies operate based on the use of common language forms, they tend to favour a single style of grammar and vocabulary. Thus, there is a chance that various regional dialects, slang languages, or local languages might be ignored during the operation of AI technology, which can cause linguistic uniformity and a possible lack of linguistic variety.

Algorithmic Bias

Algorithmic bias refers to the hidden unfairness that can occur in AI systems because they learn from the data they are trained on. When most of this data comes from standard English sources or specific regions, the system may favour certain accents, writing styles, or cultural expressions over others. As a result, people who use regional dialects, non-native English, or different speech patterns may not receive accurate responses or fair representation. This can create inequality in communication and learning. In the context of English studies, algorithmic bias raises important concerns about inclusivity, diversity, and the need for more balanced language technologies.

Overdependence on AI

Dependence on AI is characterized by the tendency of using AI tools excessively in the process of writing, studying, and communicating. Though AI can be instrumental in terms of editing grammar errors, generating ideas, and enhancing sentences, it may limit an individual's ability to think and express themselves through the language. Students and scholars may become dependent on AI when carrying out tasks that require critical reasoning and analysis. In the long run, this might have a negative effect on the uniqueness of the content of the text. Human language is strongly tied to one's thoughts and emotions.

Ethical Concerns

The main ethical considerations involved in the application of AI technology include authenticity, originality, and the manner in which the AI is utilized. While writing essays and conducting research, the use of AI software is allowed in tasks like writing, paraphrasing, and editing. However, there is a possibility that the individual may misuse the AI software. For instance, students or researchers might rely on the output from the software without fully comprehending the content, resulting in instances of plagiarism and improper authorship. Furthermore, it becomes challenging to establish whether the creator of the concepts is the writer or the software itself.

ENGLISH STUDIES AND DIGITAL HUMANITIES

For those working in English, the AI technology brings in new ways to study literary texts. Literary analysis, corpus analysis, discourse analysis, and stylistics become possible through AI technologies. Thus, traditional English literary studies transform into an interdisciplinary area related to digital humanities. Textual analysis with the help of AI allows one to analyse theme.

REFERENCES

1. Crystal, David. *English as a Global Language*. 2nd ed., Cambridge UP, 2003.
2. Crystal, David. *Language and the Internet*. 2nd ed., Cambridge UP, 2006.
3. Fairclough, Norman. *Language and Globalization*. Routledge, 2006.
4. Pennycook, Alastair. *Global Englishes and Transcultural Flows*. Routledge, 2007.
5. Russell, Stuart, and Peter Norvig. *Artificial Intelligence: A Modern Approach*. 4th ed., Pearson, 2021.
6. Broussard, Meredith. *Artificial Unintelligence: How Computers Misunderstand the World*. MIT Press, 2018.
7. Modern Language Association. *MLA Handbook*. 9th ed., MLA, 2021.
8. "Digital Humanities." *Encyclopaedia Britannica*, www.britannica.com/topic/digital-humanities. Accessed 11 Apr. 2026.
9. Modern Language Association. "How Do I Cite Generative AI in MLA Style?" *MLA Style Center*, style.mla.org. Accessed 11 Apr. 2026.
10. University of Iowa Libraries. "Digital Humanities." *English Literature Research Areas*, guides.lib.uiowa.edu. Accessed 11 Apr. 2026.

Chapter 40

Reshaping English Language Learning Through AI-enhanced Games: A Pedagogical Perspective

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ABSTRACT

Artificial Intelligence (AI)-based learning techniques have considerably transformed the pedagogical landscape of English language education. Through the use of various digital tools, English as a Second Language learners are experiencing innovative modes of learning. AI has increasingly been integrated into classroom practices through app-based learning environments. However, there is insufficient evidence explaining how AI-based games support communicative competence, vocabulary development, and grammar acquisition. Previous research has shown that gamified learning improves language acquisition and enhances student engagement. AI-driven gamified platforms combine adaptive learning, real-time feedback, and interactive challenges to improve learning effectiveness. Drawing upon Ludwig Wittgenstein's concept of "language games," this study highlights how contextual learning environments enhance linguistic competence and communicative flexibility. AI-based platforms such as Quizizz, Classcraft, Blooket, Wordwall, and Kahoot demonstrate the effectiveness of gamification in creating dynamic learning environments that enhance participation, retention, and language proficiency. When thoughtfully integrated with traditional teaching strategies, AI-based games can enhance the effectiveness of English language

learning. This paper explores the pedagogical significance of AI-based gamification in English as a Second Language (ESL) and English as a Foreign Language (EFL) contexts and examines key challenges in AI integration, including accessibility, ethical concerns, and the need to balance technology with traditional pedagogy.

Keywords: Artificial Intelligence (AI), gamification, English language learning, communicative competence, adaptive learning.

1. INTRODUCTION

The evolution of language learning has been significantly influenced by technological advancement. Artificial Intelligence (AI) and gamification have transformed traditional teaching by introducing innovative learning approaches in the last few years. English language learning has benefited from the integration of AI-based tools.

Games encourage curiosity and interaction among learners and are recognized as powerful learning tools. Ludwig Wittgenstein introduced the concept of “language games,” highlighting the significance of context in comprehending meaning and communication. Language learning involves not only memorizing vocabulary and grammar but also understanding how language functions in real-life social contexts. The various technologies help learners refine listening, speaking, reading, and writing skills in an engaging environment. With the increasing demand for English proficiency in academic and professional settings, AI-enhanced language games provide innovative solutions that complement traditional classroom teaching.

2. LITERATURE REVIEW

Gamification refers to the application of game design elements in non-game contexts to enhance participation and engagement. Educational researchers have emphasized that game elements such as rewards, feedback, competition, and achievement levels create stimulating learning environments that promote persistence and goal-oriented learning behaviour.

Previous studies indicate that gamification enhances students’ analytical skills and improves learning outcomes. Deterding et al. define gamification as the use of game design elements in non-game contexts, while Hamari et al. highlight its effectiveness in increasing learners’ satisfaction. Research has also demonstrated that gamified environments promote deeper cognitive processing by encouraging learners to apply knowledge in problem-solving contexts.

Artificial Intelligence has further strengthened the effectiveness of gamified learning by enabling adaptive and personalized learning experiences. AI-driven educational systems analyse learner performance data to modify content difficulty levels according to individual progress. Adaptive learning environments allow

learners to progress at their own pace, improving confidence and reducing anxiety associated with language acquisition.

Studies focusing on instructed learning indicate that AI technologies reinforce memory, facilitate the learning of language rules, and develop communicative competence through **experiential** approaches and **experiential and interactive learning** environments. Intelligent tutoring systems and AI chatbots provide real-time feedback that enhances self-directed learning and self-regulated learning. However, researchers also emphasize the importance of balancing technological integration with human interaction to maintain meaningful learning experiences.

Although AI-based gamification demonstrates significant pedagogical potential, concerns regarding accessibility, technological dependency, and algorithmic bias remain relevant considerations. Continued research is necessary to evaluate long-term impacts of AI integration on language learning outcomes.

The rapid advancement of Artificial Intelligence (AI) and gamification in education has transformed traditional teaching methodologies, particularly in language learning. With the increasing demand for English proficiency in academic and professional settings, innovative solutions are required to enhance participation and learning outcomes. These platforms leverage AI algorithms to personalize learning experiences, adapting to individual learner needs based on performance data (Pham et al., 2020).

Several studies have highlighted the effectiveness of gamification in language learning. For instance, a study by Vassileva (2017) found that students using gamified platforms demonstrated higher engagement and retention compared to those in traditional learning settings. Similarly, AI-powered systems have been shown to improve learning efficiency by analyzing student performance and adjusting content accordingly (Lu et al., 2021). However, while AI and gamification present numerous advantages, challenges such as accessibility, AI bias, and over-reliance on technology remain concerns (Zawacki-Richter et al., 2019).

3. GAMIFICATION IN LANGUAGE LEARNING

Gamification has emerged as an effective pedagogical strategy and productive operational technique in educational environments. Implementing factors such as rewards, competition, levels, grammar acquisition and vocabulary development make language learning environments effective. In meaningful contexts, learners can apply linguistic knowledge through interrelated activities that create learning opportunities. The games enhance memory retention and improve comprehension with repetition and reinforcement.

Collaborative learning through group activities and peer interaction could be promoted by the gamified learning environments. Games make the students feel

less anxious while learning and they are encouraged to experiment with language, which improves their fluency. Gamified systems help learners identify errors and correct them immediately with the instant feedback, by promoting continuous improvement.

4. ROLE OF ARTIFICIAL INTELLIGENCE IN LANGUAGE LEARNING

Language learning can be enhanced through artificial intelligence by providing personalized and flexible learning opportunities for the learners. AI-powered tools **interpret learner data** and lay out tailored content that meets competence levels. These adaptive learning systems help learners identify their proficiency levels and learning gaps, enabling targeted improvement.

AI technologies like speech-to-text, automatic speech recognition (ASR), human language technology (HLT), computational linguistics, text analytics, human language engineering, intelligent computer-aided instruction (ICAI), AI tutors, and computer-based training (CBT) provide real-time assessment that enhances language skills or foster growth.

AI-driven language games provide engaging interactive interfaces that create immersive learning experiences. By utilizing AI language learning tools, it supports learners' cognitive development in critical thinking, creativity, and effective higher-order thinking, encouraging creative solutions and critical analysis of content. Learners engage and accomplish meaningful goals by applying linguistic knowledge in authentic scenarios.

Research Gap

In the recent times AI forayed into various aspects of educational interventions. It is widely used in classroom activities giving rise to app based AI learning. Gamification helped teachers in using tools that made the class interesting. However, there is insufficient evidence how AI based games support communicative competence, developing vocabulary, and acquisition of grammar.

Despite the growth in AI research, limited research examined the pedagogical integration of AI-driven gamification within English language teaching (ELT) in English Foreign Language (EFL) classrooms for diverse learners. This paper attempts to bridge this gap by examining the pedagogical applications or contributions of AI-enhanced language games

5. PEDAGOGICAL BENEFITS OF AI LANGUAGE GAMES

AI-based language games provide several pedagogical advantages that improve learning outcomes.

5.1 Increased Engagement

AI enhanced games foster engaging atmospheres, cultivating stimulating settings, and the features like avatars, leaderboards, and rewards motivate learners to complete tasks and achieve learning goals.

5.2 Repetition and Practice

Language acquisition requires continuous practice. AI games provide opportunities for repeated exposure to different pronunciation patterns and strengthening language retention.

5.3 Immediate Feedback

With the experiences of AI games, instantly providing tailored feedback based on learners' skill levels and providing a "co-creator" for learning make learning more engaging. By identifying the errors and improve performance, the immediate correction supports self-determined learning and promotes confidence.

5.4 Development of Communication Skills

Multiplayer and cooperative AI games encourage learners to communicate with peers and improve speaking and listening skills. Social interaction enhances fluency and language confidence.

5.5 Cognitive Development

AI games enhance problem-solving abilities, pattern recognition, and critical thinking skills. These cognitive benefits support overall academic development.

5.6 Creativity and Innovation

Collaborative learning environments encourage learners to explore new ideas and express themselves creatively. AI tools foster innovation by presenting challenges that require imaginative thinking.

6. AI-BASED PLATFORMS FOR ENGLISH LANGUAGE LEARNING

6.1 Quizizz AI

Quizizz AI enables educators to create interactive learning activities quickly. The platform enhances involvement through gamified elements such as leaderboards, avatars, and rewards (Hamari et al., 2014; Wang & Tahir, 2020). AI-generated

explanations support self-paced learning and help learners understand mistakes (Su & Cheng, 2015).

It provides a variety of activities, interactions and competitiveness. It can help the teachers to generate Multiple Choice Questions (MCQs) quiz from a single instruction within a minute. The platform reduces teacher workload by automatically generating formative assessment questions **instead of drafting questions manually**.

Some of the games like live leaderboards, avatars, memes, and power-ups encourages learners to acquire AI-generated quizzes. The users can customize the content from the YouTube videos, PDFs, websites and can be transformed into MCQs, fill-in-the-blank etc. With the help of AI generated explanations, the users attempt to recognize self-correction and facilitating personalized learning through increase engagement solving problems. It helps in accommodating the diverse learners to adjust in difficulty levels and translating questions to other languages.

6.2 Classcraft AI

Classcraft AI promotes collaborative learning through role-playing and storytelling elements (Dicheva et al., 2015). The platform encourages teamwork, contribution, and behavioural involvement (Hamari et al., 2014). AI-generated content assists teachers in creating lesson plans, classroom activities, and observations efficiently.

It encourages learners' motivation, encouraging teamwork and creates an immersive learning environment that increases commitment by implementing the AI driven games. It also helps in providing immediate response with "Turn and Talk." By analyzing the learners' performance data in real-time, develop their ability to reason and solve problems by analyzing and determining what they represent after the customized AI instructions. It helps the teachers for the attendance and tracking behavior of the students by lessening the burden of the facilitators. It creates required materials for the specific standards and qualifications.

6.3 Blooket AI

Blooket AI supports collaborative learning through customizable games that improve vocabulary and grammar retention (Su & Cheng, 2015). The platform encourages active involvement and provides real-time performance estimation.

Learners progress through engaging activities that enhance encouragement (Hamari et al., 2014). Generate multiple-choice questions instantly to AI tools like Khanmigo or ChatGPT with the documents or inputs by the teachers. Aligning content for a specific objective and outcome towards difficulty can be generated by the educators to set it properly. Users are required to participate actively, think

fast and store the information better with repetitions without making mistakes. Reinforces learning by providing immediate responses to right or wrong answers by finding gaps in different real-time immediate identification /situations by the platform.

6.4 Wordwall AI

Wordwall AI allows educators to create quizzes, flashcards, and matching activities easily supporting interactive learning environments (Dicheva et al., 2015). The platform provides printable and digital resources, making it flexible for both online and classroom learning environments.

Educational content like Questions through quiz or words can be created and tailored instantly by this AI. The various interactive games, like Match Up” or “Whack-a-Mole,” can be completed in or under a minute by the teachers. It allows teachers to track individual student performance, increase their collaboration and continuous learning process (Su & Cheng, 2015). It can provide the fresh lessons with one click and the content can be generated and edited easily. The worksheets of any interactive play, assignment in printed form can be used for an in-class activity as in traditional way. The pre-existing community resources of 30 million and over can be accessed, used and edited by the teachers. With diverse classrooms setting, it can provide or support over 40 languages which suits for language learning.

6.5 Kahoot AI

Kahoot AI enables teachers to create collaborative quizzes and presentations quickly improving engagement and classroom interaction (Wang & Tahir, 2020; Plump & LaRosa, 2017). The platform supports individualized learning experiences and enhances student activity through gamified challenges (Hamari et al., 2014). By uploading PDFs, by pasting URLs, or any topic inputs, it can create quizzes, flashcards and presentations by the facilitators. It can provide a number of lessons or review materials in under a minute by the educators. It can make every individual participating actively from passive learning attitude and the games make collaborative with the help of AI generated question types. Digitize notes into quizzes, solve complex problems, and simulate exams to maximize study productivity. Turns handwritten notes into active recall quizzes, get instant step-by-step solutions for homework, and take mock tests to prepare for finals. Without a Wi-Fi connection, it can enable students creating and playing Kahoot sessions including the reading impairment learners of the functionality of text-to-speech as per the learning pace and experience of every individual learner, it enables specific curricula fit for the learners.

7. CHALLENGES AND LIMITATIONS

Despite the benefits of AI-powered language games, certain challenges must be considered. Inequality among learners may be created with the limited access to digital technology. The language can be developed by the face-to-face interaction which it may reduce the opportunities because of the overdependence of AI tools. The quality of experiences may be affected by the algorithmic bias and technical limitations. In addition to it, the effective training and teaching practices are required for the teachers to integrate AI tools in their teaching. Ensuring traditional teaching approaches along with the AI technologies is a must for meaningful outcomes.

8. IMPLICATIONS FOR EDUCATORS

Educators play an essential role in preparing the curriculum by implementing the AI based games. Including the traditional instructional methods, the AI tools can be used and incorporated communicative teaching approaches.

As per the requirement of learners' know-how levels, educational levels, and core curriculum, the facilitators should choose AI platforms. AI technologies can be used effectively by the educators to foster the required skills after the professional training programs. The facilitators can create learner-centered environments by encompassing AI language games decisively emphasizing on team-work, innovativeness, and analytical reasoning.

9. CONCLUSION

Artificial Intelligence introduces multi-sensory learning experience using sound, text, and images in English language learning environments. It enables learners to develop real-life communication skills in meaningful contexts. Gamification facilitates interactive participation and reinforces competence enhancement, intellectual advancement, divergent thinking, and technological fluency empowering learners in technological skills required in contemporary learning environments.

Despite challenges such as accessibility and virtual dependency exist when implemented thoughtfully, the limitations are outweighed by the AI-driven language games. For the enhancement of the English language education and supporting holistic learner development, AI-powered gamification indicates a potential solution used ethically.

Future research may further explore the long-term effects of AI-enhanced game-based learning on linguistic competence, learner-centeredness, and global

communicative competence across different stages of learning and cross-cultural settings. Overall, AI-enhanced gamification can significantly contribute to the holistic development of language learners when implemented judiciously in classroom settings based on instructional needs.

REFERENCES

1. Al-Azawi, R., Al-Faliti, F., & Al-Blushi, M. (2016). Educational gamification vs. game-based learning: Comparative study. *International Journal of Innovation, Management and Technology*, 7(4), 132–136.
2. Bond, M., Khosravi, H., De Laat, M., Bergdahl, N., & others. (2024). A meta systematic review of artificial intelligence in higher education: A call for ethics, collaboration, and rigour. *International Journal of Educational Technology in Higher Education*, 21(4). <https://doi.org/10.1186/s41239-023-00436-z>
3. Burden, K., & Kearney, M. (2018). Designing for student engagement in mobile learning: A framework for practitioner reflection. *Research in Learning Technology*, 26, 1–14. <https://doi.org/10.25304/rlt.v26.1847>
4. Byrne, D. (1986). *Teaching oral English*. Longman.
5. Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining gamification. In *Proceedings of the 15th International Academic MindTrek Conference* (pp.9–15). Association for Computing Machinery. <https://doi.org/10.1145/2181037.2181040>
6. Dicheva, D., Dichev, C., Agre, G., & Angelova, G. (2015). Gamification in education: A systematic mapping study. *Educational Technology & Society*, 18(3), 75–88.
7. Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press.
8. Garzón, J., Patiño, E., & Marulanda, C. (2025). Systematic review of artificial intelligence in education: Trends, benefits, and challenges. *Multimodal Technologies and Interaction*, 9(8), 84. <https://doi.org/10.3390/mti9080084>
9. Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language Learning & Technology*, 22(3), 1–17.
10. Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. In *Proceedings of the 47th Hawaii International Conference on System Sciences* (pp. 3025–3034). IEEE. <https://doi.org/10.1109/HICSS.2014.377>
11. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
12. Lu, X., Huang, Y., & Zhang, M. (2021). Artificial intelligence in language education: Applications and implications. *Computer Assisted Language Learning*, 34(8), 1122–1145. <https://doi.org/10.1080/09588221.2020.1720254>
13. Pham, Q., Nguyen, T., & Hwang, G. (2020). Adaptive learning systems and their impact on student performance. *Educational Technology & Society*, 23(1), 56–68.
14. Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the classroom to create engagement and active learning. *Management Teaching Review*, 2(2), 151–158. <https://doi.org/10.1177/2379298116689783>

15. Rahman, A., Raj, A., Tomy, P., & Hameed, M. S. (2024). A comprehensive bibliometric and content analysis of artificial intelligence in language learning (2017–2023). *Artificial Intelligence Review*, 57, 107. <https://doi.org/10.1007/s10462-023-10643-9>
16. Rohrbach, J. (2018). How new technologies are changing language learning, for better and worse. *Forbes*.
17. <https://www.forbes.com/sites/forbesnycouncil/2018/05/10/how-new-technologies-are-changing-language-learning-for-better-and-worse/> (Accessed: 05 July 2024).
18. Su, C., & Cheng, C. (2015). A mobile gamification learning system for improving the learning motivation and achievement. *Journal of Computer Assisted Learning*, 31(3), 268–286. <https://doi.org/10.1111/jcal.12088>
19. Vassileva, J. (2017). Gamification in education: What, how, why bother? *IEEE Transactions on Learning Technologies*, 10(3), 1–12.
20. Wang, Y., & Tahir, R. (2020). The effect of using artificial intelligence in education: A systematic review. *Educational Technology Research and Development*, 68(4), 215–234. <https://doi.org/10.1007/s11423-020-09795-9>
21. Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning – A literature review. *Computers & Education*, 149, 103818. <https://doi.org/10.1016/j.compedu.2020.103818>
22. Wittgenstein, L. (1953). *Philosophical investigations*. Blackwell.
23. Zawacki-Richter, O., Marín, V., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(39), 1–27.
24. <https://doi.org/10.1186/s41239-019-0171-0>

Chapter 41

Preparing Students for AI Driven World

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ABSTRACT

The rapid advancement of Artificial Intelligence (AI) technologies, especially in the field of education, constitutes a dynamically evolving domain, characterized by an extensive corpus of empirical research and a multifaceted repertoire of applications. These encompass adaptive learning platforms, personalized tutoring systems, intelligent assessment instruments, predictive analytics frameworks, and burgeoning array of AI-mediated pedagogical interventions. Within this paradigmatic context, the trajectory of preparing students to embrace the academic world with courage and confidence necessitates a resolute integration of Artificial Intelligence (AI) as a pivotal catalyst for scholarly innovation. This trend presents both challenges and opportunities for the academic world. This paper delineates the imperative for curriculum adaptations to integrate Gen AI tools into educational field and effectively equip students for future dominated Artificial Intelligence (AI). The chief objective is to foster interdisciplinary AI literacy via stratified curricular modules encompassing foundational principles, pragmatic applications, and sophisticated methodologies. Further, to look into the pedagogical approaches that emphasize active learning strategies and establishing a robust partnership with industry as well as research institutions. Moreover, capacity building programmes as well as assessment straggles also play a vital role to make students flourish in techno-pedagogical terrain. Additionally, this paper furnishes a blue print for faculty, institutions and policy makers in empowering students to face the world of Artificial Intelligence (AI) with grace and dignity.

Key Words: Artificial Intelligence; challenges and opportunities; AI-mediated pedagogical interventions; curricular modules; sophisticated methodologies; pedagogical approaches.

1.0 INTRODUCTION

The rise of artificial intelligence (AI) is transforming the workplace and society. As AI systems take on more complex cognitive tasks, skills like creativity, critical thinking, and adaptability will become increasingly important for human workers. Education systems need to evolve to prepare students for an AI-driven world.

Artificial Intelligence (AI) refers to the simulation of human intelligence processes by machines, especially computer systems. AI technologies include machine learning, natural language processing, computer vision, and robotics. These technologies enable machines to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and decision-making.

In recent years, the integration of AI technologies into educational settings has revolutionized traditional teaching and learning methods, offering new opportunities for personalized, adaptive, and efficient educational experiences. AI has the potential to revolutionize education by providing personalized learning experiences, automating administrative tasks, and improving educational outcomes.

The integration of Artificial Intelligence (AI) in education offers numerous benefits such as: enhanced instructional support; adaptive learning systems; personalized learning; data-driven insights; automation of administrative tasks; scalability and cost-effectiveness; support for inclusive education; access to high-quality educational resources; handling Teacher shortages; lifelong learning and professional development; Real-time feedback; and innovations in educational research.

John McCarthy (1927-2011) was an American computer scientist and cognitive scientist. McCarthy was one of the founders of the discipline of artificial intelligence. AI in education has a rich history, dating back to the mid-20th century, with early efforts focused on creating intelligent tutoring systems (ITS). Early systems like PLATO (Programmed Logic for Automatic Teaching Operations) in the 1960s laid the groundwork for AI applications in education. The 1980s saw the emergence of expert systems and rule-based AI, enabling more sophisticated ITS. By the late 1990s and early 2000s, advancements in machine learning and natural language processing led to the development of more adaptive and personalized learning systems.

History of AI in Education

Table showing history of AI in Education

<i>S.No</i>	<i>Stage</i>	<i>Developments</i>
1.	Early beginnings	Potential of computers to stimulate human intelligence in educational contexts.”Tutoring Systems” developed by researchers like Patrick Suppes and Richard Atkinson .
2	Intelligent Tutoring Systems (ITS)	Employing AI techniques to provide personalized instruction and feedback to students Developing Notable ITS projects, such as the “Computer-Assisted Instruction” (CAI) systems, and etc.
3	Expert Systems and Knowledge-Based Systems	The emergence of expert systems and knowledge-based systems Applying ES systems like MYCIN, and Dendral to educational content
4	Cognitive Modeling and Learning Sciences	Intersection of AI and cognitive psychology Exploring the role of AI in supporting constructivist learning approaches
5	Machine Learning and Data Analytics	The advent of machine learning algorithms and data analytics
6	Modern Applications and Innovations	Advancements in AI technologies, including natural language processing, computer vision, and affective computing AI-powered educational platforms, intelligent tutoring systems, educational chatbots, virtual reality simulations, and personalized learning systems

1.2 INTERNATIONAL AND NATIONAL INITIATIVES

UNESCO is committed to supporting Member States to harness the potential of AI technologies for achieving the Education 2030 Agenda, while ensuring that its application in educational contexts is guided by the core principles of inclusion and equity.

UNESCO’s mandate calls inherently for a *human-centered approach to AI*. It aims to shift the conversation to include AI’s role in addressing current inequalities regarding access to knowledge, research and the diversity of cultural expressions and to ensure AI does not widen the technological divides within and between countries. The promise of “AI for all” must be that everyone can take advantage of the technological revolution under way and access its fruits, notably in terms of innovation and knowledge.

The National Education Policy 2020 incorporates all the technological components, with a strong emphasis on artificial intelligence (AI). The policy promises to develop instructional software based on artificial intelligence that will be made available in all local or regional languages. These software or programs will be widely accessible and beneficial to students, even those who attend school in extremely rural areas or have special needs.

NEP 2020 recognizes that children have a range of learning styles, interests, and aptitudes, which focus on the need for individualized learning. By analyzing data about each student's learning styles, interests, and aptitudes, AI is enabling individualized learning.

The NEP 2020 also states that AI technology will help in the development of smart classrooms that will permit online interactions and collaborations with students from various schools across the world, online exams, applications with quizzes, and information that can develop the students.

The NEP 2020 acknowledges the value of experiential learning and skill development in preparing students for employment opportunities of the twenty-first century. Students have access to courses that emphasize skill development through AI-powered learning platforms and remote learning tools.

Besides these, a digital platform i.e., National Teacher's Portal is a repository of all the e-content created by all state boards viz., CBSE, NCERT, ICSE, ISC, and others. These contents help the teachers in their professional development.

The Union Budget 2025–26 marks a strategic move with the announcement of a Centre of Excellence in Artificial Intelligence (AI), reinforcing India's commitment to lead in the global AI landscape. Aligned with NEP 2020's vision of integrating technology in education, this initiative aims to bridge the skill gap in AI, foster cutting-edge research, and prepare a future-ready workforce to meet evolving industry demands.

1.3 AI Driven world- Students

The advent of Artificial Intelligence (AI) has initiated a profound transformation in the field of education, reshaping pedagogical practices, curriculum development, assessment systems, teacher training programmes and administrative operations.

1. Pedagogical Practices

The integration of Artificial Intelligence (AI) into education has emerged as a pivotal area of research, offering transformative solutions to long-standing challenges in teaching and learning. AI is broadly defined as systems capable of performing human-like cognitive tasks, with

applications categorized as learner-oriented, instructor-oriented, and institutional system-oriented (Gomathi et al., 2022; Guan et al., 2020). Early AI research centered on intelligent tutoring systems, which mimicked teacher-student interactions to provide personalized feedback. Over time, advancements in big data and learning analytics have enabled AI systems to deliver highly personalized learning experiences, tailored to individual student needs and performance trends. AI tools such as adaptive learning platforms, intelligent tutoring systems, and simulation-based training frameworks have shown promise in bridging existing gaps. Privacy and data security issues further complicate the adoption of AI technologies, especially in sensitive educational contexts.

2. Curriculum Development

In today's educational landscape, AI integration is essential to designing curricula to meet the various learning requirements of students, enhance educational efficiency, prepare learners for a technology-driven future, and promote inclusivity and accessibility. Conventional educational approaches often fail to accommodate individual differences, leading to disengagement and inequitable outcomes. However, AI can analyze learners' performance data to create personalized learning paths that foster engagement and success. By managing administrative assignments like grading and resource distribution, AI allows educators to concentrate more on direct student interaction and instructional quality. As the job market increasingly demands technological proficiency, embedding AI literacy into curricula equips students with the critical skills necessary for navigating complex challenges.

3. Assessment Systems

Effective assessments in education are expected to adhere to core principles such as reliability, transparency, validity, relevance, and inclusivity. The advent of Artificial Intelligence (AI) has ushered in a new era of assessment methodologies and transformative approaches. AI-driven strategies are increasingly supplementing and enhancing traditional assessment and evaluation methods, offering unprecedented levels of efficiency, customization, and insights into student learning (Boafo et al, 2025). According to Wiggins & Wiggins (2019), the purpose of authentic assessments is to evaluate or assess students' abilities or performance in real-world through meaningful tasks. These forms of assessments and evaluations are more reliable as compared to take-home essay-based and

generic questions that can easily be copied, pasted and presented by students especially in this generative AI era.

4. Teacher Training Programmes

The integration of AI into teacher education aligns seamlessly with the vision articulated in India's National Education Policy (NEP) 2020 and the aspirational goals of Viksit Bharat (Developed India). NEP 2020 emphasizes the adoption of modern technologies to enhance teacher training, focusing on equity, accessibility, and quality. It advocates for competency-based training programs and the establishment of the National Educational Technology Forum (NETF) to advance the use of digital tools in education. AI-driven teacher training initiatives resonate with this vision, addressing the policy's mandate for lifelong learning opportunities and professional development.

5. Administrative Operations

The application of AI-driven automation in Indian administrative processes is imperative for overcoming existing challenges and unlocking numerous benefits. The multifaceted advantages encompass heightened efficiency, improved accuracy, and enhanced decision-making capabilities. Addressing challenges such as infrastructure disparities, skill gaps, and cultural resistance requires a concerted effort involving investments in technology, skill development programs, and effective change management strategies (Deepaak, 2024).

1.4 SWOT ANALYSIS FOR AI DRIVEN WORLD.

SWOT analysis is a strategic planning tool used by businesses to assess their strengths, weaknesses, opportunities, and threats. It involves identifying internal factors (strengths and weaknesses) that give a company an advantage or disadvantage, and external factors (opportunities and threats) that could impact the company's performance. This analysis helps organizations to develop a strategic plan for growth and success by leveraging their strengths, addressing weaknesses, taking advantage of opportunities, and mitigating threats.

Table showing SWOT analysis of AI Driven World

1. STRENGTHS

- 1) Personalized learning: AI can tailor educational materials and content to individual student needs and learning styles, allowing for a more personalized and effective learning experience.
- 2) Automation of administrative tasks: AI can streamline administrative processes such as grading, scheduling, and course planning, freeing up educators' time to focus on more meaningful interactions with students.

- 3) Data analysis and predictive analytics: AI can analyze student data to identify patterns and trends, helping educators make informed decisions about student progress and performance.
- 4) Improving accessibility: AI can provide opportunities for students with disabilities to access educational materials and resources through tools like speech recognition software and text-to-speech technology.
- 5) Enhancing engagement and motivation: AI can incorporate gamification and interactive elements into learning materials, making education more engaging and motivating for students.

2. WEAKNESSES

- 1) Lack of human interaction: AI may not be able to replicate the emotional connection and support that comes from interactions with human teachers and peers, potentially leading to feelings of isolation for students.
- 2) Privacy concerns: AI collects a significant amount of student data, raising questions about how that data is stored, used, and protected from potential security breaches.
- 3) Bias and discrimination: AI algorithms can be predisposed to bias based on the data they are trained on, potentially leading to unfair treatment or discriminatory outcomes for certain student groups.
- 4) Cost and resource constraints: Implementing AI technology in education can be expensive and require significant resources, which may be a barrier for schools with limited budgets and infrastructure.
- 5) Technical limitations: AI technology is constantly evolving and may not always be reliable or accurate in its assessments and predictions, leading to potential errors or inaccuracies in educational outcomes.

3. OPPORTUNITIES

- 1) Personalized learning pathways: AI can help educators develop personalized learning pathways for students, allowing them to progress at their own pace and level of understanding.
- 2) Continuous learning and skill development: AI can support lifelong learning initiatives by providing on-demand access to educational resources and upskilling opportunities for individuals of all ages.
- 3) Collaboration and communication: AI can facilitate collaboration and communication among students and educators through virtual classrooms, online forums, and interactive learning platforms.
- 4) Global reach and accessibility: AI can help bridge the gap in educational disparities by providing access to quality education for students in remote or underserved areas.
- 5) Innovation and creativity: AI can inspire innovation and creativity in education through the development of new teaching methods, tools, and technologies that enhance the learning experience for students.

4. THREATS

- 1) **Job displacement:** The widespread adoption of AI in education may lead to the automation of certain teaching tasks, potentially displacing educators and support staff from their roles.
 - 2) **Resistance and skepticism:** Some educators, students, and parents may be hesitant to embrace AI technology in education due to concerns about its impact on traditional teaching practices and student learning outcomes.
 - 3) **Dependence on technology:** Over-reliance on AI in education may lead to a decrease in critical thinking skills, problem-solving abilities, and creativity among students who are not encouraged to engage in hands-on learning experiences.
 - 4) **Ethical dilemmas:** AI raises ethical dilemmas around issues such as data privacy, bias, and autonomy, which may challenge educators to navigate complex ethical considerations in their use of AI technology.
 - 5) **Technological barriers:** Schools with limited access to technology or inadequate infrastructure may struggle to implement AI in education, widening the digital divide and exacerbating educational inequalities among student populations.
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1.5 AI TOOLS IN EDUCATION

The education sector is one of the leaders in AI adoption. Among the artificial intelligence tools already being applied in education are:

1. AI Tutors: The Future of Personalized Learning

AI-powered virtual tutors are revolutionizing learning in schools and colleges. Unlike conventional chatbots or assistants, they can replace lectures, assess progress, and offer explanations tailored to each student's pace and level.

2. Simulations and Role Play for Active Learning

AI-based simulations can recreate business scenarios or ethical dilemmas in real time. Students face complex decisions with immediate *feedback*, developing critical skills for working life.

3. Gamification

Gamification has been used in education for years through rewards, levels, and progressive challenges. The new twist is that AI allows us to take these strategies much further, adapting challenges to each student's pace and constantly fine-tuning the difficulty level.

4. Virtual Assistants

While *AI tutors* are designed to teach and adapt learning to each student's pace, virtual assistants focus on providing academic and administrative

support. More and more universities are turning to chatbots to answer frequently asked questions, check calendars, or carry out administrative tasks.

1.6 CONCLUSION

The rapid advancement of Artificial Intelligence (AI) technologies, especially in the field of education, constitutes a dynamically evolving domain, characterized by an extensive corpus of empirical research and a multifaceted repertoire of applications. These encompass adaptive learning platforms, personalized tutoring systems, intelligent assessment instruments, predictive analytics frameworks, and burgeoning array of AI-mediated pedagogical interventions. Within this paradigmatic context, the trajectory of preparing students to embrace the academic world with courage and confidence necessitates a resolute integration of Artificial Intelligence (AI) as a pivotal catalyst for scholarly innovation.

The interdisciplinary competencies needed in an AI era necessitate rethinking both what is taught and how. Curriculum and teaching strategies rooted in the 20th-century industrial model will not adequately cultivate the flexible, well-rounded skill sets humans need to complement AI systems and continue innovating. Policymakers and education leaders must collaborate to build the learning environments students need to think critically, work creatively, and thrive in an AI-driven world. Ultimately, the goal is to prepare students to be competitive and effective contributors in an increasingly AI and interconnected world.

REFERENCES

1. Arokkiya Mary,S.T and. Suganthi.S (2024) Overview of Artificial Intelligence in Education: A Literature Survey. *International Journal for Multidisciplinary Research*. Vol.6, Issue.2, pp.1-8.
2. Benzaghta MA, Elwalda A, Mousa M, et al. SWOT analysis applications: An integrative literature review. *Journal of Global Business Insights*. 2021; 6(1): 55-73.
3. Bidisha Borchetia, Mridula Hazarika (2024) Artificial Intelligence in Education: An Overview. *Journal of Emerging Technologies and Innovative Research (JETIR)*. Volume 11, Issue 2,pp.b424-428.
4. Deepak Kumar (2024) AI-Driven Automation in Administrative Processes: Enhancing Efficiency and Accuracy. *International Journal of Engineering Science and Humanities*.Vol.1,Issue.1 pp.256-265.
5. Farahani MS, Ghasmi G. (2024) Artificial Intelligence in education: A comprehensive study. *Forum for Education Studies*.2(2): 1-7.
6. Fedrick Bofo, Anim P A and Arthur Emmanuel (2025) **Effective Ways of Assessment In The AI Era**. Paper presented at the Conference: Empowering Education: Navigating the Landscape of Meaningful Student Engagement, Lancaster University Education

- Conference 2024At: LU Ghana, Beijing Jiaotong University China, Sunway University Malaysia, LU Leipzig Germany, Deakin LU Indonesia
7. Marulasiddappa (2025) AI-Driven Education in the 21st Century: Transforming Teaching and Learning Paradigms. *International Journal of Innovative Research in Technology*. Volume 11 Issue 12, pp.8982-8987.
 8. Megha Jain, Ritu (2024) Artificial Intelligence in Teacher Education. *International Journal of Research Publication and Reviews*, Vol (5), Issue (12), Page – 1333-1335
 9. Shaji George.A (2023) Preparing Students for an AI-Driven World: Rethinking Curriculum and Pedagogy in the Age of Artificial Intelligence. *Partners Universal Innovative Research Publication (PUIRP)*, 01(02), pp.112-136,
 10. Soumyadarshan Nayak (2025) Analyzing the Integration of Artificial Intelligence in Fostering 21st-Century Competencies and Socio-Emotional Learning in Education: Opportunities and Challenges. *International Journal for Multidisciplinary Research*. Volume 7, Issue 3.

Chapter 42

AI-based and Traditional Approaches to Teaching and Learning English: A Comparative Analysis

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ABSTRACT

In the rapidly evolving landscape of education, the integration of Artificial Intelligence (AI) has significantly transformed the methods of English language teaching. This study presents a comparative analysis of traditional and AI-assisted approaches, focusing on their effectiveness, challenges, and future directions. Traditional methods, based on teacher-led instruction, classroom interaction, and textbook-oriented learning, have long been central to language education. In contrast, AI-assisted tools provide personalized, flexible, and technology-driven learning experiences. The research adopts a mixed-method approach, utilizing a structured questionnaire to collect data from students and teachers in a semi-urban educational context. The findings indicate that AI-assisted methods are highly effective in improving grammar, vocabulary, and providing instant feedback, while traditional teaching plays a crucial role in enhancing speaking skills, confidence, and emotional understanding.

However, both approaches present certain limitations. Traditional teaching lacks flexibility and individualized attention, whereas AI-based learning faces challenges such as limited human interaction, over-dependence on technology, and the digital divide. The study concludes that a blended approach, combining traditional and AI-assisted methods, is the most effective strategy for improving English language learning outcomes.

Keywords: English Language Teaching (ELT), Artificial Intelligence (AI) in Education, Traditional Teaching Methods, AI-Assisted Learning, Language Learning

Technologies, Student Engagement, Learning Outcomes, Digital Education, Blended Learning, Educational Technology, Personalized Learning, Teaching Effectiveness.

1. INTRODUCTION

English language proficiency has become an essential skill in today's globalized world, particularly in a diverse and developing country like India, where it plays a crucial role in education, employment, and social mobility. For decades, English has been taught primarily through traditional classroom methods that rely on textbooks, teacher-led instruction, and face-to-face interaction. In many institutions, especially in semi-urban and rural areas, these methods continue to dominate due to their accessibility and familiarity. Teachers not only deliver content but also act as facilitators of communication, helping students develop confidence in speaking and understanding the language within a social context.

In recent years, however, the integration of Artificial Intelligence (AI) into education has begun to reshape the way English is taught and learned. AI-assisted tools such as language learning applications, automated writing assistants, and conversational chatbots have introduced new possibilities for personalized and flexible learning. These tools allow learners to receive immediate feedback, practice language skills independently, and access learning resources beyond the constraints of time and place. As a result, students are increasingly engaging with English not only inside the classroom but also through digital platforms in their daily lives. Despite the growing adoption of AI in language learning, there remains a significant debate regarding its effectiveness compared to traditional teaching methods. While AI offers efficiency, adaptability, and accessibility, it often lacks the human elements of teaching, such as emotional understanding, cultural context, and spontaneous interaction, which are essential for meaningful language acquisition. On the other hand, traditional methods, though sometimes perceived as rigid or slow, provide a structured environment and direct human engagement that many learners still rely on.

This contrast creates a need to critically examine both approaches in order to understand their respective strengths and limitations. Therefore, this study focuses on a comparative analysis of traditional and AI-assisted English teaching, with particular attention to their effectiveness, the challenges they present, and their implications for the future of education. By exploring these dimensions, the paper aims to contribute to a more balanced understanding of how English language teaching can evolve in a way that combines technological advancement with human-centered learning.

2. LITERATURE REVIEW

The integration of technology in English language teaching has been widely discussed by scholars over the years, with recent attention shifting toward the role of Artificial Intelligence (AI) in transforming pedagogical practices. Traditional English teaching methods, rooted in teacher-centered approaches, have long emphasized structured instruction, grammar translation, and classroom interaction. However, with the advancement of digital technologies, researchers have begun to explore more adaptive and learner-centered approaches.

Early research in Computer-Assisted Language Learning (CALL) highlighted the importance of technology in enhancing language acquisition. Scholars argue that technology supports interactive learning and provides access to diverse linguistic resources. Building on this foundation, recent studies have focused specifically on AI-driven tools and their impact on English language teaching.

- 2.1 A significant contribution to this field is the systematic review conducted by Syuhra, Chandra, and Rosalina (2025), which analyzed multiple studies on AI in English Language Teaching (ELT). Their findings indicate that AI tools such as chatbots, writing assistants, and pronunciation software significantly improve learners' linguistic accuracy, fluency, and engagement. The study also highlights that AI enables personalized learning and real-time feedback, which are often lacking in traditional classroom settings.
- 2.2 Kristiawan, Bashar, and Pradana (2024) examined the pedagogical outcomes of AI applications in language learning. Their review emphasizes that AI technologies, including intelligent tutoring systems and speech recognition tools, enhance learner autonomy and motivation. The researchers note that AI-based learning environments allow students to practice language skills independently, thereby increasing confidence and participation.
- 2.3 Further supporting these findings, Sharadgah and Sa'di (2022) conducted a comprehensive review of AI applications in ELT and found that AI contributes to improved language performance, particularly in writing and speaking skills. However, their study also points out limitations such as lack of contextual understanding and over-reliance on technology, which may hinder deeper learning.
- 2.4 Recent research by Law Cheh Pau, Melor Md Yunus, and Colin Wong Wei Lun (2026) highlights that AI tools contribute to vocabulary retention,

pronunciation improvement, and learner motivation. However, the study also emphasizes challenges such as digital inequality, lack of teacher training, and ethical concerns related to data privacy.

- 2.5 In addition, Almeahmadi (2024) explores the application of AI techniques in teaching English as a foreign language and argues that while AI offers innovative teaching methods, selecting appropriate tools remains a challenge due to rapid technological advancements.
- 2.6 From a broader perspective, Omonova (2025) notes that AI has significantly enhanced learner engagement and teaching efficiency but also raises concerns regarding cognitive overload, teacher readiness, and the need for pedagogical adaptation.

Despite these advancements, traditional teaching methods continue to play a crucial role in language education. Studies emphasize that human interaction, cultural context, and emotional intelligence provided by teachers cannot be fully replaced by AI. Researchers argue that effective language learning requires a balance between technological tools and human guidance.

Overall, the existing literature suggests that while AI-assisted teaching offers significant advantages in terms of personalization, accessibility, and engagement, it also presents challenges that must be addressed. Most scholars agree that the future of English language teaching lies in a blended approach that combines the strengths of both traditional and AI-based methods.

3. RESEARCH OBJECTIVES

- To analyze and compare the effectiveness of traditional and AI-assisted methods in English language teaching.
- To identify and evaluate the challenges associated with both traditional and AI-based teaching approaches.
- To examine the role of Artificial Intelligence in transforming and shaping the future of English language education.
- To propose an integrated (blended) approach that enhances student engagement and improves overall learning outcomes.

4. RESEARCH METHODOLOGY

This study adopts a descriptive and comparative research design to examine the effectiveness, challenges, and future implications of traditional and AI-assisted methods in English language teaching. The research aims to provide a balanced analysis by combining both qualitative and quantitative approaches.

4.1 Research Approach

A mixed-method approach has been used in this study. The quantitative aspect focuses on collecting numerical data through surveys, while the qualitative aspect includes interpretation of responses and general observations related to teaching practices and student experiences.

4.2 Data Collection Methods

The primary data for this study is collected through a structured questionnaire distributed among students and teachers involved in English language learning. The questionnaire includes both closed-ended and open-ended questions to gather comprehensive insights into their experiences with traditional and AI-assisted learning methods.

In addition to primary data, secondary data is collected from research papers, journals, and academic articles related to Artificial Intelligence in education and English language teaching.

4.3 Sample Size and Sampling Technique

The study is conducted on a sample of 30–50 respondents, including undergraduate students and English teachers from local colleges/institutions. A convenience sampling method is used due to ease of access and time constraints.

4.4 Data Analysis

The collected data is analyzed using basic statistical tools such as percentages and comparative analysis. Responses are interpreted to identify patterns related to student engagement, effectiveness of learning, and challenges faced in both teaching methods.

4.5 Research Tools

Questionnaire (Primary tool)

Observation (based on classroom or learning experience)

Secondary sources (journals, articles, reports)

5. LIMITATIONS OF THE STUDY

5.1 The sample size is limited and may not represent all learners

5.2 Responses may be subjective and based on personal experience

5.3 Limited access to advanced AI tools in some areas may affect results

6. CHALLENGES IN TRADITIONAL AND AI-ASSISTED ENGLISH TEACHING

In the context of English language teaching, both traditional and AI-assisted approaches present several challenges that influence their effectiveness and applicability.

- 6.1 Traditional teaching methods are often limited by a lack of individualized instruction, particularly in classrooms with large student populations. The standardized nature of curriculum delivery restricts flexibility, making it difficult to accommodate diverse learning styles and proficiency levels. Additionally, the process of providing feedback in traditional settings is relatively slow, which may hinder timely improvement in language skills. Another concern is the limited exposure to real-life communicative situations, which can affect learners' confidence and practical language usage.
- 6.2 On the other hand, AI-assisted English teaching introduces a different set of challenges. A primary concern is the absence of human interaction, which plays a crucial role in language acquisition. AI tools are unable to fully replicate emotional intelligence, cultural sensitivity, and spontaneous communication, which are essential components of effective language learning. Furthermore, the increasing reliance on AI technologies may lead to reduced critical thinking and learner autonomy.
- 6.3 The issue of the digital divide remains significant, especially in developing countries like India, where access to technology and stable internet connectivity is uneven. This limits the widespread adoption of AI-based learning tools. In addition, technical challenges, including software limitations and lack of digital literacy, can negatively impact the user experience. Concerns regarding data privacy and security also pose ethical challenges in the use of AI in education.
- 6.4 Overall, these challenges highlight the limitations inherent in both traditional and AI-assisted teaching methods. Addressing these issues is essential for developing a balanced and effective approach to English language teaching that integrates the strengths of both systems.

7. SCOPE OF THE STUDY

- 7.1 The present study focuses on a comparative analysis of traditional and AI-assisted methods in English language teaching, with specific reference to their effectiveness, challenges, and future implications. The scope of

the research is primarily limited to students and teachers involved in English language learning at the undergraduate level.

- 7.2 The study examines key aspects such as student engagement, learning outcomes, accessibility, and teaching efficiency in both traditional classroom settings and AI-supported learning environments. It also explores the role of emerging technologies in reshaping language education and highlights the growing importance of digital tools in modern pedagogy.
- 7.3 Geographically, the research is confined to a semi-urban educational context in India, where both traditional teaching practices and digital learning tools coexist. This context provides a realistic setting to understand the opportunities and limitations of integrating Artificial Intelligence into English language teaching.
- 7.4 However, the study does not cover advanced technical aspects of AI development or large-scale institutional implementation. Instead, it remains focused on the practical experiences of learners and educators. The findings of this research may be useful for teachers, students, and policymakers in designing more effective and inclusive English language teaching strategies.

8. MAIN ANALYSIS OF TRADITIONAL ENGLISH TEACHING (WITHOUT AI) AND AI-ASSISTED ENGLISH TEACHING

8.1 Traditional English Teaching (Without AI)

Traditional English language teaching has long been the foundation of formal education systems, particularly in countries like India. This approach primarily relies on structured classroom environments where the teacher plays a central role in delivering content and guiding students through the learning process.

One of the most common methods used in traditional teaching is the chalk-and-board technique, where teachers explain concepts, write examples, and conduct exercises in front of the class. This method allows for step-by-step explanation and ensures that all students follow a uniform pace of learning. Along with this, teacher-led instruction remains a key feature, where the teacher controls the flow of the lesson, provides explanations, and evaluates student performance.

Traditional teaching also places strong emphasis on textbooks and grammar-focused learning. Students are often trained in reading comprehension, writing skills, and grammatical accuracy through prescribed materials. These structured resources help in building a solid foundation in the language.

Another important aspect is classroom interaction, which includes discussions, question-answer sessions, and oral activities. This interaction plays a significant role in developing communication skills and confidence among learners.

8.2 Advantages of Traditional English Teaching

- 8.2.1 Traditional methods offer several benefits, particularly in terms of human engagement. The presence of a teacher ensures direct human connection, which is essential for motivation and guidance. Students can receive immediate clarification of doubts and personalized encouragement.
- 8.2.2 Moreover, traditional classrooms provide better opportunities for speaking practice and real-time communication. Face-to-face interaction helps learners improve pronunciation, fluency, and confidence in using the language.
- 8.2.3 Additionally, teachers bring emotional understanding and cultural context into the learning process. They can adapt their teaching based on students' behavior, emotions, and comprehension levels, which enhances the overall learning experience.

8.3 Limitations of Traditional English Teaching

- 8.3.1 Despite its strengths, traditional teaching also has certain limitations. One major drawback is the “one-size-fits-all” approach, where the same teaching method is applied to all students, regardless of their individual learning needs and abilities.
- 8.3.2 Another issue is the lack of flexibility. Learning is restricted to classroom hours, and students have limited opportunities to explore content at their own pace.
- 8.3.3 Furthermore, traditional methods often involve slow feedback mechanisms, especially in written tasks. This delay can affect the speed of learning and improvement.

8.4 AI-Assisted English Teaching

- 8.4.1 With the rapid advancement of digital technology, Artificial Intelligence (AI) has emerged as a transformative tool in English language teaching. AI-assisted learning incorporates various technologies such as chatbots, language learning applications, and speech recognition systems to enhance the learning experience. Tools like ChatGPT, Duolingo, and speech-based platforms provide learners with interactive and flexible ways to develop their language skills.

- 8.4.2 One of the key features of AI-assisted teaching is its ability to offer personalized learning experiences. These tools adapt to the learner's pace, proficiency level, and learning style, allowing for a more individualized approach compared to traditional classroom methods. Students can focus on specific areas such as vocabulary, grammar, pronunciation, or writing, based on their needs.
- 8.4.3 Another important advantage is the provision of instant feedback. AI tools can immediately correct errors in grammar, pronunciation, and sentence structure, enabling learners to recognize and improve their mistakes in real time. This significantly enhances the speed and efficiency of the learning process.
- 8.4.4 AI-assisted learning also ensures 24/7 availability, allowing students to access learning resources anytime and anywhere. This flexibility encourages continuous learning beyond the classroom and supports self-directed study habits.

8.5 Advantages of AI-Assisted English Teaching

- 8.5.1 AI-based methods promote greater learner autonomy by enabling students to take control of their learning process. The interactive nature of digital tools increases engagement and motivation, especially among younger learners.
- 8.5.2 Additionally, AI tools provide a wide range of resources and practice opportunities, which contribute to improved accuracy and fluency. The ability to repeat exercises and receive consistent feedback helps reinforce learning effectively.

8.6 Limitations of AI-Assisted English Teaching

- 8.6.1 Despite its advantages, AI-assisted teaching has certain limitations. A major concern is the lack of emotional intelligence and human interaction. AI systems are unable to fully understand learners' emotions, cultural context, or psychological needs, which are essential in language learning.
- 8.6.2 Another issue is the risk of over-dependence on technology. Learners may become reliant on AI tools for corrections and answers, which can reduce critical thinking and independent problem-solving skills.
- 8.6.3 The digital divide remains a significant challenge, particularly in developing regions. Not all students have equal access to digital devices, reliable internet connectivity, or advanced AI tools, which creates inequality in learning opportunities.

8.7 Comparative Analysis: Traditional vs AI-Assisted English Teaching

A comparative analysis of traditional and AI-assisted English teaching methods reveals significant differences in terms of effectiveness, learner engagement, flexibility, and overall learning outcomes. Both approaches offer distinct advantages, yet they also present limitations that influence their applicability in different educational contexts.

One of the primary areas of comparison is teaching effectiveness. Traditional methods provide a strong foundation in language learning through structured instruction, direct teacher guidance, and classroom discipline. These methods are particularly effective in developing communication skills, as they involve face-to-face interaction and immediate clarification of doubts. In contrast, AI-assisted learning enhances effectiveness through personalized content delivery and adaptive learning systems. Learners can progress at their own pace, focusing on areas where they need improvement, which often leads to better retention and understanding.

In terms of student engagement, AI-assisted methods tend to be more interactive and stimulating. Digital tools, including applications and chat-based systems, offer multimedia content, gamified exercises, and real-time feedback, which increase learner motivation. On the other hand, traditional classrooms rely on teacher-led activities and discussions, which may vary in engagement depending on teaching style and classroom environment.

Another important aspect is flexibility and accessibility. AI-assisted learning provides greater flexibility, allowing students to learn anytime and anywhere. This is particularly beneficial for self-paced learners. Traditional teaching, however, is limited by fixed schedules and physical classroom settings, which may restrict learning opportunities outside class hours.

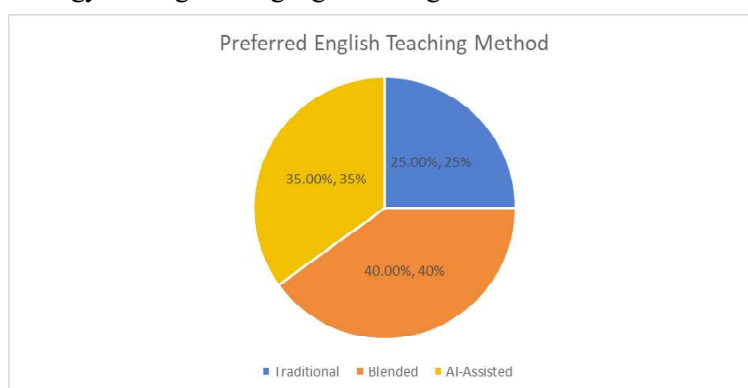
When considering feedback and assessment, AI tools offer instant and consistent feedback, enabling learners to quickly identify and correct errors. In contrast, traditional methods often involve delayed feedback, especially in written tasks, which may slow down the learning process.

However, traditional teaching holds a clear advantage in terms of human interaction and emotional support. Teachers can understand students' emotions, provide encouragement, and adapt their teaching strategies accordingly. AI systems, despite their efficiency, lack emotional intelligence and cannot fully replicate the social and cultural dimensions of language learning.

The issue of accessibility and equity also creates a notable distinction. While traditional teaching is generally accessible to a wider population, AI-assisted

methods depend heavily on digital infrastructure. In regions with limited access to technology, such as semi-urban or rural areas, the effectiveness of AI-based learning remains constrained.

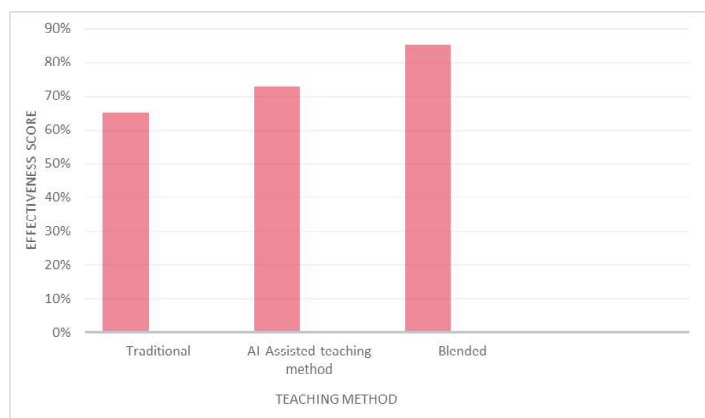
Overall, the comparison indicates that neither traditional nor AI-assisted teaching methods are independently sufficient to meet all learning needs. Traditional methods excel in fostering communication and human connection, whereas AI-assisted approaches enhance personalization, flexibility, and efficiency. Therefore, a blended approach, combining the strengths of both methods, emerges as the most effective strategy for English language teaching in the modern educational landscape.



8.8 Pie Chart Description

The pie chart illustrates the preferred methods of English language learning among respondents. A significant proportion of participants favored a blended approach, combining both traditional and AI-assisted methods, indicating a shift towards integrated learning strategies.

8.9 Bar Chart Description



The bar chart represents a comparative analysis of the effectiveness of traditional, AI-assisted, and blended teaching methods. The results suggest that blended learning is perceived as the most effective approach, followed by AI-assisted methods, while traditional teaching shows relatively lower effectiveness in comparison.

9. FINDINGS OF THE STUDY

- 9.1 The findings of the study are based on the analysis of responses collected through the questionnaire and the comparative evaluation of traditional and AI-assisted English teaching methods.
- 9.2 The study reveals that a majority of respondents are familiar with both traditional and AI-assisted methods of learning English. However, there is a noticeable shift in preference towards blended learning, where both approaches are used together to enhance learning outcomes.
- 9.3 In terms of effectiveness, AI-assisted tools are found to be highly beneficial for improving grammar, vocabulary, and writing skills due to their ability to provide instant feedback and personalized learning experiences. At the same time, traditional teaching methods are more effective in developing speaking skills, confidence, and real-time communication, as they involve direct human interaction.
- 9.4 The findings also indicate that student engagement is generally higher in AI-assisted learning environments. Interactive features, flexibility, and accessibility motivate learners to practice English more frequently. However, this engagement is often dependent on access to digital devices and internet connectivity.
- 9.5 Regarding challenges, the study highlights that traditional teaching is limited by lack of flexibility, delayed feedback, and a one-size-fits-all approach. On the other hand, AI-assisted learning faces issues such as lack of emotional connection, over-dependence on technology, and the digital divide, particularly in semi-urban and rural areas.
- 9.6 Another important finding is that most respondents do not support the complete replacement of traditional teaching with AI. Instead, they believe that AI should act as a supportive tool rather than a substitute for teachers.
- 9.7 Overall, the study concludes that a blended approach, combining the strengths of both traditional and AI-assisted methods, is the most effective strategy for English language teaching. This approach ensures both technological efficiency and human interaction, leading to improved learning outcomes.

10. RECOMMENDATIONS

Based on the findings of the study, several recommendations can be made to improve the effectiveness of English language teaching by integrating both traditional and AI-assisted approaches.

Firstly, it is recommended that educational institutions adopt a blended learning approach, combining traditional classroom teaching with AI-based tools. This integration can help balance human interaction with technological efficiency, thereby enhancing overall learning outcomes.

Secondly, teachers should be provided with proper training and support to effectively use AI tools in their teaching practices. Many educators may not be fully aware of how to integrate technology into their lessons, and professional development programs can help bridge this gap.

Thirdly, efforts should be made to improve digital infrastructure, especially in semi-urban and rural areas. Access to reliable internet and digital devices is essential for the successful implementation of AI-assisted learning. Reducing the digital divide will ensure equal learning opportunities for all students.

It is also recommended that AI tools be used as supportive learning aids rather than replacements for teachers. Human interaction, emotional understanding, and cultural context remain essential components of language learning, which cannot be fully replicated by technology.

Furthermore, students should be encouraged to use AI tools in a responsible and balanced manner. Over-dependence on technology should be avoided, and learners should be guided to develop critical thinking and independent language skills.

Finally, policymakers and educational planners should focus on developing curriculum frameworks that integrate AI effectively while maintaining the core strengths of traditional teaching methods. This will help create a more adaptive and future-ready education system.

11. CONCLUSION

1. The present study examined the comparative effectiveness, challenges, and future implications of traditional and AI-assisted methods in English language teaching. The analysis reveals that both approaches play significant roles in the learning process, yet each possesses distinct strengths and limitations.
2. Traditional teaching methods continue to be essential for developing core language skills, particularly in terms of communication, pronunciation,

and social interaction. The presence of a teacher, along with classroom-based activities, fosters confidence, emotional understanding, and contextual learning. However, these methods are often limited by lack of flexibility, delayed feedback, and a generalized approach that may not cater to individual learner needs.

3. In contrast, AI-assisted teaching has introduced new possibilities in language learning through personalization, instant feedback, and continuous accessibility. Learners benefit from flexible and self-paced learning environments that enhance engagement and improve specific language competencies such as grammar and vocabulary. Despite these advantages, AI-based methods face challenges related to lack of human interaction, over-reliance on technology, and issues of accessibility, particularly in areas with limited digital infrastructure.
4. The findings of the study clearly indicate that neither traditional nor AI-assisted teaching methods alone can fully address the diverse requirements of learners. Therefore, a blended approach, integrating the strengths of both methods, emerges as the most effective strategy for English language teaching. Such an approach ensures a balance between technological innovation and human-centered learning.

12. FUTURE DIRECTIONS

1. Looking ahead, the role of Artificial Intelligence in education is expected to expand further, making it essential for educators and institutions to adapt to technological advancements. Future research can explore the long-term impact of AI on language acquisition, particularly in diverse socio-economic contexts.
2. There is also a need to develop more context-sensitive AI tools that can better understand cultural nuances and learner behavior. Enhancing teacher training programs to include digital competencies will be crucial in ensuring effective implementation of AI in classrooms.
3. Additionally, efforts should be made to bridge the digital divide by improving access to technology and internet connectivity, especially in rural and semi-urban regions. Policymakers and educational institutions must work collaboratively to design inclusive and flexible learning models that integrate AI without compromising the value of traditional teaching.
4. In conclusion, the future of English language teaching lies not in replacing traditional methods with AI, but in harmoniously integrating both to create a more effective, inclusive, and learner-centered educational environment.

13. REFERENCES

1. Almehmadi, M. M. (2024). Artificial intelligence techniques for teaching English as a foreign language: A review. *Asian Journal of Social Sciences and Management Studies*, 11(2), 45–55.
2. Kristiawan, M., Bashar, A., & Pradana, D. A. (2024). Artificial intelligence in English language learning: A systematic review of AI tools, applications, and pedagogical outcomes. *Journal of Language Teaching and Research*, 15(1), 120–132.
3. Law Cheh Pau, S., Yunus, M. M., & Wong, C. W. L. (2026). Artificial intelligence in English language teaching: Benefits and challenges. *International Journal of Research and Innovation in Social Science*, 10(3), 210–220.
4. Omonova, M. (2025). The impact of artificial intelligence on English language teaching and learning. *International Journal of Innovative Language Studies*, 7(2), 88–96.
5. Sharadgah, T., & Sa'di, R. A. (2022). A systematic review of research on the use of artificial intelligence in English language teaching and learning (2015–2021). *Education and Information Technologies*, 27, 3891–3929.
6. Syuhra, N., Chandra, Y., & Rosalina, E. (2025). Artificial intelligence in English language teaching: A systematic literature review of tools, impact, and challenges. *Journal of Educational Technology and Innovation*, 9(1), 55–70.

14. APPENDIX

Questionnaire

Title: Traditional vs AI-Assisted English Teaching

Section A: Demographic Information

- A. Age: _____
- B. Gender: M/F
- C. Student
- D. Teacher

Section B: Learning Experience

Which method do you mostly use for learning/teaching English?

- A. Traditional (Classroom-based)

B. AI-assisted tools

C. Both

How would you rate your experience with traditional English teaching?

A. Excellent

B. Good

C. Average

D. Poor

How often do you use AI tools for English learning?

A. Always

B. Often

C. Sometimes

D. Never

Section C: Effectiveness

Which method helps you understand English concepts better?

A. Traditional

B. AI-assisted

C. Both equally

AI tools provide quick and useful feedback.

A. Strongly Agree

B. Agree

C. Neutral

D. Disagree

Traditional teaching improves my speaking skills.

A. Strongly Agree

B. Agree

C. Neutral

D. Disagree

Section D: Engagement

Which method is more engaging?

A. Traditional

B. AI-assisted

C. Both

AI-based learning motivates you to practice English more.

- A. Strongly Agree
- B. Agree
- C. Neutral
- D. Disagree

Section E: Challenges

What challenges do you face in traditional teaching?

- A. Lack of personal attention
- B. Limited interaction
- C. Time constraints

Other F: What challenges do you face while using AI tools?

- A. Internet issues
- B. Lack of understanding
- C. Less human interaction
- D. Data/privacy concerns
- E. Other: __

Section G: Future Perspective

Can AI replace traditional English teaching?

- A. Yes
- B. No
- C. Not completely

Which method do you prefer for future learning?

- A. Traditional
- B. AI-assisted
- C. Blended

Section H: Open-Ended Question

In your opinion, how can English teaching be improved using both traditional and AI methods?

Chapter 43

Teaching English in The Era of Artificial Intelligence: Balancing Innovation with Human Values

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ABSTRACT

In today's digital age, Artificial Intelligence (AI) is rapidly transforming education, including the teaching and learning of English. This paper explores how AI can be effectively integrated into English language teaching while maintaining the importance of human values, creativity, and emotional connection. It highlights the various roles AI can play in supporting teachers and students, such as assisting in lesson planning, improving grammar and writing skills, and providing personalized learning experiences. At the same time, the paper discusses key challenges, including over-dependence on technology, issues of originality, and ethical concerns like plagiarism.

The paper is based not only on general understanding but also on my personal classroom experiences. It emphasizes that AI should not replace teachers but should act as a supportive tool to enhance learning. The role of the teacher becomes more significant in guiding students to use AI responsibly and meaningfully. By sharing practical classroom strategies and real observations, the paper encourages educators to blend traditional teaching methods with modern technological tools. It also highlights the importance of maintaining a balance between innovation and the human touch in language learning.

In conclusion, the paper suggests that the future of English teaching lies in combining technology with human creativity, critical thinking, and values. This balanced approach can make learning more engaging, effective, and meaningful for students in today's changing world.

Keywords: Artificial Intelligence, English Language Teaching, Human Values, Classroom Innovation, Ethical Use of Technology, Student Learning

1. INTRODUCTION

In recent years, Artificial Intelligence (AI) has quietly entered our daily lives. From mobile phones to online learning platforms, we are surrounded by technology that makes our work easier and faster. As a teacher, I have also started noticing these changes in my classroom. Students today are more comfortable using digital tools, and they often show curiosity when technology is involved in learning.

Earlier, my teaching mainly depended on textbooks, blackboard explanations, and written exercises. Students would listen, take notes, and complete assignments. However, over time, I observed that this method alone was not enough to keep students fully engaged. They wanted something more interactive and interesting.

This made me reflect on my own teaching practices. I started thinking about how I could make learning more meaningful for my students. When I began exploring AI tools, I realized that they could support teaching in many ways. At the same time, I also noticed some challenges. Students sometimes depended too much on these tools, and their originality was affected.

This paper is based on my observations, experiences, and reflections as a teacher. It aims to explore how AI can be used in English language teaching in a balanced way, where innovation supports learning without replacing human values.

2. UNDERSTANDING AI IN EDUCATION

Artificial Intelligence refers to machines or software that can perform tasks that normally require human intelligence. These tasks include understanding language, solving problems, and giving suggestions. In education, AI is used in different forms such as chatbots, language learning apps, and writing assistants.

Some commonly used tools include ChatGPT, Grammarly, and Duolingo. These tools help students improve their language skills by providing instant feedback. For example, a student can write a paragraph and immediately check for grammar mistakes or sentence improvement.

From my experience, students find these tools very helpful. They can practice anytime without fear of making mistakes. This creates a comfortable learning

environment. However, I always remind my students that these tools are only for support. They should first try on their own and then use AI for improvement.

3. OPPORTUNITIES OF AI IN ENGLISH LANGUAGE TEACHING

AI offers many opportunities in English language teaching. One of the most important benefits is increased student engagement. Students enjoy using technology, and it makes learning more interesting. Activities become more interactive, and students participate actively.

Another important advantage is personalized learning. In every classroom, students have different learning levels. Some understand quickly, while others need more time. AI tools can adjust according to individual needs, which helps all students learn better. This is especially useful in Indian classrooms where there is a mix of abilities.

AI also improves accessibility. Students can learn anytime and anywhere. Even if they miss a class, they can use digital tools to practice and revise.

In my classroom, I observed that even shy students started participating more when I introduced small technology-based activities. They felt more confident expressing their ideas.

4. CHALLENGES AND CONCERNS

While AI provides many benefits, it also brings some challenges. One major issue is over-dependence. Some students start relying too much on AI tools and stop thinking independently.

I personally noticed that a few students began copying answers directly from AI tools instead of writing in their own words. This affected their creativity and learning process. At that moment, I realized that guidance is very important.

Another concern is ethical use. Students may misuse AI for completing assignments without real effort. This raises issues like plagiarism and lack of honesty.

There is also the problem of reduced human interaction. Language learning is not only about grammar; it is also about communication, expression, and emotions. These cannot be fully developed through machines.

5. ROLE OF THE TEACHER IN THE AI ERA

In the age of AI, the role of the teacher is becoming more important. Teachers are not just knowledge providers but guides and mentors. They help students understand how to use technology in the right way.

In my teaching, I try to encourage students to think first and then use AI as support. I ask questions, promote discussions, and create activities that require personal opinions.

I believe that the teacher's role is to maintain balance. Technology should support learning, but human interaction should remain central.

6. PRACTICAL CLASSROOM STRATEGIES

To use AI effectively, teachers can follow simple strategies:

Use AI for practice, not final answers

Encourage students to edit and improve

Combine AI with group discussions

Give creative tasks

Guide ethical use

One activity I conducted was asking students to write about "My Favorite Place." After writing, they used AI tools to improve their work. When we compared both versions, students understood their mistakes and improved their writing skills. They also enjoyed the activity.

7. REVIEW OF LITERATURE

Many researchers have discussed the role of AI in education. Holmes et al. (2019) explain that AI can support personalized learning. Luckin (2018) emphasizes that AI should assist teachers, not replace them.

UNESCO (2021) highlights the importance of ethical use of AI. It suggests that teachers must guide students to use technology responsibly.

These studies support the idea that AI is useful but must be used carefully.

8. FUTURE OF ENGLISH TEACHING WITH AI

In the future, AI will play an even bigger role in education. Classrooms may become more digital, and learning methods will continue to change.

However, teachers will always remain important. They will need to learn new skills and adapt to new technologies.

The focus should be on combining technology with human values to make learning meaningful.

9. RECOMMENDATIONS

- Based on my experience, I suggest:
- Teachers should get training in AI tools
- Students should be guided properly
- Schools should balance technology use
- Ethical use should be emphasized

10. CONCLUSION

Artificial Intelligence is changing English language teaching in many ways. It offers new opportunities but also brings challenges.

As a teacher, I feel that AI is helpful only when used wisely. It cannot replace human connection. A teacher's guidance, encouragement, and understanding are still very important.

In conclusion, the future of English teaching lies in balancing innovation with human values. This balance will help students grow not only academically but also personally.

REFERENCES

1. Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial Intelligence in Education.
2. Luckin, R. (2018). Machine Learning and Human Intelligence.
3. UNESCO. (2021). AI and Education: Guidance for Policy-makers.
4. Kukulska-Hulme, A. (2020). Language Teaching Journal.

Chapter 44

Rethinking The Role of The English Teacher in The Era of Artificial Intelligence: Challenges and Opportunities

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ABSTRACT

The integration of Artificial Intelligence (AI) into education has significantly transformed the landscape of English language teaching. This theoretical paper examines the evolving role of the English teacher in an AI-driven educational environment, where advanced technologies such as natural language processing tools, automated writing assistants, and intelligent tutoring systems are increasingly influencing pedagogical practices. Traditionally, English teachers have functioned as primary knowledge providers, but AI challenges this model by offering personalized, real-time learning support to students. This paper critically explores both the opportunities and challenges posed by AI, including enhanced learner autonomy, improved access to resources, and concerns related to overdependence, ethical use, and diminishing human interaction. Drawing on contemporary educational theories and scholarly perspectives, the study argues that the role of the English teacher must be redefined as a facilitator, mentor, and critical guide who fosters higher-order thinking and ethical awareness. The paper concludes that AI should be viewed not as a replacement but as a complementary tool that necessitates pedagogical innovation, professional adaptability, and a renewed emphasis on human-centered education.

The rapid advancement of Artificial Intelligence (AI) has ushered in profound changes across multiple sectors, including education. English language teaching, a discipline traditionally rooted in human interaction, communication, and cultural

exchange, is now experiencing a paradigm shift due to the integration of AI technologies. Tools such as automated essay graders, grammar correction software, and conversational chatbots are redefining how learners engage with language.

Historically, the English teacher has occupied a central role in the classroom as the primary source of knowledge, evaluator, and facilitator of communication. However, the emergence of AI has disrupted this conventional model by introducing systems capable of delivering instant feedback, personalizing instruction, and simulating conversational environments. This transformation raises important questions about the relevance, responsibilities, and identity of the English teacher in contemporary education.

As educational theorists suggest, teaching is no longer confined to the transmission of knowledge but involves guiding learners in navigating complex informational landscapes. In this context, the present paper seeks to critically examine how the role of the English teacher must be rethought in the age of AI, focusing on both the challenges and opportunities that arise from this technological shift.

The evolution of language teaching methodologies provides a foundation for understanding the current transformation driven by AI. Early approaches such as the Grammar Translation Method emphasized rote learning and translation, positioning the teacher as an authoritative figure. Subsequent methods, including the Direct Method and Audio-Lingual Method, introduced more interactive and oral components but still retained a teacher-centered approach.

The advent of Communicative Language Teaching (CLT) in the late 20th century marked a significant shift toward learner-centered pedagogy, emphasizing communication and real-life language use. This shift laid the groundwork for the integration of technology in language learning.

Computer-Assisted Language Learning (CALL) emerged in the mid-20th century, initially focusing on drill-and-practice exercises. Over time, CALL evolved to incorporate multimedia and internet-based resources, enhancing learner engagement and accessibility. The development of Natural Language Processing (NLP) and machine learning has further expanded the capabilities of technology in language education.

AI represents the latest stage in this evolution, offering sophisticated tools that can analyze learner input, provide personalized feedback, and simulate human-like interaction. This progression reflects a broader trend toward automation and personalization in education, challenging traditional pedagogical roles and practices.

This paper is grounded in several key educational theories that inform the analysis of the teacher's role in an AI-driven context.

1. Constructivism

Constructivist theory posits that learners actively construct knowledge through interaction and experience. In an AI-enhanced classroom, teachers facilitate learning by guiding students in interpreting and applying information generated by AI tools.

2. Socio-Cultural Theory

Based on the work of Lev Vygotsky, socio-cultural theory emphasizes the importance of social interaction in learning. While AI can simulate interaction, it cannot fully replicate the nuanced social and emotional dimensions of human communication, highlighting the continued relevance of the teacher.

3. Connectivism

Connectivism, a modern learning theory, recognizes the role of digital networks in knowledge acquisition. It aligns closely with AI-driven education, where learning occurs through interaction with technological systems and online resources.

4. Critical Pedagogy

Critical pedagogy underscores the importance of empowering learners to question and challenge dominant narratives. In the context of AI, teachers play a crucial role in fostering critical awareness about the limitations, biases, and ethical implications of technology.

OPPORTUNITIES PRESENTED

The integration of AI offers numerous advantages that can enhance teaching and learning processes.

1. Personalized Learning

AI systems can adapt to individual learner needs, providing customized content and feedback. This allows students to progress at their own pace and focus on specific areas of difficulty.

2. Immediate Feedback

Automated tools enable real-time correction of grammar, pronunciation, and writing, facilitating continuous learning and improvement.

3. Increased Accessibility

AI-powered platforms provide access to high-quality learning resources, making English education more inclusive and widely available.

4. Enhanced Engagement

Interactive tools, such as chatbots and virtual simulations, create engaging learning environments that motivate students.

5. Challenges and Concerns

Despite its benefits, AI also presents several challenges that must be addressed.

1. Overdependence on Technology

Excessive reliance on AI tools may hinder the development of independent thinking and problem-solving skills.

2. Ethical Issues

Concerns related to data privacy, plagiarism, and algorithmic bias raise important ethical questions.

3. Reduced Human Interaction

Language learning is inherently social, and the reduction of human interaction may impact communicative competence.

4. Teacher Displacement Anxiety

The increasing capabilities of AI may lead to concerns about the diminishing role of teachers.

6. Rethinking the Role of the English Teacher

In response to these changes, the role of the English teacher must be redefined.

1. From Knowledge Provider to Facilitator

Teachers guide students in using AI tools effectively rather than serving as the sole source of information.

2. Digital Curator

Teachers select and evaluate digital resources, ensuring their relevance and reliability.

3. Critical Mediator

Teachers help students critically assess AI-generated content and understand its limitations.

4. Emotional and Social Mentor

Teachers provide emotional support and foster interpersonal skills that AI cannot replicate.

5. Ethical Guide

Teachers educate students about responsible and ethical use of technology.

7. Pedagogical Implications

The integration of AI necessitates changes in teaching practices.

- Incorporating AI tools into lesson plans
- Emphasizing critical thinking and creativity
- Promoting collaborative learning
- Continuous professional development for teachers

Teachers must adopt a flexible and adaptive approach to remain effective in a rapidly changing educational landscape.

DISCUSSION

The coexistence of AI and human teachers represents a hybrid model of education that combines technological efficiency with human insight. While AI can handle repetitive tasks and provide data-driven insights, teachers bring contextual understanding, empathy, and ethical judgment to the learning process.

The challenge lies not in resisting technological change but in integrating it in ways that enhance rather than diminish the quality of education. This requires a shift in mindset, where teachers embrace innovation while maintaining a strong commitment to human-centered pedagogy.

CONCLUSION

The era of Artificial Intelligence marks a transformative phase in English language teaching. While AI offers significant opportunities for enhancing learning, it also presents challenges that necessitate careful consideration. The role of the English teacher must evolve to meet these demands, emphasizing facilitation, critical engagement, and ethical guidance.

Ultimately, AI should be viewed as a tool that complements, rather than replaces, the teacher. The future of English language education depends on the ability of educators to adapt, innovate, and uphold the human values that underpin meaningful learning.

REFERENCES

1. Brown, H. D. (2007). *Principles of Language Learning and Teaching*. Pearson.
2. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education*.

3. Luckin, R. (2018). *Machine Learning and Human Intelligence*.
4. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching*. Cambridge University Press.
5. Vygotsky, L. S. (1978). *Mind in Society*. Harvard University Press.
6. Warschauer, M. (1996). Computer-assisted language learning: An introduction.
7. Siemens, G. (2005). Connectivism: A learning theory for the digital age.

Chapter 45

Artificial Intelligence Literacy Among Students: A Survey of Select Colleges in Shrigonda Taluka

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ABSTRACT

Artificial Intelligence (AI) has significantly transformed modern education by reshaping teaching methodologies, learning patterns and academic engagement. This research paper investigates the level of awareness, usage, perception and ethical understanding of AI among students in selected colleges of Shrigonda Taluka, Maharashtra. The study adopts a descriptive survey method and collects primary data from 120 undergraduate students across arts, commerce and science streams. The findings reveal that although a majority of students are familiar with AI tools and actively use them in their academic activities, their conceptual understanding remains limited. Additionally, ethical awareness regarding AI usage is found to be inadequate. The study highlights the necessity of integrating AI literacy into higher education curricula and recommends structured training programs to enhance students' understanding and responsible use of AI technologies.

Keywords: Artificial Intelligence, AI Literacy, Rural Education, Shrigonda Taluka

INTRODUCTION

Artificial Intelligence (AI) refers to the capability of machines to perform tasks that typically require human intelligence, such as reasoning, learning, problem-solving and decision-making (Russell and Norvig). In the educational context, AI

tools such as chatbots, virtual assistants, automated grading systems and content generators have significantly altered traditional teaching and learning practices (Holmes et al.). The rapid growth of AI technologies has made them accessible even to students in semi-urban and rural areas (UNESCO). However, accessibility does not necessarily translate into awareness or understanding. Many students use AI tools without comprehending their functioning, limitations and ethical implications (Luckin et al.).

In India, the integration of AI into education is still at a developing stage, particularly in non-metropolitan regions (NITI Aayog). Shrigonda Taluka, located in Ahilyanagar district, Maharashtra, represents such a semi-urban educational environment where students have growing digital exposure but limited structured AI education. This study aims to explore the awareness and perception of AI among students in selected colleges of Shrigonda Taluka and to identify gaps that need to be addressed for effective AI literacy.

Objectives of the Study:

1. To assess the level of awareness of Artificial Intelligence among students.
2. To analyze the usage of AI tools in academic activities.
3. To examine students' perceptions of AI in education and career development.
4. To evaluate students' understanding of ethical issues related to AI.
5. To suggest strategies for improving AI literacy in higher education.

Research Questions:

1. What is the level of awareness of AI among students?
2. How frequently do students use AI tools?
3. What are students' perceptions regarding AI's role in education?
4. Are students aware of ethical concerns related to AI?
5. What measures can improve AI literacy?

REVIEW OF LITERATURE

Recent studies indicate that AI awareness among students is increasing but remains uneven. Tripathi argues that undergraduate students are familiar with AI tools but lack in-depth conceptual understanding (Tripathi 45).

Similarly, Ofem et al. highlight that students' awareness varies across disciplines, with science students showing higher familiarity than arts students (Ofem et al. 112).

Research in the Indian context reveals that students often rely on AI tools for academic tasks without understanding their limitations. A report on rural students indicates that while many students use AI applications, they lack clarity about how these tools function and their ethical implications (QuestAlliance 2025).

Furthermore, **Holmes et al.** emphasize the importance of AI literacy, stating that education systems must prepare students not just to use AI but to critically evaluate it (Holmes et al. 78).

These studies suggest that while AI exposure is widespread, structured education on AI is lacking, particularly in semi-urban regions.

RESEARCH METHODOLOGY

The present study adopts a descriptive survey method to analyze the awareness and perceptions of students regarding AI. A total sample of 120 students was selected from two colleges in Shrigonda Taluka, namely Maharaja Jivajirao Shinde Mahavidyalaya and Shri Chhatrapati Shivaji Mahavidyalaya. The sample was evenly distributed across three academic streams: Arts (40 students), Commerce (40 students), and Science (40 students), ensuring balanced representation.

A random sampling technique was employed to maintain diversity and reduce bias in the selection process. Data for the study were collected using a structured questionnaire that included multiple-choice questions, standard Likert scale statements and Yes/No questions to capture varied responses. For data analysis, several methods were utilized, including percentage analysis, tabulation, graphical representation and interpretative analysis, enabling a comprehensive understanding and presentation of the findings.

DATA ANALYSIS AND INTERPRETATION

1. Awareness of AI among Arts, Commerce and Science faculty students:

Table 1: Awareness of AI among Arts, Commerce and Science faculty students

<i>Stream</i>	<i>High</i>	<i>Moderate</i>	<i>Low</i>
Arts	02	18	20
Commerce	06	16	18
Science	14	16	10

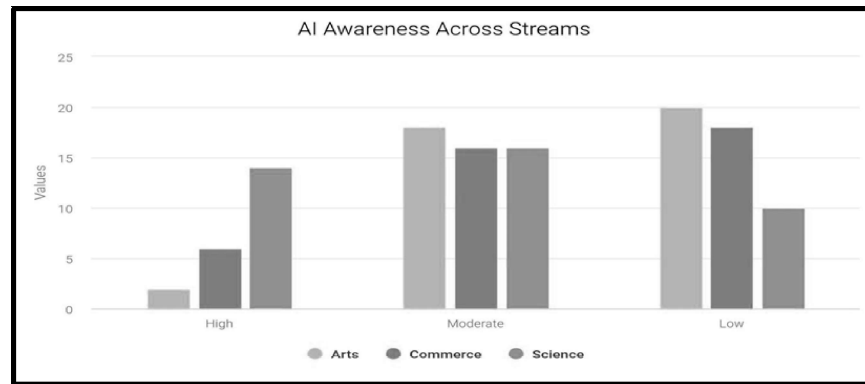


Fig. 1. Awareness of AI among all faculty students

Analysis and Interpretation

The above data presents the level of awareness of Artificial Intelligence among students from three academic streams - Arts, Commerce, and Science - categorized into High, Moderate, and Low levels. The findings reveal a significant variation in awareness levels across different streams.

- Firstly, students from the Science stream demonstrate the highest level of awareness. A total of 14 students fall under the high awareness category, which is considerably greater than in Arts and Commerce. Additionally, Science students also show a balanced distribution in moderate (16) and relatively fewer in low awareness (10). This indicates that students with a scientific background are more exposed to technological concepts, including AI, likely due to curriculum relevance and familiarity with digital tools.
- In contrast, the Commerce stream shows a moderate level of awareness. While only 6 students exhibit high awareness, a significant number fall under moderate (16) and low (18) categories. The awareness level is not proportionately high. This suggests that although Commerce students may encounter AI in business and finance contexts, their depth of understanding remains limited.
- The Arts stream reflects the lowest level of awareness among the three groups. Only 2 students show high awareness, while a majority are concentrated in moderate (18) and low (20) categories. This trend highlights a lack of exposure to AI-related content within the Arts curriculum, which may contribute to lower familiarity and understanding.
- Overall, the data indicates that disciplinary background plays a crucial role in determining AI awareness levels. Streams with closer alignment

to technology, such as Science, tend to exhibit higher awareness, whereas non-technical streams like Arts lag behind.

- The analysis suggests a need for integrating AI literacy across all streams, especially in Arts and Commerce education. Introducing interdisciplinary modules, workshops, and practical exposure to AI tools can help bridge this awareness gap and ensure that students from all academic backgrounds are equally prepared for a technology-driven future.

2. Usage of AI Tools:

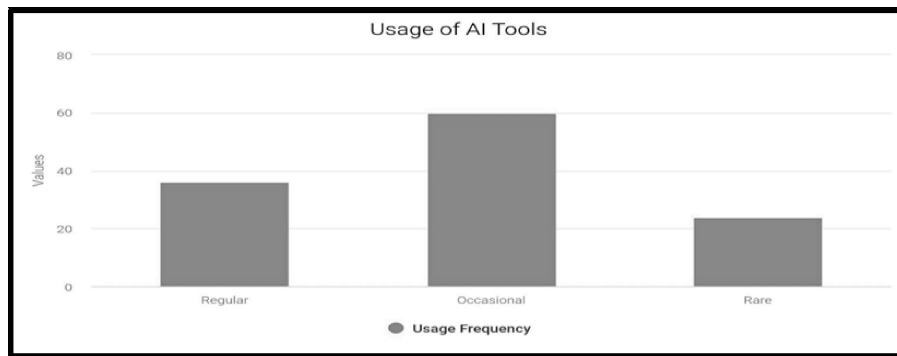


Fig. 2: Usage of AI Tools

Analysis and Interpretation:

The data on the usage of AI tools among students reveals three distinct patterns: regular, occasional, and rare usage. Out of a total of 120 respondents, 36 students (30%) reported using AI tools regularly, 60 students (50%) used them occasionally, and 24 students (20%) used them rarely.

- This distribution clearly indicates that occasional usage dominates, with half of the respondents engaging with AI tools on a non-regular basis. This suggests that while students are aware of AI technologies and have access to them, they have not yet fully integrated these tools into their daily academic practices. The high percentage of occasional users may reflect a transitional stage where students are experimenting with AI but have not developed consistent usage habits.
- The proportion of regular users (30%) is moderately significant, indicating that nearly one-third of the students have adopted AI tools as a consistent part of their learning process. This group likely benefits more from AI in terms of enhanced productivity, personalized learning, and academic support. Their engagement reflects a growing acceptance of AI as a valuable educational resource.

- On the other hand, 20% of students using AI tools rarely highlights a segment that remains largely disengaged. This may be due to factors such as lack of technical skills, limited access to digital resources, insufficient training, or even skepticism about the usefulness of AI. It also aligns with broader findings in educational research where technological adoption often faces resistance due to infrastructural and psychological barriers.
- Overall, the findings suggest that although AI tools are widely recognized among students, their effective and consistent usage is still developing. The predominance of occasional users points to the need for structured training programs, awareness initiatives, and institutional support to encourage more regular and meaningful use of AI in education.
- The data reflects a moderate level of practical engagement with AI tools. While awareness and positive perception (as seen in previous data) are high, actual usage does not yet fully match this enthusiasm. This gap between perception and practice indicates that students require guidance and opportunities to integrate AI tools more effectively into their academic routines.
- Educational institutions should organize workshops and training sessions to promote regular use of AI tools. Teachers can incorporate AI-based assignments to normalize their use in academics. Infrastructure and accessibility issues must be addressed to support wider adoption.

3. Purpose of Using AI:

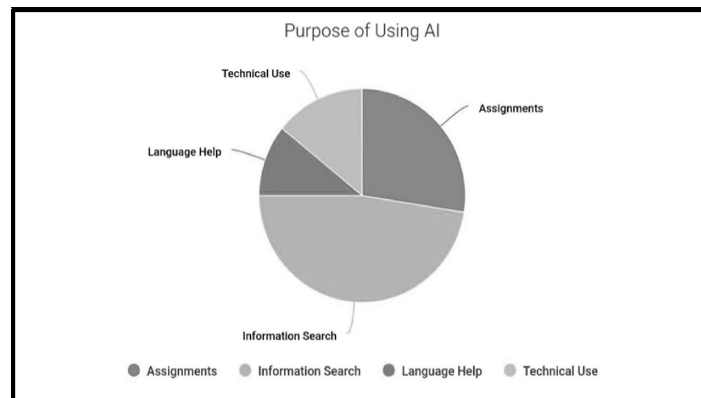


Fig. 3: Purpose of Using AI

Analysis and Interpretation:

- The data reflects how 120 students use AI tools for different academic and practical purposes:

Information Search – 57 students (47.5%); Assignments – 33 students (27.5%)

Technical Use – 17 students (14.17%); Language Help – 13 students (10.83%)

- The largest proportion of students (47.5%) use AI tools primarily for information search. This indicates that AI is widely perceived as a quick and accessible source of knowledge, replacing or supplementing traditional search engines.
- A considerable number of students (27.5%) use AI for assignment-related work. This suggests that AI tools are actively supporting academic tasks such as content generation, idea development, and structuring answers.
- Only 14.17% of students use AI for technical purposes (such as coding, data analysis, etc.). This may reflect limited technical exposure, especially among non-science streams, or lack of awareness about advanced AI capabilities.
- The least usage is seen in language help (10.83%), indicating that students may either: Already feel confident in language skills, or Are unaware of AI's potential for grammar correction, translation, and writing improvement.
- The data highlights that AI is primarily used as an informational and academic support tool, rather than for skill development. The comparatively low use in language and technical domains suggests a gap in awareness and training. Students are utilizing AI more for immediate academic needs (assignments, searching) rather than long-term skill enhancement.
- There is a need to educate students about diverse applications of AI, especially in language learning and technical skill development. Institutions can integrate AI-based tools into teaching to promote balanced and ethical usage. Training programs or workshops can help students move from basic usage (searching) to advanced usage (analysis, creation, technical tasks).

4. Perception towards AI:

Table 2: Perception towards AI

Statement	Agree	Disagree	Percentage Agree	Percentage Disagree
1. AI improves learning	120	Nil.	100 %	Nil.
2. AI will create better career	120	Nil.	100 %	Nil.
3. AI may reduce human jobs	94	26	78.33 %	21.67 %

Analysis and Interpretation:

- The data presented in the table reflects students' perceptions regarding the impact of Artificial Intelligence (AI) on learning, career opportunities and employment. A total of 120 responses were recorded for each statement.
- *AI Improves Learning:*
All 120 respondents (100%) agreed that AI improves learning, while none disagreed. This indicates a unanimous positive perception among students regarding the educational benefits of AI. It suggests that students recognize AI as a powerful tool for enhancing learning experiences through personalized content, accessibility of information and interactive learning methods.
- *AI Will Create Better Career Opportunities:*
Similarly, 100% of the respondents agreed that AI will create better career opportunities. This reflects a strong sense of optimism among students about the role of AI in shaping future careers. Students appear to be aware of the growing demand for AI-related skills and believe that AI will open new professional avenues rather than limit them.
- *AI May Reduce Human Jobs:*
In contrast to the overwhelmingly positive views above, 94 respondents (78.33%) agreed that AI may reduce human jobs, while 26 respondents (21.67%) disagreed. This indicates a significant level of concern among students regarding job displacement due to automation. Although students appreciate the benefits of AI, they are also aware of its potential negative impact on employment.

5. Ethical Awareness:

Table 3: Ethical Awareness

<i>Awareness Level</i>	<i>No. of Students</i>	<i>Percentage</i>
1. Aware	18	15 %
2. Not aware	102	85 %

Analysis and Interpretation:

The data on ethical awareness reveals a significant imbalance in students' understanding of ethical issues related to AI and technology.

- Out of a total of 120 students surveyed, only 18 students (15%) reported being aware of ethical concerns, while a substantial majority of 102

students (85%) indicated that they are not aware. This clearly demonstrates that ethical awareness among students is considerably low.

- This finding suggests that although students may be exposed to or even actively using AI tools, they lack critical understanding of ethical dimensions such as data privacy, bias in AI systems, academic integrity, and responsible usage. The low level of awareness highlights a gap between technological adoption and ethical comprehension.
- The implications of this result are important for educational institutions. It indicates a need to integrate ethical education into the curriculum, particularly in relation to emerging technologies like AI. Workshops, seminars and value-based education programs can help in developing responsible and informed users of technology.
- Furthermore, the high percentage of unawareness (85%) may be attributed to factors such as: 1. Lack of formal instruction on ethics in technology 2. Limited exposure to real-world ethical issues 3. Absence of discussions on AI-related risks in classrooms 4. Rural or semi-urban educational background with fewer resources.

Findings:

Based on the analysis of data collected from 120 students across Arts, Commerce, and Science streams, the following key findings have emerged:

1. Moderate Overall Awareness of AI

The study reveals that students possess a moderate level of awareness about Artificial Intelligence. While some students demonstrate high awareness, a significant proportion still falls under moderate and low awareness categories, especially in Arts and Commerce streams.

2. Stream-wise Difference in Awareness

Science students show comparatively higher awareness of AI than Arts and Commerce students. Arts students exhibit the lowest level of awareness, indicating a gap in exposure to technological concepts across different academic streams.

3. Highly Positive Perception towards AI

The findings indicate an overwhelmingly positive perception of AI among students: 100% of students believe that AI improves learning. 100% agree that AI can create better career opportunities. However, 78.33% also believe that AI may reduce human jobs, reflecting a mix of optimism and concern.

4. Low Ethical Awareness regarding AI

A significant finding is that 85% of students are not aware of ethical issues related to AI, while only 15% are aware. This highlights a major gap in understanding responsible AI usage.

5. Predominance of Occasional AI Usage

The majority of students (50%) use AI tools occasionally, while: 30% use them regularly; 20% use them rarely. This indicates that AI is not yet fully integrated into students' daily academic practices.

6. Gap between Awareness and Usage

Although students show positive attitudes and basic awareness, their actual usage remains inconsistent. This suggests a gap between knowledge and practical application of AI tools.

7. Influence of Accessibility and Training

Limited access to digital resources, lack of proper training, and insufficient institutional support appear to be key reasons behind low awareness and irregular usage patterns.

8. Need for Institutional Intervention

The findings strongly suggest that colleges are not adequately incorporating AI education into their curriculum; resulting in uneven awareness and usage among students. (Both the colleges have just begin a process to incorporate AI Education Course in their curriculum)

9. Potential for Future Growth

Despite current limitations, the positive perception and moderate engagement indicate a strong potential for increased adoption of AI in education if proper guidance and infrastructure are provided.

Discussion:

The findings of this study align with previous research indicating that AI exposure is increasing, but deep understanding is lacking (Tripathi 47). Students in Shrigonda Taluka primarily interact with AI through smartphones and internet platforms, rather than through formal academic instruction. This creates a situation where students become users rather than informed learners of AI technologies. As Holmes et al. argue, AI literacy must include not only usage but also critical thinking and ethical understanding (Holmes et al. 82). The lack of structured AI education in semi-urban colleges contributes to this gap. Without proper guidance, students may misuse AI tools or become overly dependent on them.

Recommendations:

1. Introduce AI literacy courses at undergraduate level. 2. Conduct workshops and training programs on AI tools. 3. Include ethical AI education in curriculum. 4. Encourage project-based learning using AI. 5. Train teachers to integrate AI into teaching practices. 6. Provide digital infrastructure support in rural colleges.

CONCLUSION

The study concludes that students in Shrigonda Taluka are increasingly exposed to Artificial Intelligence, but their awareness remains superficial. While AI tools are widely used, the lack of conceptual understanding and ethical awareness poses challenges for effective learning. This study underscores the necessity of bridging the gap between AI exposure and meaningful understanding. Educational institutions must take proactive steps to incorporate AI literacy into the curriculum, promote critical thinking and foster ethical awareness. By doing so, they can equip students with the knowledge and skills required to navigate and contribute effectively to an AI-driven world.

Acknowledgement

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REFERENCES

1. Ofem, Usani, et al. “Artificial Intelligence in Academic Research.” *Journal of Applied Learning & Teaching*, 2024, pp. 110–125.
2. QuestAlliance. *AI Awareness among Students in India*, 2025.
3. Tripathi, Chhabi Ratna. “Awareness of Artificial Intelligence among Undergraduate Students.” *NPRC Journal of Multidisciplinary Research*, 2024, pp. 40–50.
4. Holmes, Wayne, Maya Bialik, and Charles Fadel. *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign, 2019.
5. Luckin, Rose, et al. *Intelligence Unleashed: An Argument for AI in Education*. Pearson Education, 2016.

6. NITI Aayog. National Strategy for Artificial Intelligence. Government of India, 2020.
7. Russell, Stuart, and Peter Norvig. Artificial Intelligence: A Modern Approach. 4th ed., Pearson, 2021.
8. UNESCO. Artificial Intelligence in Education: Guidance for Policy-makers. UNESCO, 2021.

Chapter 46

Preparing English Language Teachers for AI-influenced Classrooms: A Context-sensitive Approach to Professional Development in ELT

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ABSTRACT

The growing presence of Artificial Intelligence (AI) in education is no longer speculative; it is already shaping everyday classroom practices in English language teaching (ELT). Students increasingly rely on AI tools for writing, translation, and language practice, often outpacing institutional policies and teacher preparedness. This paper examines how teachers are responding to these changes and argues that current models of teacher training and professional development are insufficient for the realities of AI-integrated classrooms. Drawing on classroom-based observations, existing research, and reflective analysis, the study explores how teachers interpret, negotiate, and sometimes resist AI in their teaching. It highlights the need for professional development that is continuous, context-sensitive, and rooted in lived classroom experience rather than abstract technological training. The paper ultimately proposes a grounded approach to teacher development that recognizes teachers as active agents in shaping the role of AI in education.

Keywords: AI in education, English language teaching, teacher development, classroom practice, digital pedagogy, teacher identity

1. INTRODUCTION

The increasing visibility of Artificial Intelligence in education has altered not only how learning is discussed but also how it is practiced. In English language

classrooms, this shift is particularly noticeable. Students now have access to tools that can generate essays, correct grammar, suggest vocabulary, and simulate conversations. These tools are often used independently, without explicit instruction, and sometimes without the teacher's knowledge.

This development has created a subtle but significant tension within classrooms. On the one hand, AI tools offer clear advantages: they provide immediate feedback, support independent learning, and can reduce the time required for certain tasks. On the other hand, they raise questions about authenticity, authorship, and the nature of learning itself. When a student submits a well-structured essay, it is no longer always clear how much of that work reflects the student's own language ability.

Teachers find themselves navigating this uncertain terrain with limited guidance. In many cases, institutional responses lag behind technological change, leaving teachers to make individual decisions about how to respond. Some embrace AI as a useful support, while others approach it cautiously, concerned about its implications.

This paper focuses on this moment of transition. Rather than presenting AI as either a solution or a problem, it examines how teachers are engaging with it in practice. The central argument is that teacher training and professional development have not kept pace with these changes, and that a more grounded, experience-based approach is needed.

2. AI IN ELT: BETWEEN POSSIBILITY AND PRACTICE

Discussions of AI in education often emphasize its potential. It is described as a tool for personalization, efficiency, and innovation. While these claims are not unfounded, they can obscure the more complex realities of classroom practice.

In many English language classrooms, AI appears not as a carefully integrated system but as a collection of tools used in varied and sometimes inconsistent ways. Students may use AI to draft essays, check grammar, or translate texts. Teachers may or may not be aware of these practices, and even when they are, they may not have clear strategies for responding.

One of the most noticeable changes is in writing instruction. Traditionally, writing has been a process through which students develop ideas, organize arguments, and refine language through revision. With AI tools, parts of this process can be outsourced. Students can generate drafts quickly, sometimes with minimal input, and then edit them to varying degrees.

This raises a number of practical questions. Should AI-generated drafts be treated as legitimate starting points? How can teachers assess student learning

when the process is partially mediated by technology? What constitutes plagiarism in this context?

Similarly, AI-based conversational tools offer new forms of interaction. They can simulate dialogue, provide feedback, and allow students to practice speaking in private. For learners who lack opportunities for real conversation, this can be valuable. However, such tools do not fully capture the unpredictability and social complexity of human interaction. Teachers must therefore consider how these tools fit within broader communicative goals.

What becomes clear is that AI does not enter the classroom as a neutral addition. It reshapes existing practices and requires teachers to rethink familiar approaches.

3. TEACHERS' RESPONSES: ADAPTATION, UNCERTAINTY, AND NEGOTIATION

Teachers' responses to AI are varied and often shaped by their specific contexts. Some teachers actively explore AI tools, experimenting with ways to incorporate them into lessons. Others adopt a more cautious approach, setting boundaries around their use. Still others feel uncertain, unsure of how to respond or where to begin.

In classrooms where teachers have chosen to engage with AI, the emphasis is often on adaptation rather than replacement. For example, instead of banning AI-generated writing, some teachers ask students to document their writing process, including how they used AI tools. This shifts the focus from the final product to the process of learning.

In other cases, teachers redesign assignments to make them less susceptible to AI generation. Tasks that require personal reflection, in-class writing, or collaborative work can help ensure that students remain actively involved in the learning process.

At the same time, uncertainty remains a significant factor. Teachers may question their own understanding of AI tools, particularly when students appear more familiar with them. This can affect confidence and, in some cases, lead to avoidance.

There is also a broader sense of negotiation. Teachers are balancing multiple concerns: supporting student learning, maintaining academic integrity, and adapting to technological change. These decisions are rarely straightforward and often involve trial and error.

4. PROFESSIONAL DEVELOPMENT: GAPS AND MISMATCHES

Despite the growing presence of AI in classrooms, professional development opportunities often fail to address teachers' immediate needs. Many programs focus on introducing specific tools, demonstrating their features without fully exploring how they fit into pedagogical practice.

This creates a gap between knowledge and application. Teachers may learn how a tool works, but not how to integrate it meaningfully into their teaching. Without this connection, training remains abstract and difficult to translate into practice.

Another issue is the lack of sustained support. Professional development is often delivered in isolated sessions, with little follow-up. Teachers are expected to implement what they have learned independently, without opportunities for feedback or reflection.

There is also a mismatch between the pace of technological change and the structure of training programs. AI tools evolve quickly, and what is relevant at one moment may become outdated within a short period. Static training models struggle to keep up with this pace.

Importantly, current approaches often overlook teachers' existing knowledge. Many teachers are already experimenting with AI, developing strategies through experience. However, these insights are rarely incorporated into formal training.

5. TOWARDS A MORE GROUNDED APPROACH TO TEACHER DEVELOPMENT

In light of these challenges, there is a need to rethink how professional development is conceptualized and delivered. Rather than focusing primarily on tools, a more grounded approach would begin with classroom practice.

Such an approach recognizes that teachers learn not only through formal instruction but also through experience, reflection, and interaction with peers. Creating opportunities for teachers to share their experiences can be particularly valuable. Informal discussions, peer observations, and collaborative planning sessions allow teachers to learn from one another and develop context-specific strategies.

Experimentation is another key element. Teachers need time and space to try out AI tools, observe how they function in their classrooms, and adjust their

approaches accordingly. This process is inherently iterative and cannot be fully prescribed.

Reflection plays a crucial role in this process. Teachers benefit from considering not only what works but also why it works, and under what conditions. This deeper understanding supports more informed decision-making.

A grounded approach also involves acknowledging uncertainty. Rather than expecting teachers to have definitive answers, professional development can create spaces for exploring questions and sharing dilemmas. This can help reduce the sense of isolation that some teachers experience.

6. CLASSROOM PRACTICES: EMERGING PATTERNS

Across different contexts, certain patterns are beginning to emerge in how teachers use AI. In writing classes, some teachers incorporate AI into the drafting process while maintaining a focus on revision and critical evaluation. Students may be asked to compare AI-generated suggestions with their own ideas, encouraging them to make conscious choices.

In speaking classes, AI tools are often used as preparation for in-class activities. Students practice with conversational agents and then engage in more complex interactions during lessons. This allows teachers to focus on communicative competence rather than basic practice.

Teachers are also using AI outputs as teaching materials. By analyzing AI-generated texts, students can identify strengths and weaknesses, developing both language skills and critical awareness.

These practices are not uniform, and they continue to evolve. However, they illustrate how AI can be integrated in ways that support rather than replace traditional teaching.

7. INSTITUTIONAL CONTEXTS AND CONSTRAINTS

The role of institutions in supporting or constraining AI integration cannot be overlooked. Access to technology varies widely, and not all classrooms are equally equipped to incorporate AI tools. Even where resources are available, time constraints and workload can limit teachers' ability to experiment and reflect.

Institutional policies also play a role. In some cases, policies are unclear or inconsistent, leaving teachers uncertain about expectations. In others, strict rules may limit flexibility and discourage innovation.

Support structures are equally important. Teachers benefit from access to technical assistance, opportunities for collaboration, and recognition of their efforts. Without such support, even motivated teachers may struggle to sustain new practices.

8. RETHINKING TEACHER EDUCATION

The changes discussed in this paper also have implications for pre-service teacher education. Future teachers are likely to enter classrooms where AI is already present, and they need to be prepared for this reality.

However, preparation should not be limited to technical training. Instead, teacher education programs should encourage critical engagement with AI, exploring its implications for language learning, assessment, and classroom interaction.

This can be achieved through case-based discussions, classroom simulations, and opportunities for practical experience. By engaging with real or realistic scenarios, future teachers can develop a more nuanced understanding of how AI functions in practice.

9. DISCUSSION

The integration of AI into English language teaching is an ongoing process rather than a completed transformation. Teachers are at the center of this process, making decisions that shape how AI is used in their classrooms.

This paper has argued that current approaches to professional development do not fully support this role. By focusing on tools rather than practice, they risk overlooking the complexities of teaching.

A more effective approach would recognize teachers as active participants in educational change. It would support them in exploring, questioning, and adapting AI in ways that align with their contexts and goals.

At the same time, it is important to acknowledge the broader conditions that influence teachers' work. Professional development alone cannot address issues such as workload, resource limitations, and policy constraints. These factors must be considered as part of a wider effort to support meaningful change.

10. CONCLUSION

Artificial Intelligence is becoming an everyday presence in English language classrooms, shaping both teaching and learning in subtle and significant ways. Teachers are responding to this change with a mixture of curiosity, caution, and creativity.

This paper has suggested that teacher training and professional development need to evolve in response to these realities. Rather than relying on short-term, tool-focused interventions, there is a need for approaches that are continuous, reflective, and grounded in classroom practice.

By supporting teachers in this way, it becomes possible to integrate AI in ways that enhance learning while preserving the human dimensions of education. The challenge is not simply to adopt new technologies, but to understand how they can be used thoughtfully and responsibly within the complex environment of the language classroom.

REFERENCES

1. Darling-Hammond, L., Hyster, M. E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Learning Policy Institute.
2. Holmes, W., Bialik, M., & Fadel, C. (2022). *Artificial Intelligence in Education: Promises and Implications*. Center for Curriculum Redesign.
3. Luckin, R. (2018). *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. UCL Institute of Education Press.

Chapter 47

Exploring The Importance of Digital Literacy for English Faculty

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ABSTRACT

The 21st century has witnessed an unprecedented integration of technology into education, making digital technologies an integral part of human activities. From online learning platforms to digital libraries and artificial intelligence-driven tools, technology has revolutionized the way students and educators engage with information. The COVID-19 pandemic further accelerated this shift, emphasizing the need for robust digital literacy skills to ensure continuity in education and research (UNESCO, 2021).

In the digital era, there is an urgent need for the application of technology in classroom learning. The development of technology in the digital age makes it easier for teachers to deliver learning more effectively. English Faculty require technology and digital literacy to enhance their teaching and learning activities. Digital literacy stands as a crucial skill in the preparation of English Faculty for their roles in the pedagogical realm. Among the skills emphasized in their professional development, digital literacy assumes significance. English teachers, should promote digital literacy in teaching and learning activities by providing the use of technology and digital tools to create more interesting, meaningful, and interactive materials, media, and activities. This study aims to investigate the Importance of digital

literacy for English faculty. Despite the necessity to incorporate digital technologies and the teaching of digital literacy skills in the classroom, many teachers are not equipped to do this. In this study, Normative survey-method research design was employed, integrating both qualitative and quantitative approaches. Data collection involved administering a questionnaire to 50 participants teachers of English who taught in the secondary and high schools in various regencies within the from Guntur district. Quantitative data were analyzed using descriptive statistical analysis with SPSS 20, while qualitative data were interpreted through descriptive explanations. The results Educational Implications and suggestions for further research will be present in the full paper.

Key Words: Digital Technology, English Faculty, Literacy, Education and Artificial Intelligence.

INTRODUCTION

In today's education, the computer has become the new pencil and paper, textbook, library, and, in many cases, even the teacher. Computers and related technologies are now such an integral part of everyday life that they must be an essential component of education for effective participation in present and future society. Teachers are constantly discovering new ways to integrate computers into their programs. The computer can be a tool for learning in many areas of education. For educator's computer is a tool for lesson preparation.

- Helps in research information.
- Helps teachers to collect ideas used by to present lesson. Helps to prepare audio/ video lesson presentations.

DIGITAL AWARENESS

It is the knowledge, education, and consciousness as much as a user perceived to be sufficient to learn and use digital technology and realize its overall characteristics, strategic functionality, and competitive advantage. Twenty years ago, the teacher was basically limited to providing class notes, showing a video, and using a limited variety of other tools to try and make learning fun and interesting. With this, they were expected to reach a variety of learning styles simultaneously without the proper tools to help them accomplish this task. Today, a teacher's role has changed to facilitator and supporter as students collaborate and use apps that suit their learning style. This enables the teacher to be more proactive about providing individual help when needed without having to worry about hindering other students in the classroom that are ahead in the learning process.

The growth of technology in the classroom represents a win-win situation for educational institutions. Teachers now have the tools they need to reach each student and students can choose the way they wish to consume lesson content. It will be interesting to see where technology takes education in the next two decades to come.

NEED OF THE STUDY

In the 21st century, the global education landscape is undergoing a profound transformation due to rapid technological advancements. Teachers and educators worldwide are facing the imperative need for adaptability. Technology has evolved significantly, giving rise to a myriad of teaching, and learning tools and platforms and extending the boundaries of education beyond traditional classroom settings into the digital realm.

The globalization of education has already necessitated the application of digital technologies. Online platforms were available for conducting classes, sharing resources, doing the assessment and managing the day-to-day activities of academic institutions. However, the use of these platforms was proactive. The COVID-19 Pandemic has forced the institutes to adopt the online teaching mode to sustain the education system. Developed countries were well equipped to deal with this crisis. However, developing countries worked hard to meet this requirement. Digital technologies have emerged as the savior of education in this critical time. This global crisis highlights the need to be internationally integrated into the education system. New technology offers many opportunities and challenges before the teacher and the learner.

Ms Darihun et.al. (2023) studied on Attitude of Secondary school teachers towards online teaching and learning. Dr. Vijaya Laxmi (2020) studied on Attitude of Senior Secondary School Teachers towards E-Learning. Ignatius Topno (2019) Conducted a study on Digital Awareness of Secondary School Teachers of Patna. Dr. Pawan Kumar (2017) examined that Attitude of Teacher Educators towards E-learning. Gourav Mahajan (2016) observed that Attitude of Teachers towards the use of Technology in Teaching. Based on the above composed appropriate literature it could be understood and inferred that the present study differs from the reviews and studies in many ways.

The summary of related studies helps the investigator in identifying the research gaps in the area of the study

Objectives

1. To find out the importance of digital literacy for English faculty.

2. To find out the influence of the following variable on the importance of digital literacy for English faculty i.e.

- Gender : Male/ Female
- Locality : Rural / Urban
- Type of management : Government/ Aided / Private

Hypotheses

1. There would be no significant difference in the importance of digital literacy of male and female secondary school English teachers.
2. There would be no significant difference in the importance of digital literacy of rural and urban secondary school English teachers.
3. There would be no significant difference in the importance of digital literacy government and private secondary school English teachers.

Methodology

The study is limited to 50 secondary school English teachers in Guntur district. Survey method is used in this study. The population for the present study comprises of

English teachers, who are studying in government or aided and private schools, spread in Guntur district. A simple random sample of 50 English teachers.

Tools

The researcher construct and standardized the digital learning tool. The tool consists of 40 items with YES or No. Yes for '1' mark and no for '0' mark. Test-retest reliability is 0.81 and spilt half reliability is 0.78. the tool was reliable and valid.

STATISTICAL TECHNIQUES TO BE USED

Mean, SD, % of mean, 't' value was calculated.

Data Analysis

Objective – 1: To find out the importance of digital literacy for English faculty

Table 1. Mean, SD and % of mean of English teachers

<i>Whole sample</i>	<i>Mean</i>	<i>SD</i>	<i>% of mean</i>
50	30.96	8.89	77.40

Table 2. Mean, SD and % of mean of English teachers

Level	No	Percentage
Low	1	122
Average	26	52.
High	13	26

52% English teachers are average level of digital learning. 26% of English teachers are high level of digital learning and 22% of English teachers are low level of English teachers.

Objective – 2: To find out the influence of the following variable on the importance of digital literacy for English faculty i.e. Gender Locality Type of management.

Hypothesis-1: There would be no significant difference in the importance of digital literacy of male and female secondary school English teachers.

Table 3 : Comparison of mean, SD and % of mean of male and female teachers

Subject	No	Mean	SD	S.Ed	't'
Male	25	28.22	8.73	0.76	1.11 ^{NS}
Female	25	29.07	8.44		

NS- Not Significant at 0.05 level

The mean value of male teachers is 28.22 and SD is 8.73. The mean value of female teachers is 29.07 and SD 8.44 respectively. The calculated 't' value is 1.11. which is not significant at 0.05 level. Hence the null hypothesis is accepted.

Hypothesis-2: There would be no significant difference in the importance of digital literacy of rural and urban secondary school English teachers

Table 4 : Comparison of mean, SD and % of mean of rural and urban teachers

Subject	No	Mean	SD	S.Ed	't'
Rural	50	27.61	8.54	0.75	0.77 ^{NS}
Urban	50	28.19	8.27		

NS- Not Significant at 0.05 level

The mean value of rural teachers is 27.61 and SD is 8.54. The mean value of urban teachers is 28.19 and SD 8.27 respectively. The calculated 't' value is 0.77. Hence the hypothesis is accepted.

Hypothesis-3: There would be no significant difference in the importance of digital literacy government and private secondary school English teachers.

Table 5 : Comparison of mean, SD and % of mean of Government and Private school teachers

<i>Type of management</i>	<i>No</i>	<i>Mean</i>	<i>SD</i>	<i>S.Ed</i>	<i>t'</i>
Government or Aided	50	27.51	8.23	0.79	0.974 ^{NS}
Private	50	29.28	8.27		

NS- Not Significant at 0.05 level

The mean value of government school teachers is 105.51 and SD is 8.23. The mean value of private school teachers is 106.28 and SD 8.27 respectively. The calculated 't' value is 0.974. Hence the null hypothesis is accepted.

Findings

- 77.% of English teachers possess above average level of digital learning.
- Majority of (55.8%) English Teachers are having average level in Personality Traits. 32.6% of English Teachers have high level and 11.6% of English Teachers have low level in digital learning.
- The variable gender did not significantly influence the importance of digital learning of English teachers.
- The variable locality did not significantly influence the importance of digital learning of English teachers.
- The variable type of institute did not significantly influence the importance of digital learning of English teachers.

Educational Implications

- Education is facing the challenge between technological advancement and educational innovations. Digital Learning has shown great potential in bridging the gap between these two ends. Since the findings of our study shows the attitude of teachers towards digital learning tools is positive.
- Digital learning tools development is not just about the technology. It is also about supporting the learner's journey. Paradigms such as "just-in-time" and "at own pace" learning, student centered and collaborative approaches have emerged and are supported by the technological advancement.
- Teachers must use platform that are easily supported by any device used by the students.
- Teachers must provide regular feedback to the students to track their progress and students must also give feedback to the teachers to know their weakness and areas to improve.

BIBLIOGRAPHY

1. Abbate, Janet. *Inventing the Internet*. Cambridge, Mass., 1999.
2. Adam, Alison. *Artificial Knowing: Gender and the Thinking Machine*. London, 1998
3. Best w. john, *research in education* (1986), pentice hall of India private ltd., Connaught circus New Delhi.,
4. Best, J.W. (2003). *Research in Education*. New Delhi: Prentice Hall of India Pvt.Ltd. Bhaskara Rao, Digumarti (1996). *National Policy on Education*, 2 volumes. New Delhi: Anumol Publications Pvt.Ltd.
5. Bhaskara Rao, Digumarti (1996). *Encyclopedia of education for all*. New Delhi: APH Publishing Corporation.
6. Garret H.E., *Statistics in psychology and education*, international book bureau, 3-4-267, Kachiguda station Road, Hyderabad.

Chapter 48

Artificial Intelligence (AI) in Education: Using AI Tools for Teaching and Learning Process

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ABSTRACT

Changes in the demands of education require innovation and creativity in the learning process. With the development of Artificial Intelligence (AI) in the field of education to help process daily activities including teaching and learning. The objective of this study is to investigate Artificial Intelligence (AI) in education especially in the teaching and learning process. Artificial Intelligence (AI) is the process of modelling human thinking and designing a machine so it can behave like humans. In the future progress of science and technology, teachers' work such as correcting, student attendance, giving daily tests and exams, explaining knowledge, making administrative reports and other systemic work can be submitted to be completed by technology devices. Teachers can save more energy and can focus more on non-systemic work to create a golden generation with more character and quality with natural intelligence where robots cannot do it. Technology only runs systemically and is automated based on human commands, while the human mind, especially teachers deliver new knowledge. Therefore, the teacher's intelligence will be unmatched. AI that emerged as the industrial revolution is also the result of the creative minds of human natural intelligence. So, when compared, between the two will never have an equal position.

Keywords: Artificial Intelligence (AI), education, teaching and learning.

INTRODUCTION

Today's technology has become an unavoidable part of the passage of time. Technology has not only changed people's lifestyles but has also changed how

we work, learn, and interact. Various kinds of innovations appear all the time, making our activities and work more practical and effective. A more recent technological development is the emergence of the term artificial intelligence which is abbreviated as AI (artificial intelligence) which is currently starting to steal attention as a tool to act like humans.

In its development, artificial intelligence has also penetrated the world of education. AI systems allow people to learn with the help of education assistants such as bots. The development of the times requires the world of education to adapt to technological developments to improve the quality of education, especially the adjustment of information and communication technology. AI as a pillar of the industrial revolution 4.0 plays a central role in facilitating the learning process mediated by technology. Artificial Intelligence (AI) is the process of modeling human thinking and designing a machine so that it can behave like humans or other terms called cognitive tasks, namely how machines can learn automatically from programmed data and information. Artificial intelligence can also be interpreted Artificial intelligence or AI is one part of computer science that makes machines (computers) able to do work as and as well as humans do. The use of Artificial Intelligence consciously or not we have applied it in everyday life. Many applications have implemented artificial intelligence as an advantage of these applications. Artificial intelligence technology referred to here refers to machines that can think, weigh the actions to be taken, and can make decisions as humans do. Artificial intelligence (AI) is currently being developed on a large scale so that this technology will imitate and even take over the work normally done by humans. Based on the definition of AI, it was created to be able to act like humans in the form of programs and robots. Of course to facilitate human work. Even various digital platforms have used AI as a part of it. AI is used to make things easier for humans to do. Several technology companies have implemented AI including Amazon, Facebook, Microsoft, and Google.

Artificial intelligence or (AI) is a technology where machines can learn and understand logic like humans. This technology is said to be able to help simplify human life which is very complex (Fitria, 2021a). AI itself works by combining the presence of several data, iterative processing, and intelligent algorithms. This allows the software to learn automatically from patterns or features in the data. AI can also be said to be a very broad field of study. The scope of theories, methods, technologies, and subfields that exist in AI is very wide, including machine learning, neural networks, cognitive computing, computer vision, and scientific language processing. The role of Artificial Intelligence (AI) technology is increasingly evident in various sectors, including the education sector. The presence of AI technology has transformed the educational curriculum, especially in the

fields of technology, science, mathematics, and engineering. But AI will also change the face of the world of education as a whole. One technology that has recently received attention is Artificial Intelligence (AI). This technology has an important role in facilitating various job functions, including in the field of education.

AI can also be implemented in the world of education. Teachers/lecturers can understand student needs more easily and more deeply (Fitria, 2021b). The students also can learn according to their needs without encountering difficulties. Artificial Intelligence (AI) is believed to be able to help humans learn better and achieve educational goals more effectively. So it's not surprising that currently many AI-based innovations and breakthroughs are being and will be applied to support the learning process to make it more practical and effective. So when AI is present in the education sector, which then raises concerns by teachers, it is a challenge that must be faced so that the existence of education continues. Some of the strong beliefs that teachers cannot be replaced by AI are teacher collaboration with AI in the implementation of learning. Teachers need to have skills in utilizing .

FINDINGS

Artificial intelligence has been widely applied to various educational technology platforms as follow:

a. Virtual Mentor : The function of AI which is currently quite widely applied to various educational technology platforms, especially those based online, is as a virtual mentor. Mentoring is a process in which a more knowledgeable person (the mentor) assists a less-knowing person (the mentee) in achieving a learning objective (Klamma et al., 2020). AI can provide feedback on students' learning activities and practice questions, then provide recommendations for material that needs to be re-studied like a teacher or tutor. Zhang (2016) states that Virtual Mentor (VM) is a multimedia-integrated e-Learning environment that stresses interaction, personalization, and intelligence. One example is Blackboard (<https://www.blackboard.com/teaching-learning/learningmanagement/mobile-learning-solutions>) which is an application that is widely used in universities in Europe and America. This AI tool is widely used by professors/lecturers to publish notes, homework, quizzes, and tests that allow students to ask questions and assignments for the assessment process. Applications are widely used by professors/lecturers to publish notes, homework, quizzes, and tests that allow students to ask questions and assignments. Applications can also be used for assessment/assessment. This application can identify the reasons behind students' misunderstanding and can offer solutions that have been released by the lecturer and programmed beforehand. AI works, developing solutions and solving problems in a comprehensive and

cooperative manner. AI can provide feedback on student learning activities and practice questions, provide recommendations for material that needs to be re-studied like a teacher or tutor. This AI system will continue to learn and update information independently according to the needs and constraints faced by students. This tool can identify the reasons behind students' misunderstanding and can offer solutions that have been released by the lecturer and programmed in advance. This AI system will continue to learn and update information independently according to the needs and constraints faced by students. Hwang & Vrongistinos, (2012), states that the quality teachers for quality students initiative created an electronic mentorship system between new and experienced teachers to help new teachers improve their instructional and classroom management abilities in light of the special requirements of English language learners (ELLs) in Southern California. The results of the data analysis revealed that combining the use both of Blackboard and Skype technologies was advantageous to starting instructors' ability to effectively educate ELLs.

This AI technology has been widely applied in various fields, including education. Simply put, Global Courses users or students can search for and take online courses from all over the world. The course platform can recommend your interests and interests according to the keywords you have previously entered. There are various free and open courses that you can try right now with a variety of interesting, interactive, and structured features and content. Examples of courses that have implemented AI technology include courses on MOOCs, Udemy, Google AI, Alison, Khan Academy, edX, Udacity, Coursera, and others (Zhang, 2021). The hallmark of courses that already use AI technology is that there is a personalization feature that allows us to be notified about course progress, material that needs to be studied, test accumulation, total scores, relevant course recommendations, and various other features. AI-based solutions will help schools and universities that have international programs to create classes based on the curriculum and customize learning experiences that are tailored, for example, to the student's area of origin so that the subject matter provided is also adapted to the student's cultural background. Then the language is translated and automatic subtitles will allow teachers and students to communicate without any problems

AI is widely used for online automatic assessment and question correction purposes. The use of features like this makes it easier for teachers and tutors to prepare and conduct quizzes and tests easily and practically. Teachers and tutors no longer need to make questions and correct questions manually. The use of features like this makes it easier for teachers and tutors to prepare and conduct quizzes and tests easily and practically. Teachers and tutors no longer need to make

questions and correct questions manually. One example of the application of Automatic Assessment is the quiz creation and automatic correction features provided by the Kejarcita platform (<https://kejarcita.id/>). This feature allows teachers to easily and practically create quizzes and tests. Teachers only need to choose the type of subject, level, number of questions, level of difficulty, and several other options. After that, the teacher only needs to share the quiz link with the students to do it directly online. This feature allows teachers to easily and practically create quizzes and tests. Teachers only need to choose the type of subject, level, number of questions, level of difficulty, and several other options. After that, the teacher only needs to share the quiz link with the students to do it directly online. Student quiz results can be directly accepted automatically on the teacher's account. There is a score, a list of wrong questions, correct questions, and discussion. Just imagine that teachers no longer have to bother manually correcting and assessing the results of quizzes and student tests. Everything has been done by the programmed AI system. AI technology can ease the burden on teachers/educators in handling repetitive administrative tasks, such as preparing lesson plans, assessing exams, checking student homework, and others. Automation of these processes will give teachers more time to monitor student progress and focus on improving teaching techniques.

The AI system will work independently according to programmed instructions and can learn according to the habits of the user or student. Even AI will provide recommendations for material that needs to be studied again and others based on the results you have obtained. The AI system will work alone according to programmed instructions and can learn according to the habits of the user or student. Even AI will provide recommendations for material that needs to be studied again and others based on the results you have obtained. An AI-based deployment strategy for a College English-aided education system is provided. Some functions of the English teaching system are enhanced and humanized when combined with English teaching (Bin & Mandal, 2019). The use of artificial intelligence in English education is investigated to increase the quality and effectiveness of English instruction.

Education is not just about acquiring knowledge. Education is a complex process in which we not only acquire knowledge of various concepts but also learn to apply them in daily life with our social skills. Machines cannot teach empathy, sympathy, and other emotions that are an important part of our personality development. This means that no matter how sophisticated

AI is, no matter how many examples of using AI, this technology will not be able to replace the role of teachers or educators. The role of AI is limited to

helping and empowering teachers in making the learning process a fun experience for students. The role of IT is also often used in supporting learning, either in schools or for self-learning. In the future, learning activities will apply more artificial intelligence. AI can be used to present learning materials, conduct assessments, provide learning feedback. Artificial intelligence has been widely applied to various educational technology platforms.

The following are some examples of applying artificial intelligence to support learning such as 1) Virtual Mentor, for example, Blackboard to publish notes, homework, quizzes, and tests that allow students to ask questions and assignments for the assessment process. Applications are widely used by professors/lecturers to publish notes, homework, quizzes, and tests that allow students to ask questions and assignments. Applications can also be used for assessment/assessment. 2) Voice Assistant, for example, Google Assistant (Google), Siri (Apple), Cortana (Microsoft), and others. Voice Assistant allows students to search for materials, reference questions, articles, and books by simply speaking or mentioning keywords. Voice Assistants allow interaction with various learning materials without communicating with the teacher. 3) Smart Content to share and find programmable digital book and material content more easily and quickly. Common examples of the application of this technology are found in various digital libraries today, both in schools, universities, and public libraries. MOOCs, Udemy, Google AI, Alison, Khan Academy, edX, Udacity, Coursera, and others.

There is a personalization feature that allows us to be notified about course progress, material that needs to be studied, test accumulation, total scores, relevant course recommendations, and various other features. AI-based solutions will help schools and universities that have international programs to create classes based on the curriculum and customize learning experiences that are tailored. Automatic Assessment, for example, Kejarcita platform for online automatic assessment and question correction purposes. The use of features like this makes it easier for teachers and tutors to prepare and conduct quizzes and tests easily and practically. Teachers and tutors no longer need to make questions and correct questions manually. The use of features like this makes it easier for teachers and tutors to prepare and conduct quizzes and tests easily and practically. 6) Personalized Learning for example Ruanguru (<https://www.ruangguru.com/>), and more. This allows students or users to get services like personal assistants. AI technology has a significant impact in improving the quality and learning patterns to be more practical and effective AI in education enables schools or educational institutions to create more personalized learning experiences. Educational Games, for example, Duolingo, Khan Academy Kids. Quick Brain and Puzzle Kids. Educational games are games that are designed to learn but can still offer play and fun. Educational

games are all forms of games that are created, to provide an educational experience or learning experience to the players of the game. This children's educational game is not just a picture-matching game, but many tricks that hone children's memory, Moms. This game is suitable for training memory, concentration, accuracy, attention, thinking speed, and logic skills. Intelligent Tutoring System (ITS) as known as Intelligent Computer-Aided Instruction is a system to provide teaching that can adapt to students' abilities.

Despite these promising examples of AI applications, some things might be viewed as a drawback to AI, especially in the education sector. AI limits human interaction, the development of social skills, and the ability to build relationships. AI can also be a problem for developing countries because of its relatively high cost and because of insufficient internet connectivity to operate AI. AI solutions also make the learning process so dependent on computing systems and infrastructure that it can become a target for cyberattacks and experience various technical problems. AI technology is also allegedly triggering the emergence of new methods of plagiarism. With increasingly sophisticated AI algorithms, this tool can paraphrase the original document, change conjunctions, and so on without changing the meaning. So that this plagiarized writing becomes like the original work. To overcome this, experts recommend that educational institutions implement plagiarism checker solutions that are also AI-based. Recent innovations allow developers to teach computers to perform complex tasks. This leads to opportunities to improve the learning process. However, the "teacher" is irreplaceable. AI provides many benefits for students and teachers. First, for the student. 1) Education can be done at any time. By physically attending class, it's clear that it is time-consuming – travel at least. AI-based applications provide the opportunity to study in your spare time, spending ten or fifteen minutes – without the need to attend class. In addition, students can get feedback from tutors or instructors directly. 2) Various options to suit student needs. AI-based solutions can adapt according to the student's level of knowledge, topics of interest, and so on. 3) AI-based systems will tend to help students with their weak sides. It offers learning materials based on their weaknesses. For example, students take a test before starting to use the app; The app analyzes them and provides the appropriate assignments and courses. 4) Virtual mentors. The AI-based platform offers virtual mentors to track student progress. Of course, only "human" teachers can better understand student needs, but it's worth getting instant feedback from a virtual tutor. With AI, it can help identify superior talents or identify learning difficulties faced by students. Learning in AI systems is technology-based, and is personalized learning so that it can foster the independence of students which will improve their learning experience. AI learning that emphasizes individual systems can increase student learning focus. AI can identify concepts

like what students don't understand so that later AI can make adjustments to find new ways to help student learning. Thus, the right way of teaching students can be analyzed through artificial intelligence. Second, for teachers and school institutions.

- 1) Opportunity to see the "weaknesses" of students. Different training courses make it possible to see gaps in students' knowledge. For example, AI can tell the teacher if many students choose the wrong answer for a particular question. As a result, the tutor has the opportunity to pay attention to the requested topic.
- 2) Better engagement. Modern technologies such as VR and gamification help engage students in the educational process, making students more interactive. Various AI-enabled algorithms can analyze user knowledge and interests and provide recommendations and training programs that can be further personalized.
- 3) Automatic curriculum creation. Teachers benefit greatly from AI development. Currently, they do not need to create a curriculum from scratch. As a result, tutors spend less time searching for the necessary educational materials.
- 4) Opportunity to find good teachers. With this online educational platform and the availability of "teachers" to choose from, students have the opportunity to communicate with specialists from other countries. AI enabled educational platforms offer suitable tutors, depending on teaching experience and soft skills. With AI, making media or teaching materials will become easier, teachers do not need to understand technology in detail. There are already many applications and platforms available, teachers just need to sort and choose according to their needs. In terms of assessment, With AI, teachers no longer need to spend a lot of time assessing student assignments. Assessment of student assignments can be done automatically, even item analysis can be obtained directly without the teacher having to do the analysis one by one. Students also get direct scores thanks to the application of AI in education. They don't have to wait long to find out their value. With the help of the teacher's task in minimizing the time in assessing, the teacher will have more time to focus more on the teaching and learning process. With the application of AI, learning activities can be carried out at any time. The presence of AI-based applications provides opportunities to learn anytime and anywhere, not limited by space and time. In addition, students also have the opportunity to find teachers other than the teachers at the school. With this online education platform and the availability of "teachers" to choose from, students have the opportunity to communicate with other teachers, even with teachers from other countries. The learning experience and abilities of students will certainly be able to develop better. With the implementation of AI in education, in a pandemic situation like today, where the learning process has been forced to use the online mode, it is very useful. Learning activities are changed from conventional to online to facilitate the delivery of information and communication between teachers and students, and so that learning can continue.

With the presence of AI in education, education is expected to be better and able to develop according to the times.

The presence of AI technology is a breakthrough in the field of education to facilitate learning and can foster independence, it does not have to depend on the role of a teacher who is too dominant, but teachers can shift to a level that provides enlightenment with substantial keywords and more importantly, must be returned to the essential teaching is moral education that must be maintained. Changes in the demands of education require innovation and creativity in the learning process. With the development of artificial intelligence in the field of education to help process daily activities including teaching and learning. Therefore, the teacher's intelligence is unmatched as the natural teacher's intelligence that has been bestowed by the creator. However, a gift needs to be maintained properly and optimally. Artificial intelligence that emerged as the industrial revolution is also the result of the creative minds of human natural intelligence. So that, when compared, between the two will never have an equal position. Precisely artificial intelligence can collaborate with natural intelligence to become a perfect whole. In the future progress of science and technology, teacher work such as correcting, student attendance, giving daily tests and exams, explaining knowledge, making administrative reports and other systemic work can be submitted to be completed by technology devices. Teachers can save more energy and can focus more on non-systemic work to create a golden generation with more character and quality with natural intelligence where robots cannot.

CONCLUSION

The existence of artificial intelligence may be able to provide knowledge to students, but developing character cannot be done. That is an educator's job. How to inspire, motivate, make students become good students." So the role of the teacher in providing motivation, inspiration, and developing character are what AI cannot replace because AI is not given feelings and emotions like humans in general. In the end, if we look at technological developments, we must be able to adapt as technology advances. If we do not adjust, we are an educator (teacher/ lecturer) may be replaced by technology.

REFERENCES

1. Abu Ghali, M. J., Abu Ayyad, A., Abu-Naser, S. S., & Abu Laban, M. (2018). *An Intelligent Tutoring System for Teaching English Grammar*. <http://dspace.alazhar.edu.ps/xmlui/handle/123456789/289>

2. Adi, R. (2021). *Metodologi Penelitian Sosial dan Hukum*. Yayasan Obor Indonesia.
 3. Alhabbash, M. I., Mahdi, A. O., & Naser, S. S. A. (2016). An Intelligent Tutoring System for Teaching Grammar English Tenses. *European Academic Research*, 4(9), 1–15.
 4. Bin, Y., & Mandal, D. (2019). English teaching practice based on artificial intelligence technology. *Journal of Intelligent & Fuzzy Systems*, 37(3), 3381–3391. <https://doi.org/10.3233/JIFS-179141>
 5. Canbek, N. G., & Mutlu, M. E. (2016). On the track of Artificial Intelligence: Learning with Intelligent Personal Assistants. *Journal of Human Sciences*, 13(1), 592–601.
 6. Fitria, T. N. (2021a). Grammarly as AI-powered English Writing Assistant: Students' Alternative for Writing English. *Metathesis: Journal of English Language, Literature, and Teaching*, 5(1), 65–78. <https://doi.org/10.31002/metathesis.v5i1.3519>
 7. Fitria, T. N. (2021b). QuillBot as an online tool: Students' alternative in paraphrasing and rewriting of English writing. *Englisia: Journal of Language, Education, and Humanities*, 9(1), 183–196. <https://doi.org/10.22373/ej.v9i1.10233>
 8. Haryanto, H., Rosyidah, U., & Kardianawati, A. (2018). Model Elemen Game Imersif Berbasis Appreciative Learning dan Kecerdasan Buatan Pada Game Pembelajaran. *Proceeding SENDI_U*. <https://unisbank.ac.id/ojs/index.php/sendu/article/view/5970>
 9. Hwang, Y. S., & Vrongistinos, K. (2012). Using Blackboard and Skype for Mentoring Beginning Teachers. *American Journal of Distance Education*, 26(3), 172–179.
 10. Jain, S., & Alam, M. A. (2020). Comparative Study of Artificial Intelligence-Based Teaching With Human Interactive Teaching: In E. C. Idemudia (Ed.), *Advances in Business Strategy and Competitive Advantage* (pp. 68–100). IGI Global. <https://doi.org/10.4018/978-1-7998-3351-2.ch005>
 11. Klamma, R., Lange, P. de, Neumann, A. T., Hensen, B., Kravcik, M., Wang, X., & Kuzilek, J. (2020). Scaling Mentoring Support with Distributed Artificial Intelligence. *Intelligent Tutoring Systems*, 38–44. https://doi.org/10.1007/978-3-030-49663-0_6
- Mufdalifah, M. (2017).

Chapter 49

Tragic Protagonists in Shakespeare's Hamlet: A Psychological & Moral Analysis

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ABSTRACT

William Shakespeare's Hamlet (c. 1600) is a seminal tragedy centering on Prince Hamlet of Denmark, a deeply melancholy, intelligent, and introspective character struggling to avenge his father's murder. Hamlet is famous for his philosophical soliloquies, feigned madness, and profound inaction, making him an enduring, complex figure of human internal conflict. William Shakespeare's Hamlet remains one of the most profound explorations of tragedy in English literature. Hamlet as a classical tragic protagonist through the lens of Aristotelian tragedy, focusing on key elements such as hamartia (tragic flaw), anagnorisis (recognition), peripeteia (reversal), and catharsis. Hamlet emerges as a modern tragic hero whose downfall is shaped not only by fate but also by intellectual paralysis and ethical conflict. This paper explores the concept of tragic protagonists in Hamlet by William Shakespeare, focusing on the psychological, moral, and philosophical dimensions of the central characters. The study presents a deeply complex tragic protagonist whose internal conflicts, moral dilemmas and existential reflections distinguish him from classical tragic heroes. This study examines Hamlet as a classical tragic hero while also analyzing Claudius and Gertrude as

complex tragic figures. Using qualitative textual analysis and Aristotelian tragedy theory, the research identifies hamartia, moral conflict, and existential dilemmas as defining features of Shakespearean tragedy. The findings reveal that Hamlet's indecision and intellectual depth contribute to his downfall, making him a uniquely modern tragic protagonist. The study also analyzes how Shakespeare redefines tragedy by introducing psychological depth, philosophical inquiry, and moral ambiguity. This study focuses how Shakespeare adapts this concept and presents Hamlet as a tragic hero shaped by internal conflict rather than external forces. It includes literary criticism by reinterpreting tragedy through psychological realism and ethical ambiguity. The tragic dimensions of the protagonist in Hamlet, focusing on Prince Hamlet as a multifaceted tragic hero are studied. By analyzing his internal conflicts, moral dilemmas, and existential reflections, the study explores how Shakespeare redefined Aristotelian tragedy. Through textual analysis and theoretical interpretation, this research demonstrates that Hamlet's tragedy lies not only in fate but in his consciousness and indecision, making him one of literature's most profound tragic protagonists.

Keywords: *Hamlet, tragic hero, Shakespeare, hamartia, tragedy, existentialism, revenge tragedy*

INTRODUCTION

Tragedy has been a central genre in literature since ancient Greek drama, where playwrights such as Sophocles and Euripides established conventions that influenced later works. Tragedy has been a fundamental genre in literature, particularly in the works of William Shakespeare. The concept of the tragic protagonist originates from Aristotle's Poetics, where a tragic hero is defined by a fatal flaw (hamartia). Among his plays, Hamlet stands out as a profound exploration of human psychology and moral conflict. The concept of the tragic protagonist has been central to classical and Renaissance drama, reaching its most complex expression in the works of William Shakespeare. The play revolves around Prince Hamlet's quest for revenge, which ultimately leads to his downfall. William Shakespeare, however, revolutionized tragedy by creating protagonists who are psychologically complex and morally ambiguous. Among these, Hamlet stands as one of the most compelling tragic figures. The tragic protagonist, as defined in classical literature, is a character of noble stature that experiences a downfall due to a personal flaw or fate. The protagonist of Hamlet, Prince Hamlet of Denmark, embodies both classical and modern elements of tragedy. While he fulfills many Aristotelian criteria of a tragic hero, his introspection and hesitation introduce a new dimension to tragic characterization.

Theoretical Framework: Aristotelian Concept of Tragedy

Aristotle, in his *Poetics*, defines tragedy as the imitation of an action that is serious, complete, and of a certain magnitude. A tragic hero is typically a person of noble stature who experiences a downfall due to a tragic flaw (*hamartia*), leading to recognition (*anagnorisis*) and reversal (*peripeteia*), ultimately evoking pity and fear in the audience (*catharsis*). Hamlet aligns with many of these characteristics. He is of noble birth, possesses intellectual brilliance, and faces a moral dilemma that leads to his downfall. However, Shakespeare expands the Aristotelian model by emphasizing internal conflict rather than external action. However, Shakespeare's tragedies, particularly Hamlet, transcend classical framework by introducing psychological depth and existential questioning. Prince Hamlet stands as one of the most debated tragic figures in literature. Unlike traditional heroes driven by action, Hamlet is characterized by hesitation, introspection, and philosophical inquiry.

Hamlet as a Tragic Protagonist

Hamlet's *Hamartia* shows indecision and over thinking. Hamlet's inability to act decisively is widely regarded as his tragic flaw. Despite clear evidence of his father's murder, he delays avenging it. His philosophical nature leads him to question morality, existence, and consequences, as seen in his famous soliloquy:

"To be, or not to be: that is the question."

This hesitation results in unintended consequences, including the deaths of Polonius, Ophelia, and ultimately himself.

Internal Conflict and Psychological Depth

Hamlet's tragedy is deeply psychological. He struggles with moral responsibility, fear of sin and damnation, distrust of appearances. Unlike traditional heroes, Hamlet's battle is internal rather than external. This inward conflict makes him a modern tragic figure, resonating with existential themes.

The Role of Fate and Supernatural Elements

The appearance of the ghost introduces the element of fate. Hamlet is compelled to act, yet he questions the ghost's authenticity. This tension between destiny and free intensified his tragic condition.

Moral Integrity and Ethical Dilemmas

Hamlet's delay is not mere weakness but a reflection of his moral consciousness. He seeks certainty and justice rather than impulsive revenge. His ethical struggle elevates him above typical revenge heroes.

Other Tragic Figures in Hamlet

Claudius: The Guilty King represents a different type of tragic figure. His ambition leads to regicide, and his guilt haunts him. Unlike Hamlet, Claudius acts decisively but lacks moral integrity.

Ophelia: The Victim of Circumstance- Ophelia's tragedy stems from obedience and emotional vulnerability. Manipulated by her father and rejected by Hamlet, she descends into madness and ultimately dies. Her character highlights the impact of patriarchal control.

Laertes: The Foil to Hamlet- Laertes contrasts Hamlet by acting swiftly to avenge his father's death. However, his impulsiveness leads to manipulation and eventual downfall, reinforcing the dangers of unchecked action.

Objective of Study: This paper aims to explore Hamlet's role as a tragic protagonist and analyze how Shakespeare reshapes the concept of tragedy.

LITERATURE REVIEW

Scholars have extensively studied Hamlet from various perspectives. A. C. Bradley₁ emphasized Hamlet's tragic flaw as excessive introspection. Sigmund Freud₂ interpreted Hamlet's hesitation through psychoanalytic theory, particularly the Oedipus complex. T. S. Eliot₃ criticized the play as an "artistic failure" due to its emotional imbalance. These interpretations highlight the complexity of Hamlet's character and support the need for continued research into his tragic nature.

RESEARCH METHODOLOGY

This study employs **qualitative, interpretative, and textual based methods** for analysis of approaches focusing on. Close reading of key scenes in Hamlet also included here. Application of Aristotelian tragedy theory and psychological and philosophical interpretation was applied. Primary data is derived from the text of the play, while secondary sources include critical essays and scholarly articles.

ANALYSIS AND DISCUSSION

Hamlet as a Tragic Hero

Hamlet embodies the classical tragic hero with a unique intellectual dimension. His hamartia lies in indecision and over thinking, which delays his revenge. Unlike traditional heroes, Hamlet's struggle is internal, reflecting existential concerns about life and death. His famous soliloquy, "To be or not to be," illustrates his philosophical dilemma and highlights his tragic consciousness.

Psychological Conflict

Hamlet's character reflects deep psychological conflict. Influenced by interpretations such as those of Sigmund Freud, his hesitation can be seen as a result of subconscious tension and moral anxiety. His oscillation between action and inaction ultimately leads to tragic consequences.

Gertrude's Moral Ambiguity

Queen Gertrude represents moral ambiguity. Her actions contribute to the tragic events, yet her motivations remain unclear. She can be seen as a passive tragic figure caught in political and emotional turmoil.

Existential Dimensions

The play anticipates modern existential philosophy by questioning the meaning of life, death, and human suffering. Hamlet's reflections align with existential themes later explored by thinkers like Jean-Paul Sartre.

Hamlet and Modern Tragic Theory

Modern interpretations often view Hamlet through existential and psychoanalytic lenses. His introspection aligns with existentialist ideas of absurdity and meaninglessness, later explored by philosophers like Jean-Paul Sartre. From a psychoanalytic perspective, critics like Sigmund Freud interpret Hamlet's hesitation as rooted in subconscious conflicts, particularly the oedipal complex.

RESULT & FINDINGS

The analysis reveals that Hamlet's tragedy is primarily psychological rather than situational. Shakespeare expands the concept of tragic hero beyond Aristotle's definition. Multiple characters in the play exhibit tragic dimensions. The play bridges classical tragedy and modern existential thought.

Hamlet's tragedy is unique because it arises from consciousness rather than external forces alone. His intellectual depth makes him relatable across generations. Shakespeare transforms the tragic hero from a figure of fate to one of psychological realism. The interplay between action and inaction, morality and revenge, and thought and emotion creates a complex tragic structure that continues to engage audiences and scholars.

CONCLUSION

This study concludes that Hamlet redefines the tragic protagonist through psychological depth and moral complexity. Prince Hamlet exemplifies the evolution

of the tragic protagonist. While he retains elements of classical tragedy, his psychological complexity and moral dilemmas redefine the genre. His downfall is not solely due to fate or flaw but to his profound awareness of existence. Hamlet's internal struggle, rather than external conflict, drives the tragedy, making him a timeless and universal figure. Shakespeare's innovative portrayal of tragedy continues to influence modern literature and critical theory. Hamlet remains timeless, illustrating that the greatest tragedies often occur within the human mind.

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REFERENCES

1. Bradley, A. C. (1904). *Shakespearean Tragedy*, London: Macmillan.
2. Freud, S. (1900). *The Interpretation of Dreams*, Vienna: Franz Deuticke
3. Eliot, T. S. (1919). *Hamlet and His Problems*, The Egoist.
4. Shakespeare, W. (1603). *Hamlet*. London, Nicholas Ling and John Trundle
5. Sartre, J.-P. (1943). *Being and Nothingness*, Gallimard (Paris).
6. Aristotle, *Poetics* (1996). Penguin Classics
7. Jones, Ernest. (1949). *Hamlet and Oedipus*, New York: W. W. Norton & Company.
8. Mack, Maynard. (1951–2). "The World of Hamlet." *The Yale Review* 41: 502–23.
9. Belsey, Catherine. (2016). "The Question of Hamlet." *The Oxford Handbook of Shakespearean Tragedy*.
10. Anglin, Emily (2017). "Something in me dangerous: Hamlet, Melancholy and the Early Modern Scholar". *Shakespeare* 13.1, 15-29.
11. Baker, Christopher (2019). "Hamlet and the Kairos," *Ben Jonson Journal* 26.1, 62-77.
12. Baker, Naomi, (2018). "Sore Distraction: Hamlet, Augustine and Time," *Literature and Theology* 32.4, 381-96.
13. Booth, Stephen. (1969). "On the Value of Hamlet." *Reinterpretations of Elizabethan Drama*. Ed. By Norman Rabkin. New York: Columbia University Press, 137-76.
14. Bloom, Harold, (1986). ed. *Modern Critical Interpretations: Hamlet*. New York: Chelsea House Publishers.
15. Calderwood, James L. (1983) "To Be and Not to Be: Negation and Metadrama in Hamlet" New York: Columbia.
16. Dodsworth, Martin, (1985). *Hamlet Closely Observed*. London: Athlone.

Chapter 50

Teaching English With AI and Without AI: A Human-centered Perspective

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ABSTRACT

In the Indian classroom context, language teaching becomes meaningful only when it is connected to the students' life, emotions, and surroundings. For example, when a teacher brings jasmine flowers into the class and explains their smell, beauty, and place in Indian culture, students understand immediately and remember it for a long time. If the same concept is shown only on the screen through AI, especially with an unfamiliar flower like daffodil, it may not create the same sense and connection in the minds of students. A teacher wearing jasmine flowers in her hair and explaining the idea makes the classroom lively and experiential. This is the real difference between teaching with AI and teaching without AI. This paper discusses how language learning is not just about grammar and vocabulary but about emotions, culture, and lived experiences. It also highlights the importance of the teacher as a guide, motivator, and emotional support system in the classroom.

Keywords: Artificial Intelligence, English Language Teaching, Human-Centered Learning, Emotional Intelligence, Cultural Context, Teacher's Role

1. INTRODUCTION

Teaching English is not merely teaching words, grammar, and sentence structures. It is about bringing life into language. Students learn better when they connect the language with what they see, feel, and experience in their everyday life. Today, many digital tools and AI-based platforms are helping in the classroom by giving instant answers, corrections, and practice exercises. These tools are useful, but they cannot replace the warmth, emotional understanding, and contextual teaching that a teacher brings into the classroom.

Language is a living experience. Students come to the classroom with fear, hesitation, excitement, curiosity, and emotional baggage. Only a teacher can understand these feelings and use them to make learning effective. This paper attempts to discuss the difference between teaching English with AI and teaching English through human-centered classroom interaction.

2. REVIEW OF LITERATURE

Many studies today speak about the role of technology in education and how it supports language learning. It is true that digital platforms help students practice grammar, vocabulary, pronunciation, and writing skills. They give immediate feedback and help students learn at their own pace. In the present generation, technology has become a helpful companion for students, especially in improving language accuracy and providing repeated practice without hesitation.

At the same time, educational thinkers and classroom practitioners have always emphasized that language learning happens through interaction and social connection. Students do not learn language only by reading rules, memorizing grammar, or seeing answers on the screen. They learn by speaking, listening, responding, making mistakes, and connecting ideas with their own life experiences. Language grows through human interaction.

More than this, education also happens through touch, warmth, affection, and emotional bonding. Very often, a teacher in the classroom becomes like a mother in nurturing the learner and like a father in guiding, correcting, and strengthening the learner's confidence. The affection of a teacher, a smile of encouragement, a gentle word of support, or even a reassuring presence can help a student come out of fear and hesitation.

Many students, especially in the Indian context, come to the English classroom with a sense of fear. English is often seen as the language of the British man, something distant, superior, and outside their comfort zone. This creates a shell or a box in the minds of students. They begin to feel that English is not their language and that they may not be able to speak it correctly. This fear itself becomes the first barrier to learning.

It is in such situations that the teacher's human role becomes central. A teacher, through love, patience, and warmth, helps the student come out of this shell. The teacher slowly breaks the fear associated with language and makes English feel natural, friendly, and part of life. This emotional support cannot be programmed into technology in the same way.

Therefore, while technology can support learning in terms of speed and correction, the teacher-led classroom remains the true space where confidence, belongingness, and language identity are built.

3. RESEARCH GAP

Most of the existing discussions focus mainly on how technology supports teaching through digital tools, instant correction, and structured learning materials. However, very few studies truly speak about what actually happens inside a real classroom. A classroom is not merely a space where lessons are delivered; it is a living emotional environment where learning begins with human connection. Very often, powerful learning starts not from the textbook but from simple everyday conversations initiated by the teacher. A class may begin with “Did you eat?” talk, “Are you not feeling well today?” conversation, “Take some medicine and rest” talk, or familiar interactions such as “dosa talk” and “poori talk.” These simple, caring conversations create warmth, trust, and a sense of belonging among students.

Such natural interaction leads to a powerful learning atmosphere because students first feel seen and understood as human beings before they become learners. When a teacher asks about their health, family, mood, food, or daily life, students slowly come out of fear and hesitation. The classroom then becomes emotionally safe, and once this comfort is created, language learning happens more naturally and effectively. Conversations about family, college life, cinema, friendships, and emotions further strengthen this connection, making English a language of life rather than merely a subject.

These are not programmed responses or pre-designed instructional prompts. They emerge spontaneously from the teacher’s sensitivity, observation, and emotional intelligence. Only a teacher can sense when a student is disturbed, unwell, anxious, or emotionally withdrawn and use gentle conversation to bring them back into the learning space. This human touch creates confidence and encourages participation, something that technology alone cannot replicate. It is this lived classroom reality that many studies on technology and AI in education often overlook.

4. METHODOLOGY

This paper is based on classroom observations and personal teaching experiences. The study reflects on real classroom practices where students respond to familiar topics, cultural examples, and emotionally connected discussions. The approach is reflective and experience-based.

5. DISCUSSION

Language learning begins from life. Students respond more when the class starts with familiar topics. When a teacher begins with discussions about dosa, idli, poori, family, films, actors, politics, friendship, love, heartbreak, and student

emotions, the classroom immediately becomes active. Students start participating because they feel that the language is speaking about their life.

An English classroom especially has the power to touch emotions because literature mirrors life. Stories, poems, plays, and communication exercises reflect human feelings. When these feelings are brought into discussion, students connect deeply and develop interest in learning the language.

A teacher can understand the mood of the class. Sometimes students are silent because they are afraid. Sometimes they are distracted because of emotional issues. Sometimes they are hesitant because of lack of confidence. A teacher can sense all this and respond accordingly. This human touch cannot come from a machine.

Cultural examples also make learning stronger. When grammar is taught through familiar expressions like “amma is making dosa” or “my friend is coming to college,” students understand the structure naturally. They do not feel that grammar is difficult.

Another important aspect is emotional intelligence. Students need to learn how to speak respectfully, listen patiently, and express feelings properly. These qualities are learned through classroom interaction and teacher guidance. Technology may help in correction, but it cannot teach sensitivity and empathy in the same way.

6. FINDINGS

The study shows that technology is undoubtedly useful for practice, correction, repetition, and improving structural aspects of language such as grammar, vocabulary, and pronunciation. However, the findings strongly indicate that students learn language more meaningfully through human interaction and emotionally secure classroom environments. Familiar classroom discussions, cultural references, and everyday conversations make learning deeper and more memorable.

A very important finding is that many students enter the classroom carrying invisible burdens. Some students come from economically weak backgrounds, some from socially marginalized spaces, and others struggle with feelings of inferiority related to their cultural background, complexion, physical appearance, language accent, or family status. Such students often hesitate to speak, participate, or even make eye contact in the English classroom because they feel low in confidence and self-worth.

In many cases, the fear of English is not merely linguistic but psychological and social. Students may feel that their background, appearance, or way of speaking makes them less capable. Here, the role of the teacher becomes highly significant.

Through affection, reassurance, and equal treatment, the teacher creates a space where every learner feels valued. When students are made to feel that language belongs to everyone and is not restricted by class, beauty, social status, or background, they begin to participate more freely.

The study therefore finds that emotional acceptance and human connection are central to meaningful language acquisition. Students remember not only what was taught but also how they were made to feel in the classroom. This emotional memory strengthens learning.

7. CONCLUSION

Teaching English is fundamentally a human process. Technology and AI can support the classroom by providing practice, correction, and accessibility, but they cannot replace the living presence of a teacher. A teacher brings life, emotion, culture, and confidence into language learning. The classroom becomes meaningful when students feel connected to what is being taught and when they feel emotionally safe to express themselves.

Language is not acquired only through rules and screens; it is acquired from the surroundings, from imitation, from listening to people around us, and from lived human warmth. Just as a child learns its first language by hearing voices at home, observing expressions, imitating sounds, and feeling affection, students too learn English more naturally through human interaction.

Language also carries the memory of experience. It comes from the smell of the earth after rain, the taste of water, the warmth of food shared at home, the rhythm of daily conversations, and the emotional life that surrounds the learner. These lived experiences make language meaningful and memorable.

Therefore, while technology may assist the process, the teacher remains the heart of English language teaching. It is through the teacher's warmth, guidance, empathy, and connection with life that language truly enters the mind and stays in the heart.

REFERENCES

1. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
2. Hymes, D. (1972). *On Communicative Competence*. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics*. Penguin.

Chapter 51

Innovative Methods and Approaches in Teaching Language in The Digital Era

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ABSTRACT

The integration of digital technologies has transformed the ways in which language and literature are taught. This paper explores emerging trends in teaching these subjects in the digital era, focusing on innovative approaches such as flipped classrooms, gamified learning, and blended learning models. Additionally, the use of online platforms, virtual classrooms, and digital tools is reshaping pedagogy by fostering interactive and student-centered learning environments. This article examines the benefits and challenges of these new methodologies, evaluates their effectiveness in enhancing linguistic and literary competence, and suggests ways to optimize their use for future classrooms.

INTRODUCTION

In recent years, digital technology has revolutionized educational practices, particularly in the teaching of language and literature. Traditional classrooms are being replaced or supplemented by virtual learning environments where technology plays a crucial role. The shift from teacher-centered to student-centered instruction has encouraged educators to explore modern teaching strategies that align with students' digital experiences. This paper delves into the latest trends in pedagogy and examines how these methods address the challenges of modern education, meet learners' needs, and make learning more engaging and accessible.

Flipped Classroom Approach

The flipped classroom model reverses the traditional lecture-and-homework structure. In this approach, teachers provide instructional materials (like recorded videos, podcasts, or readings) for students to study at home. Classroom sessions are then used for discussions, activities, or problem-solving. This method encourages active learning, fosters student autonomy, and allows teachers to address individual learners' challenges during class.

Advantages:

- Students learn at their own pace by reviewing materials multiple times.
- Class time is optimized for interaction, discussions, and clarifying doubts.
- It enhances students' critical thinking and collaborative skills.

Challenges:

- Requires access to digital resources, which may not always be available.
- Teachers need to ensure students come prepared for in-class activities.

Gamification in Language and Literature Classes

Gamification refers to the use of game elements such as points, rewards, and challenges in non-game settings to engage learners. In language teaching, tools like Duolingo use gamified techniques to teach vocabulary and grammar. Similarly, literature lessons can incorporate storytelling games or role-playing activities to encourage participation and comprehension.

Advantages

- Makes learning enjoyable and motivates students to participate actively.
- Reinforces knowledge through repetition and rewards.
- Builds a positive learning environment by reducing anxiety associated with failure.

Challenges:

- Overemphasis on games may distract students from learning objectives.
- Designing effective gamified content can be time-consuming for teachers.

Blended Learning: A Hybrid Model

Blended learning combines traditional face-to-face teaching with online instruction. This model allows students to access educational content through

Learning Management Systems (LMS) while participating in collaborative activities during classroom sessions. It offers the flexibility of self-paced learning along with the social benefits of in-person interaction.

Advantages:

- Accommodates diverse learning styles by offering multiple modes of instruction.
- Provides flexibility for students to learn according to their schedules.
- Increases engagement through interactive content and collaborative activities.

Challenges:

- Requires robust digital infrastructure and teacher training.
- Balancing online and offline components can be challenging.

Use of Digital Tools for Language Learning

Digital tools like podcasts, e-books, and virtual classrooms have become integral to language teaching. Platforms like Zoom, Google Classroom, and Microsoft Teams offer opportunities for real-time interaction and collaborative learning. Teachers can also use online resources like interactive quizzes, vocabulary apps, and video tutorials to enhance language skills.

Advantages:

- Facilitates personalized learning by offering resources that cater to individual needs.
- Enables access to diverse materials beyond the traditional curriculum.
- Encourages interaction and communication through digital collaboration tools.

Challenges:

- Technical difficulties may interrupt learning sessions.
- Overreliance on technology may diminish personal connections between teachers and students.

Incorporating Multimedia in Literature Teaching

Multimedia resources such as films, documentaries, and audio recordings enrich the teaching of literature by providing different perspectives on literary

works. Students can experience texts visually or aurally, deepening their understanding and engagement with the material. For example, watching a movie adaptation of a novel can enhance comprehension and spark discussions about interpretation and adaptation.

Advantages:

- Promotes deeper engagement with literary texts.
- Encourages critical thinking by comparing multiple interpretations.
- Appeals to various learning styles (visual, auditory, kinesthetic).

Challenges:

- Availability of relevant and high-quality multimedia content may be limited.
- Teachers must balance multimedia use with traditional text-based analysis.

Online Assessment and Feedback Mechanisms

Digital platforms enable teachers to conduct assessments and provide feedback efficiently. Tools like Google Forms, Kahoot, and Quizizz offer instant grading and feedback, which enhances learning by identifying students' strengths and weaknesses promptly. Additionally, online platforms allow teachers to track students' progress and design personalized interventions.

Advantages:

- Instant feedback promotes continuous learning.
- Teachers can create customized assessments that suit learners' levels.
- Online tools offer data analytics for tracking student performance.

Challenges:

- Ensuring academic integrity during online assessments can be challenging.
- Students may feel disconnected from the learning process without face-to-face feedback.

Teacher Training and Professional Development in the Digital Era

The successful implementation of digital teaching methods requires ongoing professional development for teachers. Workshops, webinars, and online courses equip educators with the skills needed to integrate technology into their teaching

practices effectively. Peer collaboration and knowledge sharing also play a crucial role in professional growth.

Advantages:

- Empowers teachers to innovate and experiment with new teaching strategies.
- Enhances teachers' confidence in using digital tools and platforms.
- Fosters a collaborative culture among educators.

Challenges:

- Time constraints may limit teachers' participation in training programs.
- Continuous learning is necessary to keep up with rapidly evolving technology

CONCLUSION

The digital era has opened new avenues for teaching language and literature by introducing innovative methods and approaches. Flipped classrooms, gamified learning, blended models, and multimedia integration offer students engaging and meaningful learning experiences. However, these approaches also present challenges, such as the need for digital infrastructure, teacher training, and the careful balancing of technology with traditional teaching methods. To harness the full potential of digital tools, educators must adopt a reflective approach, continuously adapt to emerging trends, and focus on creating inclusive and interactive learning environments.

As the educational landscape continues to evolve, it is essential for teachers to embrace these changes and remain committed to professional development. The future of language and literature education lies in a hybrid model that combines the best of technology with human interaction, ensuring that students not only acquire knowledge but also develop critical thinking, creativity, and communication skills.

Chapter 52

Leveraging ICT Tools to Enhance Speaking and Listening Skills For Career Advancement

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ABSTRACT

The research aims to carry out a systematical or a formal inquiry to discover and examine the higher impact of speaking and listening in a professional field. This study exhibits different theoretical structures that support the usage of Technology in education to improve once speaking and listening in his/her profession. The value of hearing is acknowledged and listening is shown as a linguistic skill that has to be given careful consideration. These days Information and Communication Technology ICT has rapidly developed and become a necessary component of daily life for all people. Individuals from diverse backgrounds use social media and YouTube as a platform for learning particularly students.

The research explores how the learners are able to speak well after listening through a video for better pronunciation. The process and procedure of handling things have become very simple and comfortable thanks to inventions in the end. Since education is now a function of educational institutions their inventions have the potential to significantly improve and affect education since they help students to become employable once completing higher education. ICT plays a vital role in improving student's Worldly knowledge happenings it has been noted that communicating once opinions, thoughts and expertise to others becomes crucial regardless of one's career path or social status hence to be successful, professional and proficient speaking plays a very important part which is actually a complex task. Few techniques will really help the learners to get a wider perception in both skills.

The qualitative research is conducted among various learners in different age group to illustrate the relationship between ICT and its role in helping learners in various skills. The future researched findings will reveal that ICT will serve as one of the useful and practical tool in promoting speaking and listening skill among pupils. The result obtained from the survey will be divided into several themes, which would be further discussed in the thesis.

In a nutshell, person who are learning English as a second language often feel that social media and YouTube helps to improve their speaking and listening skills when the language learners are asked to speak in English language on a particular topic, they try to speak, but they may not listen well. The reason students have faced problem due to lack of practice in listening's they even write composition owing to this the second language learners lose their confidence of the background to build up their communication competency.

The present research focus on developing communication skill specifically through listening skill with the positive outcomes of using ICT materials.

Key words: ICT, Communication skills, Technology, speaking, hearing, youtube

BACKGROUND OF THE STUDY

The learners from diverse backgrounds who possess limited exposure to the English language are heterogeneous. Without the necessary training, they are expected to speak and listen in a second language. Teachers at all levels of education assign more practice in reading and writing than in speaking; they completely disregard the ability to listen. The pupils had trouble communicating because they had not practiced listening skills and were careless with them. Because of their inexperience and nervousness, second language learners find it difficult to communicate. This is the primary cause of second language learners' inability to meet the desired level. Therefore, the researcher believed that using ICT tools to produce ideas and encourage learners to listen in the target language was a new technique to motivate them to do so.

INTRODUCTION

Since the COVID-19 pandemic, technology like cell phones, the Internet, TVs, PCs, and video games have become an essential aspect of students' lives. Their previous circumstances are significantly different from this one. The students are surrounded by technology as they grow up. They utilize it for both socializing with others and studying. This generation has been described by Marc Prensky

as “Digital natives” (Prensky, 2001). He stated, “Our students have changed radically”. Their brain process perceives new information differently from what their educators expected or designed to teach. Therefore, it becomes a challenge for educators to find and develop creative and effective ways to engage and teach the digital natives. Teaching is an activity that aims to enhance students’ knowledge, character, and conduct to become good individuals in a good state of mind. It does this by knowing and explaining a certain subject. English is a global language that is used for a variety of various tasks and purposes, including business, education, and professional endeavors. Since English is taught as a second language in India, few individuals there use it for formal or everyday communication. listening is in close relation with studying speaking because doing interaction correctly speaker and listener are needed (Brown, 2006). People could not turn out a word correctly especially for non-native speakers without listening to someone’s first, or on the other hand before being a good listener they cannot be a good speaker. The process of receiving a language is a question that puzzles scholars of linguistics and induces dispute in academics. In the past, some decades, theories of language comprehension have recognized the primacy of listening in the comprehension processes, confinement of information in mind, and the acquisition of second language ability. Pratama et al. / International Journal of Global Operations Research, Vol. 1, No. 3, pp. 123-129, 2020 124 However, for some English language learners, listening is the most difficult skill to be achieved. As a result, educators and teachers are always looking for creative ways to use multimedia tools to engage and instruct their pupils. Teachers are advised to employ instructional media to help with the teaching and learning of listening in order to lessen this issue that arises among language learners. YouTube has turned as social media when the videos are shared and when comments and other forms of interaction occur YouTube primarily creates knowledge by providing multimedia educational resources. When students have a whole experience—that is, when they see, hear, and interact—their memory and comprehension skills improve. When students see, hear, and generate materials during instruction, their comprehension level rises to over 75%; when they simply understand during preparation, it is 20%; and among those who see and hear alone, it is only 40% (Lindstrom, 1994). As previously mentioned, YouTube videos are an additional resource for audio-visual language instruction. This study looks at how important and active YouTube can be in the educational process and how language teachers may use it to help students get better at studying the English language. The study aims to respond to the following queries: What effect do YouTube videos have on pupils in a classroom setting? What strategy is being used to take use of YouTube in the classroom?

ICT TOOLS FOR ENHANCING LISTENING SKILL

Using ICT tools to facilitate new forms of communication between language learners and teachers is becoming a more popular trend and essential component of curricula in education. Nonetheless, the researcher's experimental research study looked at how to use ICT tools to improve listening abilities. High-quality LSRW skills are crucial for job seekers in the worldwide economy. One needs to communicate well in order to succeed in any industry. In addition to technical expertise, recruiters look for candidates with great communication abilities. Non-native English speakers use either their first language or the working language in the workplace. They must speak English well in order to understand, get along with, and accept their tasks from their coworkers. The ability to Listen, Speak, Read, and Write are thus the LSRW Skills that are most important for job seekers in the global market. Learning any language starts with these skills. While many illiterates are capable of speaking and listening, only those who are literary are able to master all four talents. (K. Gurusamy 2016)

BASIC TOOLS OF INFORMATION COMMUNICATION TECHNOLOGY USED FOR THE RESEARCH

In this research the researcher chooses the you tube, computer, projector, interactive white board, audio speakers these are the technological resources which are used as ICT tools

THE OVER VIEW OF YOUTUBE

The platform YouTube was created by three former PayPal employees on February 14, 2005 (Jefferson, 2005). It is a video-sharing website that allows people to easily upload, share, and view some video clips. It becomes the most widely used resource for online videos (Burke and Snyder, 2008). YouTube is hosted for thousands and even millions of entertainments, educational, political, medical, and historical videos from around the world

STRATEGIES FOR USING YOUTUBE VIDEOS IN CLASSROOMS

Twelve generic techniques for using video clips in teaching according to Berk (2009) First, video clips should provide content and data that is different from the information appropriate for the context. Second, they illustrate different concepts or principles like family relationships, anger management, etc. Third, YouTube videos present alternative viewpoints to develop the ability to reach decisions and convey compelling arguments. Fourth, they apply content to real-world applications

for important matters like child abuse, rape, etc. Fifth, videos serve as a stimulus for learning activities. Playing the video, the teacher can ask students for their reaction in an open discussion, direct them to answer specific questions collaboratively, or ask specific questions about the content presented. Sixth, video clips provide a good or bad application to critique, like inaccurate interpretations offered by the media on different topics. Seventh, the videos can exaggerate a particular point on various issues like personality disorders, diplomacy, and political decision making, etc. Eighth, YouTube clips snap student's attention through inserting sound clips of comedy or inspiring and motivating videos to the class while covering any particular topic. Ninth, videos should be entered into collaborative learning exercises. The teacher can assign examples of practical applications, the students critique the performance and concept, and the video is the motive for the discussion. The students engage in an unforgettable learning experience, and of course, this has various characteristics and several benefits for the educational process. Tenth, YouTube videos should motivate and inspire students through viewing uplifting message videos. A short video clip may make a gigantic difference in their moods, motivation, and attitude, and it takes the pressures they experience away. Eleventh, the teacher can use videos as commercial breaks when students are restless for whatever reason. These breaks charge student's energy and grab their attention back to the presentation of the material. Twelfth, the teacher can also employ videos to signal a return from a class break. Berk (2009) also provides eight steps for using a video clip in teaching. These are the following:

1. The teacher picks a particular clip to provide the content or illustrate a concept or principle.
2. The teacher prepares specific guidelines for students or discussion questions, to have directions on what to see, hear, and search. What is the point of the clip? The teacher makes it clear to the students.
3. The teacher introduces the video briefly to reinforce a purpose
4. The teacher plays the clip
5. The teacher stops the clip at any scene to highlight a point or replay clip for a specific in-class exercise
6. The teacher sets a time for reflection on what was the view
7. The teacher assigns an active learning activity to interact on specific questions, issues, or concepts in the clip
8. The teacher structures a discussion around those questions in small and large group formats.

RECOMMENDATION

The usage of ICT tools and other technological devices in language acquisition is done so as an instructional tool for the researcher's varied efforts and beneficial outcomes. This study is an experiment whose findings have been extensively studied in connection to the relationship between modern ICT tools and mediating language in precise traditional language instruction.

Education has seen significant and comparatively distinct advancements. Overcoming challenges.

1. Some ICTD activities requires special technical knowledge.
2. All staff needs to develop an understanding of how ICTs fit within their respective areas. Therefore, investment in ICT education and training for all program staff is essential.
3. Raising awareness about ICT as overall development enablers (within the perspective of national development strategies) is also important.

The true benefit of ICT lies in more complex processes than simple information sharing and communication via technology. However, the ongoing process of integrating ICT into daily life while providing everyone with enough training and practice is really removing the barriers. ICT has significantly altered how people view life. The aforementioned comments, which were taken from recent data, made it quite evident that ICT development looks at how technology tools are applied successfully in a variety of fields, raising the degree of national development. A language teacher's ability to encourage their students to mediate technological communication and assist them in directly listening to a second language using an ICT tool is expanded by the growing use of ICT devices and innovative teaching techniques.

CONCLUSION

This study's primary focus has been on using ICT tools to improve speaking and listening abilities. It also examines performance differences between learners from diverse backgrounds who have had less exposure to language acquisition and how to improve communication skills. The primary objective of this study is to transform the learning environment through technology, facilitating the rapid and effortless development of communication skills. One innovative approach to revolutionizing traditional teaching methods into digital ones is the use of ICT tools to improve speaking and listening skills. Through the use of various ICT devices, students have learned to communicate in a new digital environment and in real-life interactions. In the past, utilizing technology was mostly used for

teaching and learning languages, but in more recent times, technological advancements have brought about a tremendous transformation in a number of fields, including trade, commerce, health, and education. Even after class, face-to-face, simple, and quick communication has developed between students and professors. One of the main reasons ICT tools are being produced more and more is to facilitate easy communication using a variety of resources, including email, mobile phones, computers, and the internet. ICT tools are a great aid to students in communicating information via technology and in making things happen. It has been determined that teaching listening to students through the use of videos has a major positive impact on their ability to comprehend the subject matter or context of the lesson. Teachers are unable to abandon the classroom to use YouTube as it provides them with all the benefits of a more remarkable and valuable teaching experience. YouTube videos ought to be both an integral and extended aspect of education at the same time. The use of YouTube videos is enjoyable for students. These films improve students' comprehension of the course subject and help them strengthen their presentation skills. Since they are taking notes and perceive a real duration for the videos, students view the YouTube videos as a meaningful teaching tool. Pupils are so strongly stimulated by YouTube videos that many believe they should be used in the classroom. Additionally, students think that watching videos on YouTube improves their language proficiency in all domains, particularly hearing, and they particularly enjoy watching content produced by native speakers. Through the original content offered, YouTube videos enable students to gain an understanding of the culture of the language they are studying. YouTube videos are so crucial to the learning process, and future research should concentrate on enhancing them to generate greater interest. The teacher invites the students to submit digital materials that they believe are useful ICT tools for improving language acquisition and expanding their communication opportunities. Furthermore, as the school level students may be have less technological exposure and awareness is the cause for their higher education level they had difficulties in using ICT resources in the language learning classroom.

REFERENCES

1. Ikmal, Ikmal, et al. "USING YOUTUBE VIDEOS to ENHANCE STUDENTS' CREATIVITY on FLTM CLASS." *Metacommunication: Journal of Communication Studies*, vol. 6, no. 1, Mar. 2021, p. 1, <https://doi.org/10.20527/mc.v6i1.9715>.
2. Berk, R. A. (2009). ultimedia Teaching with Video Clips: TV, Movies, YouTube, and MtvU in the College Classroom. *International Journal of Technology in Teaching and Learning*, 5 (1), 1–21.
3. Gilakjani, A. P. & Ahmadi, M. R. (2011). A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement. *Journal of Language Teaching & Research*, 2(5), 977-988

4. DeWitt, Dorothy, et al. "The Potential of Youtube for Teaching and Learning in the Performing Arts." *Procedia - Social and Behavioral Sciences*, vol. 103, Nov. 2013, pp. 1118–26, <https://doi.org/10.1016/j.sbspro.2013.10.439>.
5. Kremer, M., Brannen, C., & Glennerster, R. (2013). The Challenge of Education and Learning in the Developing World. *Science Direct*, 340(6130), 297–300. **Goh, C. C. M.** (2000). *A cognitive perspective on language*
6. learners' listening comprehension problems. *System*, 28(1), 55-75.
7. Rice, K, Cullen, J. & Davis, F. (2011). *Technology in the Classroom: The Impact of Teachers Technology Use and Constructivism*.

Chapter 53

Teaching English in The Era of Artificial Intelligence: A Critical Exploration of Psychological and Affective Dimensions Through The Selective Literary Works of Arundhati Roy

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ABSTRACT

This paper critically examines the changing landscape of English language teaching in the age of Artificial Intelligence (AI), focusing on its psychological and emotional aspects. As AI-driven tools increasingly influence teaching methods, questions emerge about learner motivation, emotional engagement, cognitive independence, and the importance of human empathy in language learning. This study looks at how these aspects are addressed in modern classrooms by incorporating insights from the selected works of Arundhati Roy. Her narratives highlight themes of identity, marginality, emotional strength, and social awareness. Using an approach that combines literary analysis with educational psychology, the paper explores how Roy's texts can serve as valuable resources in AI-focused learning environments. It argues that while AI improves access, personalization, and efficiency in English language teaching, it risks reducing the emotional depth and human connection

that are vital for meaningful learning. Roy's works, filled with emotional depth and cultural richness, help balance this by promoting empathy, critical thinking, and emotional engagement among learners. The study uses qualitative textual analysis and theoretical insights from emotional learning and digital teaching to assess the relationship between technology and human-centered education. It emphasizes the need for a balanced approach that combines AI capabilities with literature-based emotional and psychological development. Ultimately, the paper supports a teaching model that maintains the human elements of language learning while welcoming technological advances. This will ensure that learners gain not only language skills but also emotional intelligence and critical awareness in a rapidly changing educational environment. In the history of teaching English methods became established pedagogy. According to an American applied linguist Edward Anthony's 1963 definition approach relates to a correlative set of assumptions about language learning and the nature of language itself. Method is the presentation of instructional material in the selected approach. Technique is the level of implementation at which classroom procedures are prescribed. A theory of the nature of language learning consists of an account of the Psycholinguistic and cognitive processes involved in language learning. In light of the above, I will discuss the psychology domain of Jean Piaget's theory of cognitive Development, Jerome Bruner's Cognitive theory and Lev Vygotsky's psychology of learning. I will also discuss affective dimensions of the theories of George Kelly, Carl Rogers and Abraham Maslow.

KEYWORDS: Artificial Intelligence, Psychological, emotional Intelligence, empathy, human

1. INTRODUCTION

The rapid growth of Artificial Intelligence (AI) in education has changed the landscape of English Language Teaching (ELT). It has shifted the focus to data-driven, personalized, and technology-based learning environments. AI tools like automated writing evaluation systems, chatbots, and adaptive learning platforms have improved learners' access to language resources and facilitated personalized instruction (Holmes et al., 2019). However, the increasing reliance on AI raises important questions about the loss of human elements in language education. This is especially true for the psychological and emotional factors that support meaningful learning.

Language learning is a social and emotional process that is influenced by learners' identities, motivations, fears, and cultural backgrounds (Krashen, 1982). Without emotional engagement in AI-driven environments, language acquisition

may become a mechanical task, harming learners' overall development. In this context, literature serves as a vital counterbalance by promoting empathy, critical thought, and emotional connection. The literary works of Arundhati Roy, especially *The God of Small Things* (1997) and *The Ministry of Utmost Happiness* (2017), provide deep insights into marginality, trauma, identity, and resistance. These stories highlight the emotional complexities of human experience, making them highly relevant for exploring the emotional aspects of language learning in the AI age. Arundhati Roy is a well-known Indian writer, essayist, and political activist. She is celebrated for combining literary creativity with sharp social and political critique. Born on November 24, 1961, in Shillong, she gained international fame with her first novel, *The God of Small Things* (1997). This book won the prestigious Booker Prize and explores themes like caste discrimination, forbidden love, and social injustice. Her later work, *The Ministry of Utmost Happiness* (2017), looks further into issues of marginality, identity, gender, and political conflict. Roy's writings consistently address themes of social inequality, postcolonial identity, environmental justice, and political resistance. She often highlights the voices of marginalized communities, including women and LGBTQ+ individuals. Beyond fiction, her essays, such as *The Algebra of Infinite Justice* and *Capitalism: A Ghost Story*, critique global capitalism, state violence, and nuclear politics. These works reflect her active participation in movements like the *Narmada Bachao Andolan*.

Her unique narrative style features non-linear structures, poetic language, and cultural richness. This style adds emotional and psychological depth to her work. Recognized worldwide, she has received awards like the Sydney Peace Prize but famously declined the Sahitya Academy Award in protest. Roy remains relevant in today's literary and cultural studies, especially in postcolonial, feminist, and ecocritical discussions. Her work shows how literature can serve as a powerful tool for resistance, empathy, and social change. According to an American applied linguist, Edward Anthony's 1963 definition approach relates to a correlative set of assumptions about language learning and the nature of language itself. Method is the presentation of instructional material in the selected approach. Technique is the level of implementation at which classroom procedures are prescribed (Anthony, E.M. 1963). Coming to the Psychological and Affective dimensions of AI, it is important to discuss English language teaching and its broader implications in the context of AI. Since language learning involves psycholinguistic and cognitive processes, it's imperative to discuss the psychological domains of Jean Piaget's theory of cognitive Development, Jerome Bruner's Cognitive theory, and Lev Vygotsky's psychology of learning. Besides, it is also important to discuss affective dimensions of the theories of George Kelly, Carl Rogers and Abraham Maslow.

2. LITERATURE REVIEW

2.1 AI and the Transformation of ELT

Artificial intelligence has steadily reshaped English Language Teaching (ELT), opening new possibilities for how learners access, process, and engage with language instruction. By analysing performance data, adapting instructional content in real time, and delivering immediate feedback, AI systems can meaningfully support individualized learning trajectories (Luckin et al., 2019). Technologies such as automated essay scoring and speech recognition have moved well beyond experimental status and are now embedded in everyday language classroom practice.

Yet this technological progress is not without its critics. A recurring concern in the literature is that AI's orientation toward measurable, quantifiable outcomes tends to crowd out the subtler, less tangible dimensions of learning — emotional engagement, spontaneous interaction, and genuine human connection (Dreyfus, 1992). When learning is mediated primarily through AI, students can be left navigating their studies in relative isolation, which research consistently links to diminished motivation and a creeping sense of disconnection from the learning process.

2.2 Affective Dimensions of Language Learning

The relationship between emotion and language acquisition has a rich theoretical history. Krashen's (1982) Affective Filter Hypothesis remains one of the field's most cited frameworks, arguing that emotional variables — anxiety, self-confidence, and motivation — act as a kind of internal filter that can either facilitate or obstruct the acquisition of a second language. Building on this, Gardner's (1985) socio-educational model drew attention to integrative motivation, highlighting how a learner's desire to connect with the target language community shapes their overall engagement and persistence.

More recent scholarship has extended these insights further. Dörnyei (2009), for instance, emphasises the roles of emotional intelligence, empathy, and learner identity as active forces in shaping the language learning experience — not peripheral concerns, but central ones. This is precisely what makes their consistent absence from AI-driven pedagogies so striking, and so worth examining.

2.3 Literary Pedagogy and Emotional Engagement

Literature has long occupied a distinctive place in language education, valued not merely as a source of vocabulary or grammatical models but as a vehicle for human understanding. Nussbaum (1997) makes this case compellingly, arguing

that literary narratives invite readers into perspectives and experiences far removed from their own, cultivating moral imagination and deepening emotional comprehension in ways that few other educational tools can match.

The works of Arundhati Roy offer a particularly rich illustration of this potential. *The God of Small Things* weaves together forbidden love, caste discrimination, and the lasting wounds of childhood trauma, asking readers to sit with moral complexity rather than resolve it neatly. *The Ministry of Utmost Happiness* ranges across questions of gender identity, political violence, and the lives of those pushed to the margins of society. Roy's essays, too, press readers to confront socio-political injustice and to reckon with the ethical and emotional weight of human experience. Taken together, her writing exemplifies how literary texts can serve as a genuinely affective medium within the ELT classroom.

2.4 Research Gap

Scholarship has made considerable progress in two broad areas: understanding how AI tools can support ELT, and exploring the role of literature in language learning. What remains comparatively underdeveloped, however, is the space where these two domains might intersect. Few studies have asked, in a sustained interdisciplinary way, how literary texts might be used to enrich the affective dimensions of AI-mediated language learning environments. This study is positioned to address that gap directly by examining how literature — and Roy's work in particular — can bring emotional depth and human resonance to contexts where AI instruction might otherwise fall short.

3. NEED AND RELEVANCE OF THE STUDY

The current study has several implications regarding the potential impact of increasing use of AI in education on students' emotional and psychological well-being. Here, we outline the importance of the study. Humanizing digital pedagogy: addressing the emotional disconnect in AI-powered online learning environments. Promoting holistic education: integrating both the cognitive and affective dimensions. Improving learner engagement: Using literature to foster empathy and motivation. Crossing disciplinary boundaries, educational technology and literary studies meet in this context. The novels of Arundhati Roy are examined as a means of improving AI-supported ELT in actual classrooms.

4. RESEARCH OBJECTIVES

- It explores the effects of AI on the psychological and affective processes in English language learning.

- It seeks to critique identity, trauma, and marginalisation in the works of Arundhati Roy\$
- To investigate the role of literary texts in evoking emotional engagement in AI-mediated classrooms\$
- To recommend an integrated pedagogical framework for AI and literary approaches\$

5. RESEARCH METHODOLOGY

The study employs a qualitative, interpretive approach\$

Textual Analysis: Close reading of *The God of Small Things* and *The Ministry of Utmost Happiness* and selected essays\$

Theoretical Framework: affective learning theories and theoretical models of AI in education\$

Comparative Analysis: AI-driven pedagogy compared to literature-based learning in classroom settings\$

Secondary Sources: Review of scholarly literature on ELT, Artificial Intelligence, and literary criticism.

6. RESULTS

No doubt, Literary analysis, when mingled with AI-based pedagogy, unravels that though AI tools enhance linguistic proficiency, they are devoid of deeper emotional and psychological aspects. This is evident from the fact when compared and contrasted with affective richness in Roy's works. In *The God of Small Things*, Roy reiterates the fragility of human emotions in a context: "*Things can change in a day*" (Roy, 1997, p. 32). This seems to be a simple statement that encapsulates the unpredictability of life and emotional vulnerability, which resonates with learners navigating identity and uncertainty. Such emotional depth is lacking in AI-driven learning environments that prioritise structured, calculated and predictable outputs. We will also come to know the existential anxiety and complexity of psychology in the line: "*Not old. Not young. But a viable die-able age*" (Roy, 1997, p. 3). This is a touching expression in *The God of Small Things*. This is clear evidence of trauma and memory, which is lacking in AI.

A statement of pathetic line "*She lived in the graveyard like a tree*" (Roy, 2017, p. 4) in *The Ministry of Utmost Happiness*, reveals the socially ostracised identities through the character of Anjum. This evokes the sense of resilience and belongingness where everyone feels excluded. This fosters empathy and a deep

sense of thinking about marginalised people in society in the minds of learners, a quality that is lacking in AI-generated content.

Another line in *The Ministry of Utmost Happiness*, “*Another world is not only possible, she is on her way*” (Roy, 2017, p. 403), definitely inspires future hope and transformation. It encourages readers to go for the alternative worlds. Such an affective dimension is crucial in language learning. This is really a point of motivation and personal connection with the literary text. These findings indicate that literary texts offer a depth of emotional engagement that AI-driven tools cannot achieve on their own.

Psychological Dimensions of AI

As for a Swiss Psychologist, Jean Piaget’s theory (1972), maturation refers to the development of physical (human) body which is natural and spontaneous, cognition refers to mental activity through which human beings require and process knowledge, cognitive development refers to intellectual abilities and the knowledge of the world influence the changes in a person as he or she grows older. To Piaget, our thinking process changes slowly but radically as we try to negotiate with the environment around us. He said that four factors influence the thinking of the individual: maturation, activity, social experience and equilibrium, which means when we face a new event or a situation, we apply a particular scheme to it. In other words, we use our current ways of thinking to understand how it works, then we say it has equilibrium; if it does not result in satisfactory engagement, we term it disequilibrium. Piaget, through sensor, motor, pre-operational, concrete operational and formal operational stages, throws insights into children’s cognitive abilities. Now it is to remind the experience of Estha with the orange drink and the lemon drink man in the cinema there in *The God of Small Things*. The sour experience haunts Estha for the rest of his life. It is evident how cognitive and affective dimensions work with human beings. This AI-driven world cannot explain. These four stages are universal, but the rate of development may vary from culture to culture. At each stage, children are capable of certain operations and incapable of certain operations. So, as teachers of English, we should first attempt to understand the learner’s level of cognitive development and plan lessons within that range of abilities. We should tailor our instrumental material and activities to suit each learner’s development level. They should be intense and evoke curiosity, and be moderately challenging. But nowadays, what AI is giving to the students is contrary to what Piaget propounded in his theory. All AI material is neither challenging nor evokes any curiosity among students. It’s a great cause of concern.

Jerome Bruner (1961), who in turn was influenced by Piaget, propounded the concept of human development as a combination of enactive skills (manipulating objects and spatial awareness), iconic skills (visual recognition, the ability to compare and contrast) and symbolic skills (abstract reasoning). An example in the language classroom would be enacting a play by Shakespeare, reading the play and discussing the play. To Bruner, learning is a process of personal discovery. But Bruner, in contrast to Piaget, believed that environmental and experiential factors promote learning and affect development. To Bruner, learning and development are mutually independent. Therefore, teaching has a vital role to play in bringing about development. For Bruner, learning is directed towards making the development of conceptual understanding and of cognitive skills and strategies the prime aim of education, rather than the acquisition of factual information. The process of education is more important than the product. There is a need to learn how to learn, and learning is for future use. It's a discovery learning. This is termed as Bruner's constructivism, which is lacking in AI and which is abandoned in the literature. Another psychologist, Lev Vygotsky, said that people are born in a social world and learning occurs through interaction with others. His key insight is that children's thinking develops through dialogue with more capable persons (Vygotsky, 1962). Here, it is important that a skilful teacher gives scaffolding to the students. This is too contrary to what AI now stands for. AI, no doubt, can give you inputs, but the interactions with people around you will give you a multifaceted angle.

Affective Dimensions of AI

This Affective domain is an extension of the viewpoints of the fields of Psychology of Piaget, Bruner and Vygotsky. George Kelly, Carl Rogers and Abraham Maslow (1943), who founded the Humanistic Association, emphasise the role of human emotions, thoughts, and feelings which shape human learning. They are of the view that without taking the learner's inner world, no one can understand human learning; they focus on the development of the whole person, not looking at particular aspects such as the development and use of cognitive skills. Based on this theory, many modern foreign language teaching methods, such as The Silent Way, Community Language learning, suggestopedia are based on these methods. These take the learner as a whole person and pay attention to the affective states while learning is taking place. Affective is about mental states. It's about subjective experience, not an objective experimental or experiential study. AI gives everything that is objective. AI has no subjectivity. Affective Dimension advocates for experiential learning, an awareness of the multifaceted aspects of our existence, the physical, the emotional, the intellectual and the social, which help us in

evolving into a better learner and also human being. Now the question is, will an AI make you a better human being? Maybe it could make you a better learner. Moreover, everyone is aware that Maslow's theory of hierarchy of needs shows how a person's physical, emotional and intellectual needs are all interrelated. And he provides a framework for understanding them. Carl Rogers emphasised the self, a flexible and changing perception of personal identity. It's a totally subjective perception of your body and personality. It involves one's concepts of worth. Trust in one's own feelings and values and acting accordingly leads to a balanced adjustment in adult life. Feelings and values are alien to the AI.

7. DISCUSSION

The use of AI in English Language teaching and the teaching of English literature has totally transformed pedagogical practices. In fact, it enhanced the learner to come to grips with language and literature with that much ease. But when coming to the affective domain, we find lacunae in the area of complex human emotions. Here at this juncture, AI operates within its programmed and algorithmic constraints. No doubt AI systems are designed to enhance efficiency, accuracy and personalisation.

When coming to the literary works of Arundhati Roy, it offers an abundant exploration of emotional and affective dimensions. *The God of Small Things* questions the intersection of personal trauma and social structures through the recurrent running motif of "Love Laws," which prescribes "who should be loved, and how, and how much" (Roy, 1997, p. 33). These humanistic emotions provide a critical framework for throwing a discussion on power, identity and emotional repression in the classroom. For students, engagement with such emotional texts and social realities will enable them to live in a real world. This is actually a correct pedagogical perspective. This is in tune with Krashen's (1982) assertion that emotional engagement lowers the affective filter, facilitating language acquisition. Similarly, in *The Ministry of Utmost Happiness* Roy's critical narrative challenges the normal understanding of belongingness and identity. Anjum, the protagonist living "in the graveyard like a tree" symbolises human resilience against the backdrop of marginalisation and ostracization. In the words of Nussbaum (1997), such engagement of human resilience fosters what she calls 'narrative imagination'. This will enable learners to perceive things on their own.

It is always advisable to integrate AI with literary pedagogy, and educators can obtain the advantage of both. On one hand, AI increases linguistic development through practice and feedback, on the other hand, literature increases emotional intelligence and critical thinking. The combination of these creates a more holistic

and conducive learning environment that addresses both cognitive and affective dimensions. After all, many cognitive and affective theories were propounded to understand the learner better so that a perfect learning environment may be created.

8. CONCLUSION

We are living in an age of cutting-edge technology. Every country nowadays is making state-of-the-art artillery. The internet has made the world a global village. The world has now reached a new level with the advent of AI. In favour of AI, Sundar Pichai (CEO of Google and Alphabet) said, “AI is probably the most important thing humanity has ever worked on. I think of it as something more profound than electricity”. In fear of AI, Stephen Hawking said, “Everything that civilisation has to offer is a product of human intelligence; we cannot predict what we might achieve when this intelligence is magnified by the tools that AI may provide, but the eradication of war, disease, and poverty would be high on anyone’s list. Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last.” We must re-examine Psychological and Affective theories to understand the learner uniquely as the days are getting complex. It is time to balance AI-enabled learning and human creative, critical and emotional thinking. This way, we can make the world a better place to live.

REFERENCES

1. Anthony E.M., 1963. “Approach Method and Technique” in English Language teaching.
2. Bruner J. S. (1961). The act of discovery. *Harv. Educ. Rev.* 31 21–32.
3. Brudermann, Cédric. “Zoltán Dörnyei, The Psychology of Second Language Acquisition.” *Recherche Et Pratiques Pédagogiques En Langues De Spécialité - Cahiers De l’APLIUT*, Open Edition.
4. Dreyfus, H. L. (1992). What computers still can’t do: A critique of artificial reason. MIT Press.
5. Gardner, Robert C. (1985). Social psychology and second language learning: The role of attitudes and motivation. London; Baltimore, Md., U.S.A.: E. Arnold, 1985xiv, 208 p.: ill.; 24 cm. ISBN:0713164255
6. Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign.
7. Holmes, Wayne., Bialik, Maya., & Fadel, Charles. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Centre for Curriculum Design. ISBN-13: 978-1-794-29370-0 ISBN-10: 1-794-29370-0
8. Krashen, S. D. (1982). Principles and practice in second language acquisition. Pergamon Press Inc. Print Edition ISBN 0-08-028628-3. First internet edition July 2009.
9. Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*.

10. Nussbaum, M. C. (1997). *Cultivating humanity: A classical defense of reform in liberal education*. Harvard University Press.
11. Piaget, J. (1972). *The Psychology of the Child*. New York: Basic Books.
12. Roy, Arundhati. *The God of Small Things*. IndiaInk, 1997.
13. Roy, Arundhati. *The Ministry of Utmost Happiness*. Penguin Random House India, 2017.
14. Vygotsky, L.S. (1962). *Thought and Language*. Cambridge, MA: MIT Press. (Original work published in 1934).

Chapter 54

Teaching English in The Era of Artificial Intelligence: Challenges and Opportunities

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ABSTRACT

The rapid development of artificial intelligence (AI) has brought significant transformations to the educational landscape, including English language learning at the tertiary level. This study aims to explore the challenges and opportunities of using AI technology in the learning process for students of the English Language Education program.

General Information: Using information technology in education has made it possible for students to keep on learning, irrespective of where they are. Teachers and professors can send assignments to students and they can complete and submit them even without physically stepping into the classrooms and so learning never has to stop. Nowadays managing books in the library is not such tough work. Libraries are now computerised. To manage a lot of books barcodes can be associated with books which make the process easy to keep track of the list of available books and many more.

Information technology IT is very much used in education for teaching-learning processes. The software and Hardware made the process of learning very easy. We can see a lot of animations in educational videos which made studying very interesting. Various methods of illustrations are now brought to visualize what we are reading in the real world.

IT can be used in various ways in schools, colleges to handle online classes. E-learning classrooms, smart-board presentations, videos on experiments, creation of images and video, desktop publishing of magazines, letters and documents.

Today, many priorities for improvements to teaching and learning are unmet. Educators seek technology-enhanced approaches addressing these priorities that would be safe, effective, and scalable. Naturally, educators wonder if the rapid advances in technology in everyday lives could help. Like all of us, educators use AI-powered services in their everyday lives, such as voice assistants in their homes; tools that can correct grammar, complete sentences, and write essays; and automated trip planning on their phones. Many educators are actively exploring AI tools as they are newly released to the public¹. Educators see opportunities to use AI-powered capabilities like speech recognition to increase the support available to students with disabilities, multilingual learners, and others who could benefit from greater adaptivity and personalization in digital tools for learning. They are exploring how AI can enable writing or improving lessons, as well as their process for finding, choosing, and adapting material for use in their lessons. Educators are also aware of new risks. Useful, powerful functionality can also be accompanied with new data privacy and security risks. Educators recognize that AI can automatically produce output that is inappropriate or wrong. They are wary that the associations or automations created by AI may amplify unwanted biases.

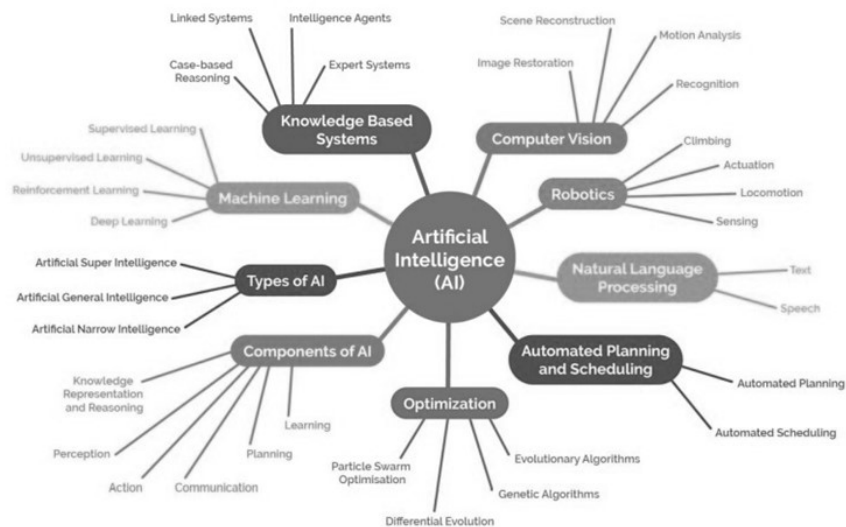


Fig: Application and Versatility of AI in different forms.

Traditional English teaching has long emphasized skill training while neglecting the transmission and cultivation of humanistic spirit and cross-cultural communication abilities between the East and the West. This has led to a series of problems, such as reduced student interest in learning, insufficient motivation, low learning efficiency, and the inability to apply what they have learned in practice. These issues are also at the heart of the crisis facing the foreign language

teaching. In particular, college students in the new AI era, who are in a period of transformation, pose greater challenges to foreign language teachers. Teachers are not only required to continuously improve their professional competence and gain a thorough understanding of foreign cultural knowledge, but also need to constantly explore and research ways to improve traditional language teaching methods. They must design teaching plans according to students' levels and needs to reflect the value of classroom teaching. Today's college English classrooms are facing a new generation of college students who have grown up in the AI era. Traditional English teaching, which focuses solely on skill training, can no longer meet their needs.

English educators face unprecedented challenges in terms of the diversity of teaching resources and the adoption of new teaching models. Ignoring these challenges or adhering rigidly to old methods will only lead to falling behind the times and being left in a passive position. Exploring new approaches in English classroom teaching can serve as a breakthrough point to transcend traditional teaching, highlight the connotation and characteristics, and achieve a diversified teaching model.

AI can serve as a co-teacher, handling routine tasks, such as grading assignments and providing feedback. This allows teachers to focus on more complex and creative aspects of teaching, such as designing innovative lesson plans and fostering students' higher-order thinking skills. They can encourage students to work in groups, both online and offline, to complete projects and assignments. AI can support this process by providing collaborative tools and monitoring group progress. So, teachers have more time and energy to systematically and structurally process "fragments" of language knowledge, allowing knowledge to form thought, generate viewpoints, solve problems, and release energy, thereby transforming knowledge into wisdom. In this context, the release, collection, processing, derivation, and integration of information in the classroom become particularly significant.

Students should not only learn language skills but more importantly, develop the ability for rational thinking, critical absorption, and creative exploration. The English classroom should be internalized as an intrinsic quality of students, fostering their sense of self-efficacy. The adoption of hybrid teaching models that combine online resources with face-to-face instruction can optimize the learning experience.

Teachers can use online platforms for pre-class assignments, while classroom time can be dedicated to discussion, collaboration, and problem-solving. Through classroom practice, teachers can achieve unexpected teaching efficiency by employing various methods, techniques, and strategies. This approach can address issues, such as monotonous teaching methods, insufficient classroom engagement, neglect of students' emotional factors, and the inability of textbooks to keep pace with current needs.

There are some challenges and opportunities while teaching in day today life in era of AI are as follows:

CHALLENGES IN TEACHING ENGLISH WITH AI

1. Erosion of Original Writing Skills

The rapid adoption of AI writing tools such as ChatGPT and Grammarly has fundamentally altered how students approach writing tasks. While these tools offer convenience and support, they also raise serious concerns about the development of authentic writing abilities.

- a) **Assessing Genuine Writing Ability:** One of the most immediate challenges for educators is distinguishing between student-generated and AI-assisted work. 1. Blurred authorship: AI can produce well-structured, grammatically flawless essays, making it difficult for teachers to identify a student's true proficiency level. 2. Loss of diagnostic value: Traditional assignments (essays, reports) are meant to reveal a learner's strengths and weaknesses in grammar, vocabulary, coherence, and argumentation. AI-generated content masks these gaps. 3. Inconsistent performance: A student may submit high-quality AI-assisted assignments but perform poorly in in-class writing or oral communication, creating discrepancies in evaluation. This undermines the reliability of assessments and complicates grading fairness.
- b) **Encouraging Independent Thinking:** Writing is not just a linguistic exercise—it is a cognitive process involving idea generation, organization, and critical reflection. AI tools can shortcut this process. 1. Reduced cognitive engagement: Instead of brainstorming or structuring arguments, students may rely on AI to generate ideas instantly. 2. Passive learning behavior: Over time, learners shift from creators to consumers of content, weakening their ability to think independently. 3. Limited creativity: AI outputs tend to follow predictable patterns and generalized perspectives, which can discourage original voice and innovative thinking.
As a result, students may struggle to develop analytical and interpretative skills essential for academic success.
- c) **Preventing Over-Reliance on AI-Generated Content:** Dependence on AI tools can gradually replace essential writing practice. 1. Skill atrophy: Just as calculators can weaken basic arithmetic skills if overused, AI can reduce students' ability to construct sentences, develop arguments, and edit their own work. 2. Lower perseverance: Writing often involves

drafting, revising, and refining ideas. AI reduces this effort, leading to impatience with the writing process. 3. Superficial understanding: Students may submit AI-generated answers without fully understanding the content, affecting long-term retention and application of knowledge.

Over-reliance ultimately weakens both linguistic competence and academic integrity.

2. Academic Integrity and Plagiarism:

The integration of AI tools such as ChatGPT has complicated long-standing academic norms around originality, authorship, and honesty. Unlike traditional plagiarism—where content is copied from identifiable sources—AI-generated text is often original in form but not necessarily in intellectual ownership, creating a grey area in academic integrity.

- a) **Limitations of Traditional Plagiarism Detection Tools:** Conventional plagiarism detection systems (e.g., Turnitin) are designed to compare submitted text against existing databases. 1.No direct source match: AI generates content that is not copied verbatim from published material, making it difficult for detection tools to flag it as plagiarized. 2.False sense of originality: A report may show “0% similarity,” yet the student may not have written the content themselves. 3.Evolving AI sophistication: As AI models improve, their outputs become more human-like, further reducing detectability.

This creates a gap between *technical originality* and *actual authorship*, challenging existing evaluation systems.

- b) **Superficial Learning and Lack of Understanding:** AI-assisted submissions may not reflect the student’s true comprehension. 1. Outsourced cognition: Students may rely on AI to generate answers without engaging in reading, analysis, or synthesis of information. 2. Inability to explain work: When questioned, students may struggle to defend arguments or explain concepts presented in their own submissions. 3. Reduced knowledge retention: Learning is weakened because the cognitive effort required for writing and problem-solving is bypassed.

This undermines the core purpose of education, which is not just producing answers but developing understanding.

- c) **Ethical Questions About Authorship:** AI introduces complex questions about who should be credited for academic work. 1. Ambiguous ownership: If a student input prompts and edits AI output, to what extent is the work “theirs”? 2. Transparency issues: Many students do not disclose AI

assistance, raising concerns about honesty and accountability. 3. Redefining plagiarism: Traditional definitions (copying others' work) may not fully apply, requiring institutions to rethink policies and guidelines. This shifts academic integrity from a clear-cut rule-based system to a more nuanced ethical framework.

3. Reduced Critical Thinking

The increasing reliance on AI tools such as ChatGPT for summaries, interpretations, and ready-made answers can significantly reshape how students engage with language and ideas. While these tools provide quick access to information, they can inadvertently weaken the deeper cognitive processes essential for mastering English and related disciplines.

- a) **Decline in Analytical Reading Skills:** Critical reading involves questioning, interpreting, and evaluating a text rather than merely understanding its surface meaning. 1. Reduced effort in interpretation: Students may bypass close reading by asking AI for summaries or explanations, avoiding the effort required to analyze tone, themes, and literary devices. 2. Weakened inference skills: The ability to “read between the lines” diminishes when interpretations are provided instantly rather than constructed independently. 3. Limited questioning ability: Critical readers typically ask questions about bias, perspective, and context. AI-generated answers often present information in a resolved, authoritative form, discouraging inquiry. Over time, this leads to passive reading habits rather than active intellectual engagement.
- b) **Reduced Deep Engagement with Texts:** Literary and academic texts require time, reflection, and emotional as well as intellectual involvement. 1. Shortcut learning: Instead of reading entire works (novels, poems, essays), students may depend on AI-generated summaries, missing narrative depth and stylistic nuances. 2. Loss of interpretative diversity: Literature allows multiple interpretations, but AI often provides generalized or standard analyses, limiting exposure to diverse viewpoints. 3. Diminished emotional connection: Engaging with texts deeply fosters empathy and imagination; reliance on summaries reduces this experiential aspect of learning.

This weakens the holistic appreciation of language, culture, and human experience embedded in texts.
- c) **Shift Toward Surface-Level Learning:** AI can encourage a results-oriented rather than process-oriented approach to learning. 1. Focus on

quick answers: Students may prioritize obtaining correct responses over understanding underlying concepts or arguments. 2.Minimal cognitive struggle: Productive struggle—an essential part of learning—is reduced when AI provides immediate solutions. 3.Fragmented knowledge: Without engaging deeply, students may acquire disconnected bits of information rather than integrated understanding. This results in learners who can reproduce information but struggle to analyze, evaluate, or apply it in new contexts.

4. Teacher Preparedness and Digital Divide

The integration of AI in English education is only as effective as the readiness of educators and the accessibility of technology to learners. While tools like ChatGPT offer transformative potential, disparities in training and access create significant barriers in academic environments.

- a) **Lack of Training Programs in AI Pedagogy:** Many educators are expected to adopt AI tools without formal preparation. 1.Limited professional development: Few institutions provide structured training on how to integrate AI into lesson planning, assessment, and feedback. 2.Pedagogical uncertainty: Teachers may struggle to decide when AI use is appropriate (e.g., brainstorming vs. full content generation). 3.Skill gap: While some educators are digitally proficient, others lack confidence in using AI tools, leading to inconsistent classroom practices. 4.Absence of curriculum integration: AI is often treated as an add-on rather than embedded into teaching frameworks and learning outcomes. This results in uneven adoption and missed opportunities to enhance learning.
- b) **Unequal Access to Digital Tools Among Students:** The benefits of AI are not distributed equally across all learners. 1.Socio-economic disparities: Students from underprivileged backgrounds may lack access to reliable internet, devices, or paid AI tools. 2.Institutional inequalities: Urban institutions may adopt advanced technologies faster than rural or resource-limited colleges. 3.Learning gaps: Students with better access gain a significant advantage in assignments, research, and skill development. 4. Exclusion risks: Over-reliance on AI-based tasks may unintentionally disadvantage students who cannot access such tools. This deepens the digital divide and raises concerns about equity in education.
- c) **Resistance to Change in Traditional Teaching Systems:** Educational systems often evolve slowly, creating friction with rapid technological change. 1.Attachment to conventional methods: Some educators prefer lecture-based teaching and handwritten assessments, viewing AI as a

threat rather than a tool. 2. Fear of loss of control: Teachers may worry that AI reduces their authority or role in knowledge delivery. 3. Scepticism about reliability: Concerns about AI accuracy, bias, and misuse can lead to reluctance in adoption. 4. Institutional inertia: Universities and boards may delay updating policies, curricula, and assessment methods to accommodate AI. This resistance can hinder innovation and prevent effective integration of technology in education.

5. Language Authenticity Issues

AI writing systems such as ChatGPT and Grammarly can produce polished, error-free English. However, this fluency often comes at the cost of authenticity—an essential element in effective communication and language learning. Authentic expression involves cultural context, individuality, creativity, and emotional depth, which AI-generated text may not fully capture.

- a) **Grammatically Perfect but Culturally Neutral:** AI-generated language tends to prioritize correctness and clarity over cultural specificity.
 1. Standardized expression: AI often uses globally neutral English, avoiding region-specific idioms, dialects, and cultural references.
 2. Loss of cultural identity: Students may adopt AI-generated language patterns that do not reflect their own linguistic background or socio-cultural context.
 3. Limited exposure to linguistic diversity: Authentic English varies across regions (e.g., Indian English, British English, American English), but AI outputs often flatten these variations.
 4. Context insensitivity: Cultural subtleties, humor, and local expressions may be misrepresented or omitted. This can lead to communication that is technically correct but lacks cultural richness and relevance.
- b) **Lack of Personal Voice, Creativity, and Emotional Nuance:** Authentic writing reflects the writer's individuality and perspective.
 1. Generic tone: AI-generated content often follows predictable structures and phrasing, resulting in uniform, impersonal writing.
 2. Reduced originality: Students may rely on AI-generated ideas rather than developing their own viewpoints or arguments.
 3. Limited emotional depth: While AI can simulate emotion, it does not genuinely or interpret human experiences, leading to less impactful writing.
 4. Suppressed creativity: Creative risk-taking (unique metaphors, narrative styles, personal reflections) may decline when students depend on AI-generated templates.

As a result, student writing may become technically proficient but stylistically bland and less engaging.

- c) **Challenges in Teaching Authentic Expression:** The presence of AI reshapes how educators approach writing instruction. 1. Difficulty in evaluating originality: Teachers may find it hard to assess whether a piece reflects a student's true voice or an AI-generated style. 2. Shift in learning goals: Teaching must move beyond grammar and structure toward fostering voice, creativity, and critical expression. 3. Need for new assessment methods: Assignments must encourage personal reflection, lived experiences, and contextual relevance that AI cannot easily replicate. 4. Balancing AI use: Educators must guide students on using AI for support (e.g., editing) without compromising authenticity. This requires a redefinition of what constitutes "good writing" in the AI era.

OPPORTUNITIES IN TEACHING ENGLISH WITH AI

1. Personalized Learning

One of the most powerful contributions of AI to English education is its ability to tailor learning experiences to individual student needs. Tools like ChatGPT and Duolingo use data-driven approaches to adjust content, pace, and feedback, making learning more efficient and learner-centered.

- a) **Customized Grammar Exercises:** AI can design grammar practice based on each student's specific strengths and weaknesses. 1. Targeted practice: Instead of generic exercises, AI identifies recurring errors (e.g., tense usage, prepositions, articles) and generates focused practice tasks. 2. Level-based progression: Exercises automatically adjust in difficulty—from basic sentence correction to advanced syntactic structures. 3. Contextual learning: Grammar can be taught through real-life examples and meaningful sentences rather than isolated rules. 4. Continuous adaptation: As the learner improves, AI modifies exercises dynamically, ensuring optimal challenge without frustration.

This individualized approach enhances mastery and reduces the one-size-fits-all limitation of traditional classrooms.

- b) **Instant Feedback on Writing:** AI enables real-time evaluation, which is often difficult for teachers to provide consistently due to large class sizes. 1. Immediate corrections: Students receive instant suggestions on grammar, spelling, punctuation, and sentence structure. 2. Explanatory feedback: Many AI tools explain why a correction is needed, helping students understand underlying rules. 3. Iterative learning: Learners can revise their work multiple times based on feedback, promoting a process-

oriented approach to writing. 4. Confidence building: Quick feedback reduces anxiety and encourages experimentation with language. This accelerates learning and allows students to improve continuously outside the classroom.

- c) **Adaptive Vocabulary Learning:** Vocabulary acquisition becomes more efficient when tailored to individual usage and comprehension levels. 1. Personalized word lists: AI tracks frequently used or misused words and suggests new vocabulary accordingly. 2. Spaced repetition techniques: Words are revisited at optimal intervals to enhance long-term retention. 3. Context-based learning: Vocabulary is introduced within sentences, dialogues, or scenarios, improving understanding and application. 4. Multimodal learning: Integration of audio, visuals, and examples supports diverse learning styles. This leads to deeper and more practical vocabulary development compared to rote memorization.

2. Enhanced Writing Support

AI-powered tools such as ChatGPT and Grammarly are increasingly functioning as intelligent writing assistants. Rather than replacing the writing process entirely, they can support students at different stages—drafting, revising, and refining—thereby improving the overall quality of written communication.

- a) **Suggest Sentence Improvements:** AI helps learners refine their sentences for clarity, correctness, and style. 1. Grammar and syntax correction: Identifies and corrects errors in tense, agreement, punctuation, and sentence construction. 2. Clarity enhancement: Rewrites awkward or ambiguous sentences into clearer, more concise forms. 3. Tone adjustment: Suggests changes to match academic, formal, or conversational writing styles. 4. Vocabulary enrichment: Recommends more appropriate or varied word choices, helping avoid repetition. This allows students to learn from their mistakes while producing more polished writing.
- b) **Help with Structure and Coherence:** Organizing ideas logically is a key challenge in academic writing, and AI can provide valuable support. 1. Logical organization: Assists in structuring essays into clear sections—introduction, body paragraphs, and conclusion. 2. Flow and transitions: Suggests linking words and phrases to improve coherence between sentences and paragraphs. 3. Argument development: Helps in arranging ideas in a logical sequence, ensuring that arguments are supported with relevant points. 4. Outline generation: Provides frameworks or outlines before writing, guiding students in planning their content. This is especially useful for learners who struggle with organizing complex ideas.

- c) **Provide Models for Essays and Reports:** AI can generate sample texts that serve as references for students. 1. Exposure to formats: Demonstrates standard structures for essays, reports, letters, and research papers. 2. Understanding expectations: Helps students grasp what constitutes a well-written academic response. 3. Scaffolding learning: Beginners can use AI-generated models as a starting point and gradually develop their own writing skills. 4. Adaptability: Models can be tailored to different levels, topics, and disciplines, making them versatile learning aids. However, these models should be used as guides—not as content to copy—so that students still engage in original writing.

3. Interactive and Engaging Learning

Artificial Intelligence has transformed English language learning from a passive, textbook-based activity into a dynamic, interactive experience. Tools like ChatGPT and apps such as Duolingo enable continuous engagement through real-time interaction, making language practice more immersive and learner-friendly.

- a) **Chat-Based Language Practice:** AI-powered chat interfaces simulate real-life conversations, allowing students to practice English anytime. 1. 24/7 availability: Learners can practice conversations without waiting for classroom sessions or partners. 2. Low-pressure environment: Students feel more comfortable making mistakes with AI than in front of peers, reducing anxiety. 3. Contextual interaction: AI can engage in topic-based discussions (e.g., travel, education, daily life), helping learners apply language in practical situations. 4. Immediate response: Continuous interaction improves fluency and helps learners think and respond in English spontaneously. This promotes active language use rather than passive memorization.
- b) **Role-Playing Conversations:** AI enables simulation of real-world scenarios, enhancing communicative competence. 1. Situational learning: Students can practice dialogues such as job interviews, customer service interactions, or academic presentations. 2. Multiple perspectives: AI can take on different roles (teacher, interviewer, customer), exposing learners to varied communication styles. 3. Skill development: Enhances speaking, listening, and pragmatic language skills (tone, politeness, formality). 4. Experiential learning: Learners gain practical experience without real-world consequences, building confidence. This method bridges the gap between theoretical knowledge and real-life communication.
- c) **Real-Time Pronunciation and Grammar Correction:** AI provides instant corrective feedback during language use. 1. Pronunciation guidance: Speech

recognition tools analyze pronunciation and suggest improvements in accent, stress, and intonation. 2. Grammar correction in real time: Errors are identified immediately, allowing learners to correct themselves on the spot. 3. Reinforcement learning: Immediate feedback strengthens correct usage and prevents repeated mistakes. 4. Personalized improvement: Feedback is tailored to individual speaking and writing patterns. This accelerates language acquisition compared to delayed or manual correction methods.

4. Teacher Productivity

AI is not only transforming student learning but also significantly enhancing teacher efficiency. Tools like ChatGPT and Canva enable educators to streamline routine tasks, allowing them to focus more on meaningful teaching and student engagement.

- a) **Generating Lesson Plans and Quizzes:** AI can assist teachers in designing structured and effective instructional content. 1. Quick lesson planning: Educators can generate complete lesson plans with objectives, activities, and assessment methods within minutes. 2. Curriculum alignment: AI can tailor lesson plans according to specific syllabi, learning outcomes, or frameworks (e.g., Bloom's Taxonomy). 3. Diverse question types: Teachers can create multiple-choice questions, short answers, case-based questions, and higher-order thinking questions easily. 4. Customization: Content can be adjusted based on class level, topic complexity, and student needs. This reduces preparation time while improving the quality and variety of instructional materials.
- b) **Automating Grading of Objective Tasks:** AI can handle repetitive evaluation tasks efficiently and consistently. 1. Instant grading: Objective assessments such as MCQs, fill-in-the-blanks, and true/false questions can be graded automatically. 2. Consistency and fairness: AI ensures uniform evaluation without human bias or fatigue. 3. Data analytics: Provides insights into student performance, identifying common errors and learning gaps. 4. Time-saving: Reduces the burden of manual grading, especially in large classes. This allows teachers to dedicate more time to qualitative assessment and personalized feedback.
- c) **Creating Teaching Materials Quickly:** AI enables rapid development of diverse and engaging educational resources. 1. Content generation: Teachers can create notes, summaries, worksheets, and presentations instantly. 2. Multimedia integration: AI tools can generate visuals,

infographics, and interactive content to enhance learning. 3. Adaptability: Materials can be modified for different learning levels or teaching contexts (online, offline, hybrid). 4. Resource diversification: Facilitates the creation of varied teaching aids, making lessons more engaging and inclusive. This enhances classroom delivery while reducing the workload on educators.

5. Access to Global Resources

Artificial Intelligence has significantly expanded access to global knowledge, making English learning more inclusive, diverse, and context-rich. Through tools like ChatGPT and Google Translate, learners are no longer confined to local textbooks or limited classroom exposure—they can engage with language and content from around the world in real time.

- a) **Exposure to Diverse Linguistic Styles and Accents:** AI enables learners to experience English as it is used globally. 1. Variety of English forms: Students can interact with different styles such as British, American, Australian, and Indian English. 2. Accent familiarity: AI-powered audio tools help learners understand pronunciation variations and improve listening skills. 3. Contextual usage: Learners can observe how language changes depending on region, culture, and situation. 4. Improved communication skills: Exposure to diverse accents prepares students for real-world global communication. This broadens linguistic competence beyond textbook-standard English.
- b) **Access to Global Literature and Content:** AI opens pathways to a vast range of literary and academic resources. 1. Wide range of texts: Students can explore novels, poems, essays, and research articles from different cultures and time periods. 2. Simplified explanations: Complex texts can be summarized or explained in simpler terms, improving accessibility. 3. Interdisciplinary learning: AI connects language learning with global topics such as culture, science, and society. 4. Comparative understanding: Learners can analyze texts from different regions, enhancing critical and cultural awareness. This enriches both language proficiency and global perspective.
- c) **Real-Time Translation and Explanation Tools:** AI removes language barriers, making learning more inclusive and efficient. 1. Instant translation: Learners can quickly translate words, sentences, or entire texts into their native language. 2. Concept clarification: Difficult phrases, idioms, or expressions can be explained immediately. 3. Multilingual support: Students from diverse linguistic backgrounds can learn English without being

limited by initial language gaps. 4. Enhanced comprehension: Real-time assistance ensures that learners do not get stuck, maintaining continuity in learning. This is particularly beneficial for beginners and non-native English speakers.

CONCLUSION

AI does not just increase the risk of plagiarism—it transforms its nature. The challenge is no longer only about detecting copied content but about ensuring authentic learning and ethical use of technology.

The reduction in critical thinking is not simply a technological issue but a pedagogical one. When students rely excessively on AI, they risk becoming passive recipients of knowledge rather than active constructors of meaning—undermining the very purpose of education in the humanities.

Without adequate teacher preparedness and equitable access, AI risks widening existing educational inequalities rather than bridging them. The success of AI in English teaching depends not just on the technology itself, but on the systems and people implementing it.

Language learning is not just about correctness—it is about meaningful, context-rich communication. Over-reliance on AI risks producing learners who write accurately but lack identity, voice, and expressive depth.

Interactive and engaging learning through AI shifts English education from a passive to an active process. Students become participants rather than observers, practicing language in meaningful contexts. This leads to improved fluency, confidence, and communicative competence.

Personalized learning transforms English education from a uniform, teacher-centered model to a flexible, learner-centered system. Students can progress at their own pace, focus on their specific needs, and receive continuous support—making learning more inclusive and effective.

Enhanced writing support through AI can significantly improve writing quality, especially for beginners and non-native English speakers. It transforms writing from a one-time task into a continuous, iterative learning process.

At the same time, the effectiveness of these tools depends on how they are used—as learning aids rather than shortcuts.

AI-driven productivity tools shift the teacher's role from administrative and repetitive tasks to more strategic and interactive functions—such as mentoring, facilitating discussions, and fostering critical thinking. It improves efficiency without compromising educational quality when used appropriately.

Access to global resources through AI transforms English learning into a borderless experience. It promotes cultural awareness, linguistic diversity, and inclusive education, enabling students to become global communicators rather than just local learners.

Opportunities and challenges coexist for both college English teachers and students in this new era which calls for the capability of transforming the traditional teaching and learning as well as the radical change in educational methods, technological skills, and ethical considerations. In this new round of educational reform, how to apply artificial intelligence to teaching to create a new teaching ecosystem and cultivate the talents needed by the country in the new era is an important issue that every English educator needs to think about. Realizing the unshakable trend and overwhelming challenges, college English teachers will be urged to harness the power of AI to explore new possibilities and creatively bring positive changes to the traditional teaching contexts through continuous professional development, thus paving the way for the students' future growth in the digital age.

REFERENCES:

1. Adeoye, M. A., Prastikawati, E. F., & Widyaningrum, L. (2024). Discourse Analysis: Language Issues in Indigenous Language Learning in Indonesia. *Educalingua*, 2(2), 81-92. <https://doi.org/10.26877/educalingua.v2i2.1114>
2. Alm, A. (2024). Exploring autonomy in the AI wilderness: Learner challenges and choices. *Education sciences*, 14(12), 1369. <https://doi.org/10.3390/educsci14121369>
3. Andayani, E. S. (2022). The importance of learning and knowing English in higher education in Indonesia. *Research and Development Journal Of Education*, 8(1), 372-379. <http://dx.doi.org/10.30998/rdje.v8i1.13315>
4. Asad, M. M., Erum, D., Churi, P., & Guerrero, A. J. M. (2023). Effect of technostress on Psychological well-being of post-graduate students: A perspective and correlational study of Higher Education Management. *International Journal of Information Management Data Insights*, 3(1), 100149. <https://doi.org/10.1016/j.jjime.2022.100149>
5. Bolton, K., Hill, C., Bacon Shone, J., & Peyronnin, K. (2023). EMI (English medium instruction) in Indonesian higher education. *World Englishes*, 42(3), 424-446. <https://doi.org/10.1111/weng.12622>
6. Cardon, P., Fleischmann, C., Aritz, J., Logemann, M., & Heidewald, J. (2023). The challenges and opportunities of AI-assisted writing: Developing AI literacy for the AI age. *Business and Professional Communication Quarterly*, 86(3), 257-295. <https://doi.org/10.1177/23294906231176517>
7. David, H. (2022). Digital immigrants, digital natives and digital learners: Where are we now?. *Journal for the Education of Gifted Young Scientists*, 10(2), 159-172. <https://doi.org/10.17478/jegys.1090172>
8. Ghafar, Z. N., Salh, H. F., Abdulrahim, M. A., Farxha, S. S., Arf, S. F., & Rahim, R. I. (2023). The role of artificial intelligence technology on English language learning: A

- literature review. *Canadian Journal of Language and Literature Studies*, 3(2), 17-31. <https://doi.org/10.53103/cjlls.v3i2.87>
9. Gottardello, D., & Karabag, S. F. (2022). Ideal and actual roles of university professors in academic integrity management: a comparative study. *Studies in Higher Education*, 47(3), 526-544. <https://doi.org/10.1080/03075079.2020.1767051>
 10. Hermann, I. (2023). Artificial intelligence in fiction: between narratives and metaphors. *AI & society*, 38(1), 319-329. <https://doi.org/10.1007/s00146-021-01299-6>
 11. Jia, F., Sun, D., Ma, Q., & Looi, C. K. (2022). Developing an AI-based learning system for L2 learners' authentic and ubiquitous learning in English language. *Sustainability*, 14(23), 15527. <https://doi.org/10.3390/su142315527>
 12. Kristiawan, D., Bashar, K., & Pradana, D. A. (2024). Artificial intelligence in English language learning: A systematic review of AI tools, applications, and pedagogical outcomes. *The Art of Teaching English as a Foreign Language (TATEFL)*, 5(2), 207-218. <https://doi.org/10.36663/tatefl.v5i2.912>
 13. Kuddus, K. (2022). Artificial intelligence in language learning: Practices and prospects. *Advanced analytics and deep learning models*, 1-17. <https://doi.org/10.1002/9781119792437.ch1>
 14. Kulaksýz, G. C. (2024). Artificial intelligence-based language modelling: The effect of ChatGPT application on writing skills in the context of teaching English as a foreign language.
 15. Liang, X., Haiping, L., Liu, J., & Lin, L. (2021). Reform of English interactive teaching mode based on cloud computing artificial intelligence—a practice analysis. *Journal of intelligent & fuzzy systems*, 40(2), 3617-3629. <https://doi.org/10.3233/JIFS-189397>
 16. Mahendra, M. W., Nurkamilah, N., & Sari, C. P. (2023). Artificial-intelligence powered app as learning aid in improving learning autonomy: Students' perspective. *JEES (Journal of English Educators Society)*, 8(1). <https://jees.umsida.ac.id/index.php/jees/article/view/1699>
 17. Musa Giuliano, R. (2020). Echoes of myth and magic in the language of artificial intelligence. *AI & society*, 35(4), 1009-1024. <https://doi.org/10.1007/s00146-020-00966-4>
 18. Orgianus, Y., Oemar, H., Praseytaningsih, E., & Amalia, H. K. (2024). Islamic Values in Lecturer Competency Development: A Systematic Literature Review of Trends, Frameworks, and Impacts in Islamic Higher Education. *Jurnal Pendidikan Islam*, 13(1), 69-83. <https://doi.org/10.14421/jpi.2024.131.69-83>
 19. Perkins, M., & Roe, J. (2024). Decoding academic integrity policies: A corpus linguistics investigation of AI and other technological threats. *Higher Education Policy*, 37(3), 633-653. <https://doi.org/10.1057/s41307-023-00323-2>
 20. Rajak, L., Chauhan, S., & Bara, S. (2024). Transforming English pedagogy with Artificial Intelligence: Enroute to enhanced language learning. In *Artificial intelligence: A multidisciplinary approach towards teaching and learning* (pp. 216-241). Bentham Science Publishers. <https://doi.org/10.2174/97898153051801240101>
 21. Reid, L., Button, D., & Brommeyer, M. (2023). Challenging the myth of the digital native: A narrative review. *Nursing Reports*, 13(2), 573-600. <https://doi.org/10.3390/nursrep13020052>
 22. Rigopouli, K., Kotsifakos, D., & Psaromiligkos, Y. (2025). Vygotsky's creativity options and ideas in 21st-century technology-enhanced learning design. *Education Sciences*, 15(2), 257. <https://doi.org/10.3390/educsci15020257>

23. Saleem, F., Chikhaoui, E., & Malik, M. I. (2024). Technostress in students and quality of online learning: role of instructor and university support. *Frontiers in Education* (Vol. 9, p. 1309642). Frontiers Media SA. <https://doi.org/10.3389/feduc.2024.1309642>
24. Shahini, A. (2025). Constructivism in Language Learning. *Language Learning Theories: A Student's Guide* (pp. 41-63). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-92210-7_4
25. Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in psychology*, 14, 1260843. <https://doi.org/10.3389/fpsyg.2023.1260843>
26. Ștefan, I., Barkoczi, N., Todorov, T., Peev, I., Pop, L., Marian, C., ... & Morales, L. (2023). Technology and Education as Drivers of the Fourth Industrial Revolution Through the Lens of the New Science of Learning. In *International Conference on Human-Computer Interaction* (pp. 133-148). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-34411-4_11
27. Stolpe, K., & Hallström, J. (2024). Artificial intelligence literacy for technology education. *Computers and Education Open*, 6, 100159. <https://doi.org/10.1016/j.caeo.2024.100159>
28. Susanto, D. A., Meisuri, M., Umar, U., Panjaitan, M. M. J., Arianto, T., Mora, H., ... & Wirentake, W. (2025). *AI In The English Classroom: Leveraging Deep Learning For Language Education*. CV. Gita Lentera.
29. Tang, Y. (2025). Cultivating university data culture in the age of artificial intelligence: a conceptual framework and critical reflections. *Information Research an international electronic journal*, 30(iConf), 500-507. <https://doi.org/10.47989/ir30iConf47293>
30. Ullah, A., Gul, F., & Khattak, Q. H. (2025). Artificial Intelligence as an Enabler of Spoken English Acquisition-perceptions and performance of students of Kohat University of science and Technology. *ASSAJ*, 4(01), 1548-1559. <https://assajournal.com/index.php/36/article/view/647>
31. Zhai, C., Wibowo, S., & Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review. *Smart Learning Environments*, 11(1), 28. <https://doi.org/10.1186/s40561-024-00316-7>
32. Chen, M., & Lv, M. C. (2024). College English writing instruction in a ChatGPT context. *Contemporary Foreign Language Studies*, 45(1), 161-168.
33. Ellis, R., & Shintani, N. (2013). *Exploring language pedagogy through second language acquisition research*. London: Routledge.
34. Shu, D. F. (2011). On the functions and objectives of foreign language classroom teaching. *Foreign Languages and Their Teaching*, 33(1), 5-8.
35. Urwin, J., & Du, L. P. (2003). Task-based approaches to second language pedagogy and the design of Chinese textbooks at tertiary level. *Chinese Teaching in the World*, 17(3), 84-98+4.
36. Zhang, J. Y., & Zhao, H. Y. (2024). Innovative paths for college English teaching in the context of digital transformation. *Foreign Language Research*, 47(2), 84-97.

Chapter 55

Preparing Students for An AI-driven World

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ABSTRACT

Artificial Intelligence (AI) is rapidly transforming industries, economies, and societies, making it essential for education systems to prepare students for an AI-driven future. This paper explores the integration of AI literacy, critical thinking, and ethical awareness into curricula to equip learners with the skills necessary to thrive in a technologically advanced environment. It emphasizes the importance of interdisciplinary approaches, combining technical knowledge with human-centered competencies such as creativity, communication, and problem-solving. The discussion highlights strategies for embedding AI concepts in schools and universities, including project-based learning, collaboration with industry, and continuous teacher training. Furthermore, the paper addresses challenges such as digital inequality, ethical dilemmas, and the need for lifelong learning. By fostering adaptability and resilience, education can empower students to navigate the opportunities and risks of AI responsibly. Ultimately, preparing students for an AI-driven world requires a balance between technical proficiency and human values, ensuring that future generations can harness AI for innovation while safeguarding social and ethical principles.

Keywords: Artificial Intelligence, Education Reform, Digital Literacy, Ethical Awareness, Future Skills

INTRODUCTION

The twenty-first century has been defined by rapid technological advancement, with Artificial Intelligence (AI) standing at the forefront of this transformation.

Once confined to speculative fiction and theoretical research, AI has now permeated everyday life, influencing how individuals work, communicate, and interact with the world. From healthcare diagnostics to financial forecasting, from personalized learning platforms to autonomous vehicles, AI applications are redefining professional roles and reshaping societal structures. In this context, education systems face a profound challenge: how to prepare students for a future in which AI is not only ubiquitous but also foundational to economic and social progress.

Education has historically evolved in response to technological revolutions. The industrial age demanded literacy and numeracy to operate machinery and manage production. The digital age required computer literacy and information management skills. Today, the AI age calls for a new set of competencies that extend beyond technical expertise. Students must learn to understand AI systems, critically evaluate their outputs, and apply them responsibly across diverse domains. More importantly, they must cultivate human-centered skills—creativity, empathy, ethical reasoning—that machines cannot replicate.

This paper argues that preparing students for an AI-driven world requires a holistic educational transformation. It is not enough to teach coding or data analysis in isolation. Instead, curricula must integrate AI literacy with critical thinking, ethical awareness, and interdisciplinary approaches. Teachers must be trained to guide students through complex technological landscapes, while policymakers must address issues of access and equity to prevent digital divides. Industry collaboration is essential to ensure that education remains relevant to evolving labor markets, while lifelong learning must be embraced as a necessity rather than an option.

The following sections explore these dimensions in depth, offering strategies, case studies, and critical reflections on how education can rise to the challenge of AI. By examining literacy, ethics, interdisciplinarity, teacher training, inequality, and lifelong learning, this paper seeks to provide a comprehensive framework for preparing students to thrive in an AI-driven world.

AI LITERACY AND CURRICULUM INTEGRATION

Artificial Intelligence literacy refers to the ability to understand, interpret, and critically engage with AI technologies. Just as traditional literacy empowers individuals to read and write, AI literacy equips students to comprehend how algorithms function, how data is processed, and how automated systems influence decision-making. In the twenty-first century, this form of literacy is no longer optional; it is a prerequisite for meaningful participation in society and the workforce.

Defining AI Literacy

AI literacy encompasses several dimensions. At its core, it involves a basic understanding of concepts such as machine learning, neural networks, natural language processing, and data analytics. However, literacy extends beyond technical definitions. It requires students to grasp the implications of AI, including its strengths, limitations, and potential biases. For example, students should be able to recognize that while AI can analyze large datasets quickly, it may also perpetuate discrimination if trained on biased information.

Why Curriculum Integration Matters

Education systems have historically adapted to technological revolutions. During the industrial era, schools emphasized mechanical skills and standardized processes. In the digital age, computer literacy became essential. Today, AI literacy must be embedded into curricula to ensure students are not passive consumers of technology but active participants in shaping its use.

Curriculum integration also democratizes access to AI knowledge. If AI education is limited to specialized programs or elite institutions, inequality will deepen. Embedding AI literacy across subjects ensures that all students, regardless of background, gain exposure to these critical skills.

Strategies for Integration

1. **Early Exposure in Schools** Introducing AI concepts at the primary and secondary levels helps normalize technology as part of everyday learning. Simple activities, such as teaching students how recommendation systems work on streaming platforms, can spark curiosity.
2. **Project-Based Learning** Hands-on projects allow students to apply AI concepts in real-world contexts. For instance, students might design a chatbot to answer school-related queries or use machine learning to analyze environmental data. Such projects encourage creativity and problem-solving while reinforcing technical knowledge.
3. **Cross-Disciplinary Modules** AI literacy should not be confined to computer science classes. History students can explore how AI reshapes archival research, while economics students can analyze AI's impact on labor markets. This interdisciplinary approach highlights AI's relevance across domains.
4. **Partnerships with Industry** Collaboration with technology companies can provide students with access to cutting-edge tools and mentorship. Internship programs, hackathons, and guest lectures bridge the gap between classroom learning and industry practice.

5. **Teacher Training** Teachers must be equipped with AI knowledge to guide students effectively. Professional development programs, online courses, and collaborative workshops can empower educators to integrate AI into their teaching.

Case Studies

1. **Finland's AI Literacy Initiative:** Finland launched a national program called *Elements of AI*, offering free online courses to citizens. Schools adopted simplified versions for students, ensuring widespread exposure.
2. **India's CBSE Curriculum Reform:** The Central Board of Secondary Education introduced AI as a skill subject in secondary schools, emphasizing practical projects and ethical discussions.
3. **United States K–12 Programs:** Several states have piloted AI modules in STEM curricula, focusing on coding, robotics, and data analysis.

Challenges in Integration

Despite its importance, integrating AI literacy faces obstacles.

1. **Resource Inequality:** Schools in rural or underfunded areas may lack access to computers, internet connectivity, or trained teachers.
2. **Curriculum Overload:** Adding AI modules risks overwhelming students and teachers unless carefully balanced with existing subjects.
3. **Rapid Technological Change:** AI evolves quickly, making it difficult for curricula to remain up-to-date.

The Role of Policy

Governments play a crucial role in standardizing AI literacy. National education policies must mandate AI integration, allocate funding for resources, and establish partnerships with industry. International organizations such as UNESCO and OECD have emphasized the need for global cooperation to ensure equitable access to AI education.

Long-Term Impact

Embedding AI literacy in curricula prepares students not only for careers but also for citizenship. In a world where AI influences elections, healthcare, and justice systems, informed citizens are essential to safeguard democracy and human rights. By cultivating AI literacy, education empowers students to question, critique, and shape the technologies that govern their lives.

CRITICAL THINKING, CREATIVITY, AND PROBLEM-SOLVING IN THE AGE OF AI

Artificial Intelligence excels at processing vast amounts of data, identifying patterns, and generating predictions. However, it lacks the uniquely human capacities for judgment, imagination, and ethical reasoning. Preparing students for an AI-driven world therefore requires cultivating critical thinking, creativity, and problem-solving skills that complement technological capabilities rather than compete with them.

The Role of Critical Thinking

Critical thinking involves analyzing information, questioning assumptions, and evaluating evidence. In an AI-driven society, students must learn to interrogate the outputs of algorithms rather than accept them uncritically. For instance, when an AI system recommends a medical treatment or financial investment, students should be able to ask: *What data was used? Could bias be present? What alternative interpretations exist?*

Embedding critical thinking into education ensures that students remain active decision-makers. It also guards against overreliance on technology, which can lead to errors or ethical lapses. Classroom practices such as debate, case study analysis, and reflective writing can strengthen these skills.

Creativity as a Human Advantage

While AI can generate art, compose music, and even write essays, its creativity is derivative, based on existing data. Human creativity, by contrast, thrives on originality, emotional depth, and cultural context. Preparing students for an AI-driven world means encouraging them to think beyond algorithms, to imagine possibilities that machines cannot foresee.

Creativity is particularly vital in fields such as design, entrepreneurship, and the arts, where innovation drives progress. Project-based learning, exposure to diverse disciplines, and opportunities for experimentation nurture creative confidence. For example, students might use AI tools to generate design prototypes but then refine them with human insight and aesthetic judgment.

Problem-Solving in Complex Contexts

AI can solve technical problems efficiently, but many real-world challenges are complex, involving social, ethical, and environmental dimensions. Students must learn to approach problems holistically, considering multiple perspectives and long-term consequences.

Problem-solving education should emphasize collaboration, adaptability, and resilience. Group projects, simulations, and community-based initiatives allow students to practice solving problems that mirror real-world complexity. For instance, a class might design an AI-powered solution to reduce food waste, requiring them to balance technical feasibility with social acceptance and ethical responsibility.

Case Studies

1. **Singapore's Education Reform:** Singapore emphasizes "21st-century competencies," including critical thinking and creativity, alongside technical skills. Students engage in inquiry-based learning and interdisciplinary projects that foster problem-solving.
2. **Stanford's Design Thinking Model:** Stanford University integrates design thinking into curricula, encouraging students to empathize with users, define problems, ideate solutions, prototype, and test. This model blends creativity with structured problem-solving.
3. **Finland's Phenomenon-Based Learning:** Finnish schools adopt phenomenon-based learning, where students explore real-world issues such as climate change or digital privacy, requiring critical analysis and creative solutions.

Challenges in Cultivating These Skills

1. **Assessment Limitations:** Standardized testing often prioritizes rote memorization over critical thinking or creativity. Reforming assessment methods is essential.
2. **Cultural Barriers:** In some contexts, creativity and questioning authority may be discouraged. Education must balance respect for tradition with encouragement of innovation.
3. **AI Dependence:** Students may become overly reliant on AI tools, undermining their own problem-solving abilities. Teachers must emphasize that AI is a support, not a substitute.

Strategies for Implementation

1. **Inquiry-Based Learning:** Encourage students to ask questions, conduct research, and present findings.
2. **Collaborative Projects:** Group work fosters diverse perspectives and collective problem-solving.
3. **Integration of Arts and Humanities:** Exposure to literature, philosophy, and art nurtures creativity and ethical reflection.

4. **Use of AI as a Partner:** Students can use AI tools to generate ideas or analyze data, but must critically evaluate and refine outputs.

Long-Term Impact

By cultivating critical thinking, creativity, and problem-solving, education ensures that students remain indispensable in an AI-driven world. Machines may handle routine tasks, but humans will continue to lead in innovation, ethical reasoning, and complex decision-making. These skills empower students not only to thrive professionally but also to contribute meaningfully to society.

ETHICAL, LEGAL, AND SOCIAL IMPLICATIONS OF AI IN EDUCATION

Artificial Intelligence is not a neutral technology. It reflects the values, assumptions, and biases of its creators and the data on which it is trained. As AI becomes embedded in education, ethical, legal, and social questions arise that must be addressed to ensure responsible use. Preparing students for an AI-driven world therefore requires not only technical literacy but also ethical awareness and civic responsibility.

Ethical Concerns

AI systems can perpetuate bias, invade privacy, and undermine autonomy. For example, predictive algorithms used in admissions or grading may disadvantage certain groups if trained on biased data. Facial recognition technologies raise concerns about surveillance and consent. Students must be taught to recognize these risks and to question the ethical implications of AI applications.

Ethical education should emphasize principles such as fairness, transparency, accountability, and respect for human dignity. Classroom discussions can explore dilemmas such as: *Should AI be used to monitor student behavior? How do we balance efficiency with privacy? Who is responsible when AI makes a mistake?*

Legal Dimensions

The legal landscape surrounding AI is evolving rapidly. Issues include data protection, intellectual property, and liability. For instance, if an AI tutoring system provides incorrect advice that harms a student's performance, who is legally accountable—the developer, the school, or the teacher?

Students must be introduced to basic legal frameworks such as data protection laws (e.g., GDPR in Europe), copyright regulations, and emerging AI governance policies. Understanding these frameworks empowers them to navigate professional environments responsibly.

Social Implications

AI in education can exacerbate inequality if access is uneven. Wealthier schools may afford advanced AI tools, while underfunded institutions struggle. This digital divide risks reinforcing social stratification.

Moreover, AI may alter teacher-student relationships. Automated grading or tutoring systems could reduce human interaction, potentially undermining empathy and mentorship. Students must learn to value human connection alongside technological efficiency.

Case Studies

1. **China's Classroom Surveillance:** Some schools in China have implemented AI-powered cameras to monitor student attention. While intended to improve learning outcomes, these systems raise concerns about privacy and autonomy.
2. **U.S. Predictive Analytics in Admissions:** Several universities use AI to predict student success. Critics argue that such systems may disadvantage applicants from marginalized backgrounds.
3. **European Union's AI Act:** The EU is developing comprehensive regulations to govern AI, emphasizing transparency and accountability. This provides a model for integrating legal awareness into education.

Strategies for Ethical Education

1. **Ethics Modules in Curricula:** Incorporate courses on AI ethics, exploring case studies and dilemmas.
2. **Debates and Simulations:** Engage students in role-playing exercises where they must defend ethical positions.
3. **Interdisciplinary Collaboration:** Combine computer science with philosophy, law, and sociology to provide holistic perspectives.
4. **Student-Led Initiatives:** Encourage students to design ethical guidelines for AI use in their schools.

Long-Term Impact

By embedding ethical, legal, and social awareness into AI education, students become responsible innovators and citizens. They learn to balance technological progress with human values, ensuring that AI serves society rather than undermines it.

INTERDISCIPLINARY APPROACHES: BLENDING HUMANITIES AND TECHNOLOGY

Artificial Intelligence is not confined to computer science; it influences psychology, economics, literature, law, and the arts. Preparing students for an AI-driven world therefore requires an interdisciplinary approach that bridges technical knowledge with humanistic insight. This blending ensures that students understand not only how AI works but also how it shapes culture, ethics, and society.

The Need for Interdisciplinarity

AI is a socio-technical phenomenon. Algorithms are built by humans, trained on human data, and deployed in human contexts. Without interdisciplinary perspectives, education risks producing technologists who lack ethical awareness or humanists who cannot engage with technology. Interdisciplinary learning equips students to navigate complexity, fostering versatility and adaptability.

Examples of Interdisciplinary Integration

1. **AI and Psychology** Students can explore how AI models human cognition, from neural networks inspired by brain structures to chatbots simulating conversation. This fosters understanding of both technological design and psychological processes.
2. **AI and Literature** Literature offers insights into how societies imagine technology. From Mary Shelley's *Frankenstein* to contemporary science fiction, narratives reveal hopes and fears about AI. Analyzing these texts helps students critically reflect on cultural attitudes toward technology.
3. **AI and Economics** AI reshapes labor markets, productivity, and inequality. Economics students can study how automation affects employment, wages, and global trade, preparing them to design policies that balance innovation with equity.
4. **AI and Law** Legal studies explore questions of liability, intellectual property, and regulation. Students can analyze how AI challenges traditional legal frameworks, preparing them for careers in governance and compliance.
5. **AI and the Arts** Artists increasingly use AI to generate music, visual art, and performance. Students can experiment with AI tools while reflecting on questions of authorship, originality, and creativity.

Case Studies

1. **MIT Media Lab:** The lab integrates technology with art, design, and social sciences, producing projects that explore the cultural dimensions of AI.

2. **Oxford's Humanities and AI Initiative:** Oxford University has launched programs combining philosophy, ethics, and AI research, emphasizing responsible innovation.
3. **Indian Institutes of Technology (IITs):** Several IITs have introduced interdisciplinary courses combining AI with economics, law, and social sciences.

Benefits of Interdisciplinary Learning

- **Holistic Understanding:** Students grasp both technical and human dimensions of AI.
- **Versatility:** Interdisciplinary skills prepare students for diverse careers.
- **Innovation:** Combining perspectives fosters creativity and novel solutions.
- **Ethical Awareness:** Humanities perspectives ensure that technology aligns with human values.

Challenges

- **Institutional Silos:** Universities often separate disciplines, making collaboration difficult.
- **Curriculum Design:** Integrating diverse subjects requires careful planning.
- **Assessment:** Measuring interdisciplinary learning is complex.

Strategies for Implementation

1. **Interdisciplinary Courses:** Develop modules that combine computer science with humanities subjects.
2. **Collaborative Projects:** Encourage students from different disciplines to work together on AI-related challenges.
3. **Guest Lectures:** Invite experts from diverse fields to share perspectives on AI.
4. **Research Initiatives:** Support interdisciplinary research centers focused on AI and society.

Long-Term Impact

Interdisciplinary education prepares students to become leaders who can navigate both technological and human challenges. By blending humanities and technology, education ensures that AI serves not only efficiency but also justice, creativity, and cultural enrichment.

TEACHER TRAINING, PEDAGOGICAL INNOVATION, AND INDUSTRY COLLABORATION

No matter how advanced technology becomes, teachers remain central to education. They are the facilitators who guide students through complex ideas, nurture curiosity, and model ethical responsibility. In an AI-driven world, however, teachers must themselves be equipped with new knowledge and pedagogical strategies. Preparing students for the future therefore requires investment in teacher training, innovative teaching methods, and strong collaboration between schools and industry.

Teacher Training for AI Literacy

Teachers cannot effectively prepare students for AI if they lack confidence in the subject themselves. Professional development programs must provide educators with both technical knowledge and pedagogical strategies. This includes:

1. **Foundational AI Concepts:** Understanding machine learning, data analysis, and algorithmic bias.
2. **Practical Tools:** Training in educational AI applications such as adaptive learning platforms, automated grading systems, and AI-driven research tools.
3. **Ethical Awareness:** Guidance on how to discuss privacy, fairness, and accountability with students.

Countries such as Singapore and Finland have already invested heavily in teacher training for digital literacy, offering workshops, online courses, and certification programs. Similar initiatives must be scaled globally to ensure teachers remain relevant in an AI-driven classroom.

Pedagogical Innovation

Traditional lecture-based teaching is insufficient for preparing students to thrive alongside AI. Innovative pedagogies must emphasize active learning, collaboration, and adaptability. Examples include:

1. **Flipped Classrooms:** Students engage with AI-powered learning materials at home, while classroom time is devoted to discussion and problem-solving.
2. **Project-Based Learning:** Students design AI applications to solve real-world problems, fostering creativity and critical thinking.
3. **Gamification:** AI-driven simulations and games can make learning interactive and engaging.

4. **Personalized Learning:** AI systems can tailor content to individual student needs, allowing teachers to focus on mentorship and higher-order skills.

Industry Collaboration

Education cannot exist in isolation from the labor market. Industry collaboration ensures that curricula remain relevant and that students gain practical experience. Partnerships can take several forms:

1. **Internships and Apprenticeships:** Students gain hands-on experience with AI tools in professional settings.
2. **Guest Lectures and Mentorship:** Industry experts share insights into current trends and challenges.
3. **Curriculum Development:** Companies collaborate with schools to design modules that reflect real-world applications.
4. **Hackathons and Competitions:** Joint initiatives encourage innovation and problem-solving among students.

For example, Microsoft and Google have partnered with schools worldwide to provide AI learning resources, while IBM's "SkillsBuild" program offers free training in AI and digital skills. Such collaborations bridge the gap between theory and practice.

Challenges

1. **Resource Inequality:** Not all schools can access industry partnerships or advanced AI tools.
2. **Teacher Resistance:** Some educators may feel threatened by AI or reluctant to change established methods.
3. **Curriculum Alignment:** Balancing industry needs with academic goals requires careful negotiation.

Strategies for Success

1. **Government Support:** Policies must fund teacher training and incentivize industry collaboration.
2. **Continuous Professional Development:** Teachers should have ongoing opportunities to update their skills.
3. **Collaborative Networks:** Schools can form networks to share resources and best practices.
4. **Balanced Integration:** AI should support, not replace, teachers. Pedagogical innovation must preserve human mentorship.

Long-Term Impact

By investing in teacher training, pedagogical innovation, and industry collaboration, education systems can ensure that students are prepared for the realities of an AI-driven world. Teachers become facilitators of lifelong learning, while industry partnerships provide relevance and opportunity. Together, they create an ecosystem where students thrive as both learners and future professionals.

ADDRESSING DIGITAL INEQUALITY AND GLOBAL CHALLENGES

Artificial Intelligence promises immense benefits for education, but its integration also risks deepening existing inequalities. Access to AI-driven tools, infrastructure, and training is uneven across regions, institutions, and social groups. Preparing students for an AI-driven world therefore requires confronting digital inequality head-on and addressing global challenges that shape the educational landscape.

The Nature of Digital Inequality

Digital inequality refers to disparities in access to technology, connectivity, and digital skills. In the context of AI, inequality manifests in several ways:

1. **Infrastructure Gaps:** Rural schools may lack reliable internet or modern devices, preventing students from engaging with AI tools.
2. **Resource Disparities:** Wealthier institutions can afford advanced AI platforms, while underfunded schools struggle with basic digital resources.
3. **Skill Divide:** Students from privileged backgrounds often have greater exposure to coding, robotics, and AI, while others remain excluded.
4. **Global Imbalances:** Developed countries lead in AI research and education, while many developing nations lag behind, risking marginalization in the global economy.

Global Challenges in AI Education

1. **Economic Inequality** AI education requires investment in infrastructure, teacher training, and curriculum development. Poorer countries and communities often lack resources, widening the gap between privileged and marginalized students.
2. **Ethical and Cultural Diversity** AI systems often reflect Western values and data sources, marginalizing perspectives from other cultures. Global education must ensure inclusivity and respect for diverse ethical frameworks.

3. **Environmental Sustainability** AI technologies consume significant energy, raising concerns about sustainability. Education must prepare students to balance innovation with environmental responsibility.
4. **Political and Regulatory Differences** Countries vary in their approaches to AI governance. Students must be aware of global regulatory landscapes to navigate international careers.

Case Studies

- **UNESCO's Global AI in Education Initiative:** UNESCO emphasizes equitable access to AI education, advocating for open resources and international cooperation.
- **India's Digital India Program:** India has launched initiatives to expand digital infrastructure and AI literacy, but challenges remain in rural areas.
- **African Union's AI Strategy:** Several African nations are collaborating to develop AI policies that address local needs and prevent dependency on external technologies.

Strategies to Address Inequality

1. **Government Investment** Public funding is essential to provide infrastructure, devices, and teacher training in underserved areas. Policies must prioritize equitable distribution of resources.
2. **Open-Access Resources** Free online courses, open-source AI tools, and digital libraries can democratize access to AI education. Programs such as Finland's *Elements of AI* demonstrate the potential of open resources.
3. **Community-Based Initiatives** Local organizations can provide training, mentorship, and support for students in disadvantaged communities. Community centers equipped with AI labs can bridge gaps.
4. **International Cooperation** Global partnerships between universities, governments, and NGOs can share resources, expertise, and best practices. Collaborative research ensures diverse perspectives.
5. **Inclusive Curriculum Design** Curricula must reflect diverse cultural contexts and ethical frameworks, ensuring that AI education is globally relevant.

Challenges in Implementation

- **Funding Limitations:** Governments may struggle to allocate sufficient resources.

- **Resistance to Change:** Institutions may be slow to adopt new technologies.
- **Language Barriers:** Many AI resources are available only in English, limiting access for non-English speakers.
- **Geopolitical Tensions:** International cooperation may be hindered by political conflicts.

Long-Term Impact

Addressing digital inequality ensures that AI education benefits all students, not just the privileged. By investing in infrastructure, open resources, and global cooperation, education systems can empower students worldwide to participate in the AI revolution. This not only promotes equity but also enriches innovation by incorporating diverse perspectives.

LIFELONG LEARNING AND FUTURE READINESS

Artificial Intelligence is evolving at a pace that far outstrips traditional educational cycles. Skills that are relevant today may become obsolete tomorrow, while new competencies emerge continuously. In this context, preparing students for an AI-driven world cannot be limited to formal schooling; it must embrace the principle of lifelong learning. Lifelong learning refers to the continuous acquisition of knowledge, skills, and attitudes throughout one's life, enabling individuals to adapt to changing circumstances and remain future-ready.

The Imperative of Lifelong Learning

AI technologies are dynamic, with breakthroughs in machine learning, robotics, and natural language processing occurring regularly. Professionals who stop learning risk being left behind. For students, this means cultivating not only technical skills but also the mindset of adaptability and resilience. Lifelong learning ensures that individuals remain employable, innovative, and capable of navigating uncertainty.

Dimensions of Lifelong Learning

1. **Formal Education** Schools and universities must instill the habit of continuous learning. This involves teaching students how to learn, not just what to learn. Critical thinking, research skills, and self-directed study are essential foundations.
2. **Workplace Learning** Employers increasingly expect workers to update their skills through training programs, certifications, and workshops. AI-driven platforms can personalize learning pathways, helping employees acquire relevant competencies.

3. **Community and Informal Learning** Lifelong learning also occurs outside formal institutions. Community centers, online forums, and peer networks provide opportunities for skill development. Informal learning fosters collaboration and inclusivity.
4. **Digital Platforms** Online courses, MOOCs (Massive Open Online Courses), and AI-powered tutoring systems democratize access to lifelong learning. Platforms such as Coursera, edX, and Udacity offer flexible opportunities for continuous education.

Strategies for Promoting Lifelong Learning

1. **Curriculum Reform** Schools must emphasize meta-learning—teaching students how to acquire new skills independently. This prepares them for future challenges.
2. **Integration of AI Tools** AI can personalize lifelong learning by analyzing individual strengths and weaknesses, recommending tailored resources, and tracking progress.
3. **Government Policies** Governments should incentivize lifelong learning through subsidies, tax benefits, and public programs. National strategies must recognize lifelong learning as a cornerstone of workforce development.
4. **Industry Partnerships** Companies must collaborate with educational institutions to design training programs that reflect evolving labor market needs.
5. **Cultural Shift** Societies must value continuous education, viewing learning as a lifelong pursuit rather than a finite stage.

Case Studies

- **Singapore's SkillsFuture Program:** Provides citizens with credits to pursue lifelong learning courses, emphasizing adaptability in a dynamic economy.
- **European Union's Lifelong Learning Strategy:** Promotes continuous education across member states, integrating digital platforms and vocational training.
- **IBM's SkillsBuild Initiative:** Offers free AI and digital skills training to learners worldwide, bridging gaps in workforce readiness.

Challenges in Lifelong Learning

- **Access and Equity:** Not all individuals have equal access to lifelong learning opportunities. Digital divides persist.

- **Motivation and Engagement:** Adults may struggle to balance learning with work and family responsibilities.
- **Recognition of Informal Learning:** Informal learning often lacks formal certification, limiting its value in the job market.
- **Rapid Technological Change:** Keeping pace with AI developments requires constant updating of curricula and resources.

Future Readiness

Future readiness involves preparing students not only for current technologies but also for unknown challenges. This requires cultivating adaptability, resilience, and ethical awareness. Students must learn to embrace uncertainty, experiment with new ideas, and remain open to change.

Key components of future readiness include:

- **Adaptability:** The ability to adjust to new environments and technologies.
- **Resilience:** The capacity to recover from setbacks and persist in learning.
- **Ethical Awareness:** Understanding the societal implications of AI and acting responsibly.
- **Global Citizenship:** Recognizing interconnectedness and collaborating across cultures.

Long-Term Impact

By embracing lifelong learning, education systems empower individuals to thrive in dynamic environments. Students become not only consumers of knowledge but also creators, innovators, and responsible citizens. Lifelong learning ensures that societies remain competitive, inclusive, and resilient in the face of technological disruption.

Ultimately, lifelong learning is not optional in an AI-driven world; it is essential. It transforms education from a finite stage into a continuous journey, equipping individuals to navigate complexity, seize opportunities, and contribute meaningfully to society.

CONCLUSION

Preparing students for an AI-driven world is not a matter of choice but of necessity. As Artificial Intelligence reshapes industries, economies, and societies, education must evolve to equip learners with both technical proficiency and human-centered values. This paper has argued that AI literacy, critical thinking, creativity, ethical awareness, interdisciplinary approaches, teacher training, equity, and lifelong learning are all essential components of future-ready education.

AI literacy ensures that students understand the technologies shaping their lives, while critical thinking and creativity empower them to complement machines with uniquely human skills. Ethical and legal awareness safeguard against misuse, ensuring that innovation aligns with fairness and accountability. Interdisciplinary approaches bridge the gap between technology and the humanities, fostering holistic understanding. Teacher training and industry collaboration provide relevance and mentorship, while addressing digital inequality ensures that opportunities are distributed equitably across societies. Finally, lifelong learning instills adaptability and resilience, preparing individuals for continuous change.

Together, these elements form a comprehensive framework for preparing students to thrive in an AI-driven world. Education must not only teach students how to use AI but also how to question it, shape it, and harness it responsibly. By balancing technological competence with human values, education can empower future generations to lead innovation while safeguarding social good. In doing so, schools and universities will not merely prepare students for jobs but for citizenship in a world where AI is both a tool and a challenge.

REFERENCES

1. Brynjolfsson, E., & McAfee, A. (2017). *Machine, Platform, Crowd: Harnessing Our Digital Future*. W. W. Norton & Company.
2. Floridi, L. (2019). *Ethics of Artificial Intelligence*. Oxford University Press.
3. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An Argument for AI in Education*. Pearson.
4. OECD (2020). *Artificial Intelligence in Society*. OECD Publishing.
5. UNESCO (2021). *AI and Education: Guidance for Policymakers*. UNESCO Publishing.
6. European Commission (2021). *Proposal for a Regulation Laying Down Harmonised Rules on Artificial Intelligence (AI Act)*. Brussels: European Union.
7. Singapore Ministry of Education (2020). *21st Century Competencies Framework*. Government of Singapore.
8. Stanford University (2019). *Design Thinking in Education*. Stanford d.school Publications.
9. Finland Ministry of Education (2018). *Phenomenon-Based Learning in Finnish Schools*. Helsinki: Government of Finland.
10. IBM (2022). *SkillsBuild Initiative: Empowering Learners Worldwide*. IBM Global Reports.

Chapter 56

Transforming English Education: Shifting From Grammar Expert to Communication Mentor

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ABSTRACT

English language teaching has been experiencing a major shift to cease its traditional grammar-based teaching and move towards a more communication-based one. In this paper, Transforming English Education: Shifting to a Communication Mentor, the authors discuss the changing role of English instructors in modern classrooms. It focuses on how to shift the role of being an authoritative figure who is concerned with linguistic accuracy to a facilitator that promotes effective communication, critical thinking, and engagement of the learner. The study focuses on the role of communicative language teaching (CLT), task-based learning and digital applications in transforming pedagogy. It emphasizes the significance of interactive learning settings where students are actively involved in discussions, group activities, and language application in the real world. The paper also examines the barriers to change, which include training, resistance to change, and institutional barriers to change.

The paper adopts a qualitative and quantitative methodology that involves obtaining the opinions of teachers and pupils in order to know how they view this pedagogical change. The results indicate that the communication-oriented method

has a beneficial impact on the fluency, self-confidence, and the competence of the language of the students. Moreover, it highlights the importance of the ongoing professional growth of teachers to fit into these changing roles. The research argues that the English teacher should be redefined to be a communication mentor in order to make language education in the 21st century relevant. Not only does this change enhance the language proficiency, but it also provides the learner with the necessary skills in life and career, which makes English education more pertinent and effective.

Keywords: Transforming, Communication, Professional, Methodology

INTRODUCTION

The traditional English language education was based on the mastery of grammar, vocabulary and syntactic accuracy, and the teacher acted as an authority figure, expected to present linguistic knowledge. Over many years, this was a teacher-centered approach that focused on the rule-based teaching approach, rote memorization, and written tests as the primary indicators of language proficiency. Even though these methods have contributed to the understanding of grammatical structures among learners, they often do not provide the practical communication skills, which are required in real life contexts. Over the recent past, the growing imperatives of globalization, technological advancement and cross-cultural interaction have led to reexamination of the objectives of teaching the English language.

The ability to express oneself in a way that is effective, both orally and in writing, has become primary over the simple grammatical correctness. As a result, there is an increasing recognition of the importance of meaningful interaction, fluency and the use of English in different types of social and professional situations as a priority of language education. This has led to the development of learner-focused instructional strategies like Communicative Language Teaching (CLT) and task-based learning, which focus on active learning and practical application of language. The English teacher is changing his role in this new environment. The teacher is no longer expected to be a grammar teacher but as a communication mentor who is expected to guide, facilitate and support students to improve their communicative skills. These would include the development of interactive classroom environments, encouragement of collaborative learning, integration of digital materials, and the individual student needs. The role of the teacher goes even further than just teaching; it involves mentoring, motivation and instilling confidence in the students.

However, this transformation has a number of problems. Many educators are faced with a challenge of adapting to new teaching strategies because of lack of training, rigid curricula and testing systems that still focus on the accuracy and

not fluency. Moreover, the combination of the grammar teaching with the communicative practice requires a careful planning and a shift in attitude. Despite these difficulties, such change is essential in order to make sure that the English education will still be relevant and efficient to provide students with the skills they will need in the 21st century. This study aims to examine the changing role of English educators in this paradigm, exploring how the shift of grammar master to communication advisor influences the teaching strategies, student engagement and language outcomes. The paper seeks to highlight the significance of this change by analyzing the existing trends and educational practices, and its implications to English language education in the future.

OBJECTIVES

The overall aims of this research are:

1. To examine the old-fashioned role of English teachers as grammar gurus.
2. To investigate the necessity to change English language teaching.
3. To investigate contemporary methods of pedagogy that are concerned with communication.
4. To gain an insight into the changing role of English teachers as mentors of communication.
5. To establish the advantages and problems of this change.

RESEARCH METHODOLOGY

In this study, the qualitative and conceptual research approach is adopted on the basis of:

1. Pertinent literature on English language teaching.
2. Pedagogical trend and teaching practices.
3. Classroom observations and classroom strategies.
4. Secondary sources of journals, books and educational reports.

The study is analytical and descriptive, aiming at comprehending the change in the teaching roles.

SHIFTING FROM GRAMMAR EXPERT TO COMMUNICATION MENTOR

The development of English language teaching is indicative of a more general change in the philosophy of education- the move away towards teaching knowledge and towards the teaching of skill. Historically, English instructors were regarded as grammar scholars who were concerned with rules, sentence construction and

correctness. Nevertheless, recent studies and teaching tendencies underline that language should be viewed more as a communication tool rather than as a system of rules. This has changed with the advent of Communicative Language Teaching (CLT) in the 1970s, where it became more interested in the use of language, particularly in everyday language rather than emphasis on grammatical correctness.

Grammar has traditionally been associated with mechanical precision and strict rules. It has often been introduced as a set of standards that should be memorized and used with little consideration of the context or communicative purpose. This approach to tradition has led to classroom practices that focus on correcting errors and rule practice, and does not keep grammar and its communicative role distinct. However, current perspectives on linguistics and pedagogy debunk this belief, suggesting that grammar is not a prescriptive system but a dynamic and meaning-creating system that evolves with use and context (Halliday and Matthiessen, 2014). The rise of functional grammar, notably with the work of Michael Halliday has made grammar a means of generating meaning, as opposed to merely being correct.

Functional grammar is based on the belief in the fact that different forms of grammar serve particular communicative functions in a specific situation. An example of this is that the use of the passive voice can help in avoiding the mention of the agent in scientific text whereas nominalization can help in the conciseness of information in academic texts. These are not arbitrary grammatical choices made but are motivated by a rhetorical intent and expectations of the audience. This shift in attitude has significant implications to writing education. Rather than learning grammar as independent entities, teachers are encouraged to present it as an aid to writing that enhances clarity, coherence and subtlety in style. By understanding grammar in this way, students will become more skilled at making purposeful decisions about structure of the sentence, usage of tenses and voice that align with their communicative goals.

This helps one to write more proficiently in different genres and to different audiences. Furthermore, grammar is essential in creating textual coherence. Cohesive devices like conjunctions, prepositions, and pronouns are used to provide a grammatical structure that links ideas and follows the logical progress of a piece of writing. Proper use of these elements can make the difference between a well-structured writing and disorganized or incoherent prose. As an example, transition words show the relationships among the concepts whereas reference words provide continuity and reduce redundancy. Grammatical awareness is also important in the acquisition of metacognitive skills by students as pointed out by modern scholars. Grammatical decisions are not technical choices but must have a sense of tone,

formality and audience. As the learners are taught to manipulate and break grammar with these factors in mind, they are better equipped to revise and improve their writing.

Finally, grammar is not to be viewed merely as a collection of rules that one has to follow. It is a versatile and effective device of meaning-making, discourse-making, and rhetorical precision. Such redefinition promotes a higher-order and more pragmatic way of teaching grammar—one which is embedded in writing and based on real communicative scenarios. In taking this approach, teachers will be able to help learners to see grammar as not an obstacle, but as a helpful co-pilot in their quest to achieve writing perfection.

Textual cohesion is a grammatical competence that is necessary and it defines the seamless linking of ideas in sentences and paragraphs. By use of linguistic elements, which create logical relationships between ideas, Cohesion, as defined by Halliday and Hasan (1976), is the process of making a text to be seen as a unified whole instead of a fragmented sequence of sentences. It is the linguistic glue that holds a text together and enables the readers to trace the logic of the author in an easy and understandable manner. A coherent flow of ideas, thematic consistency, and logical development of thoughts are characteristic features of a cohesive text. Such coherence did not occur by chance; it highly depends on the mastery of grammatical means by the writer. These devices include reference (e.g., pronouns and demonstratives), substitution, ellipsis, conjunctions and lexical cohesion (use of related words).

All these unifying mechanisms are based on grammatical knowledge and are used carefully to enhance the readability and structural integrity of a text. The most common cohesive device is reference, which involves the use of pronouns (he, she, it, they), demonstratives (this, that, those) and other referential words to refer back or forward to the elements in the text. For instance, in the sentences “Maria completed the assignment. She submitted it on time,” the pronouns ‘she’ and ‘it’ forge connections between the sentences and minimize unnecessary repetition. Without these devices, texts may end up being monotonous and cumbersome which compromises the overall quality of the texts. Other essential grammatical devices that help to sustain cohesiveness are substitution and ellipsis, which help avoid redundancy.

Substitution is a change of one thing with another (e.g. I would prefer to use the red pen. You would like this one?). Ellipsis, on the other hand, involves not providing information that has already been mentioned (such as, in She likes jazz, and he does too, the word likes jazz is already known). Both approaches require an understanding of the sentence structure and context, thus grammatical proficiency

is essential to their successful use. The conjunction is essential to show the connections between the ideas, whether it is additive (and, also), adversative (but, however), causal (because, therefore), or even time-based (then, after that). These connectors help to organize discourse by making the logical relationships among propositions clearer. Effective use of conjunction enables writers to come up with arguments that are coherent, convincing and easy to read. Another feature of text cohesion is lexical cohesion, which is accomplished by repeating important words, using synonyms, antonyms, and collocations.

Even though the phenomenon is more semantic than grammatical, it still relies on the grammatical control so as to have correct and meaningful associations among words and phrases. To illustrate the point, the use of terms associated with a given theme that are used throughout the writing of academic texts (e.g., education, pedagogy, learning, instruction, etc.) makes them stronger and thematic, which helps the reader track the narrative thread. It should be noted that cohesive writing does not just happen. It presupposes deliberate choices on how to organize sentences and paragraphs to ensure that every single element of the text is in support of and reinforces others. Such control can only be performed successfully when a writer is well versed with the rules of grammar and he/she understands how to incorporate them in different communicative situations.

FINDINGS

Shift to Communicative Competence is Well-marked. Recent researches affirm that English language teaching has quite shifted to communication-oriented pedagogies especially Communicative Language Teaching (CLT). Studies indicate that contemporary classrooms focus on interaction, practical language application and significant communication more than single-subject grammar teaching.

Finding: The English teacher role is changing to one not of a grammar teacher but a communicative competence facilitator.

Teaching through Communication enhances language achievement. Empirical studies illustrate those communicative practices: Enhance speaking and listening skills Enhance general language skills. Encourage active participation Researchers indicate that practical communication activities involving students in real-life communication scenarios are very effective in enhancing effective transmission and interpretation of meaning.

Finding: Students who learn using communication-oriented strategies excel at practical language use, when compared with students who learn using grammar-oriented strategies.

Greater Student Motivation and participation. Studies have continually indicated that communicative classrooms: Increase student motivation Promote active learning Encourage peer interaction In-depth analysis revealed that students in CLT settings are more interested, more engaged, and more motivated to learn English.

Finding: The shift to communication mentoring leads to more engaged and motivated learners.

Role Transformation of Teachers is a Core. Research proves that successful introduction of communicative teaching is largely reliant on the role of the teacher: From lecturer to facilitator From authority to mentor From evaluator to guide Studies indicate that teacher flexibility and training can greatly determine the effectiveness of this change.

Finding: This transition has been directly successful because the teacher is capable of adapting to a mentoring role.

Blended Approach is Most Effective There has been a lot of research that indicates that a moderate strategy gives the best results, which are achieved by combining: Grammar instruction Communication practice

Finding: The best learning outcomes occur with an integrated model (Grammar + Communication).

CONCLUSION

The shift of a grammar specialist to a communicative mentor means a radical alteration in the philosophy and approach to teaching the English language. The old techniques based on grammatical accuracy and teaching by rules are becoming unsuitable to meet the demands of globalization and communication-based world. Though grammar remains an important part of language learning, it is no longer the focus but is a support mechanism of effective communication. This trend highlights the need to have English teachers adopt more dynamic and student-centered roles. As communication mentors, teachers are expected to encourage communication, encourage engagement and create meaningful learning experiences that reflect the use of language in real life. This can enhance not only fluency and confidence levels of students, but also provide essential 21st-century skills like critical thinking, teamwork, and problem-solving. Empirical data and studies have conclusively shown that communication-based instruction leads to improved teaching and learning outcomes, greater student involvement, and better equipping to academic and professional settings.

However, this change does not come without its challenges. Such challenges as rigid curricula, the assessment model, which puts emphasis on accuracy, teacher

training, and classroom restrictions need to be considered to ensure successful implementation. To sum up, the transformation of grammar guru into communication mentor is necessary and inevitable in modern English grammar teaching. Combined and balanced treatment which combines grammatical knowledge and communicative competence offers the best path to acquisition of language. Through this shift, teachers will be able to make teaching English more pertinent, practical, and effective, and eventually prepare students to apply the language in the real-life situations with confidence and effectiveness.

REFERENCES

1. Richards, Jack C., and Theodore S. Rodgers. *Approaches and Methods in Language Teaching*. Cambridge University Press, 2014.
2. Harmer, Jeremy. *How to Teach English*. Longman, 2007.
3. Brown, H. Douglas. *Principles of Language Learning and Teaching*. Pearson Education, 2007.
4. Nunan, David. *Task-Based Language Teaching*. Cambridge University Press, 2004.
5. Hymes, Dell. "On Communicative Competence." In *Sociolinguistics*, edited by J. B. Pride and J. Holmes, Penguin, 1972.
6. Xiao, Yang. "The Application of Communicative Language Teaching in English Classroom Activities." *Journal of Education and Educational Research*, 2024.

Chapter 57

A Literary Framework for Soft Skills Development: Translating Narrative Theory into Classroom Practice

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ABSTRACT

Narrative theory is a part of philosophical discussion and literary genius. It demonstrates how stories get structured, how they create meanings with identity, and how they shape social recognition and individual perception. Aristotle has stated that, “Human is a social animal.” What one experience in the society and also can imagine become the part of literature. Hence, Narrative theories can show literary engagement and they can also become an efficient tool to rejuvenate classroom teaching especially English.

The world has witnessed the drastic changes soon after globalization where the world became ‘*Global Village*’ and evolution of digital revolution has connected the world virtually. Over the time, this rapid progress has offered expanded choices to individual consumers. In India, colonization brought western influences and introduction of English language to all colonized countries significantly impacted the mainstream. Soon after decolonization, different authors from social strata and especially marginalized sections of society have raised their voices through literary works and build the narratives to show their issues.

Hence, the thrust for identity was grown among young learners and in a globalized world it become crucial to understand empower the underdeveloped countries, third world countries, and emerging nations along with the youth. Hence, the role of soft skills considered as pivotal which was also prioritized in National Education Policy (NEP) 2020. Thus, this paper uses analytical, critical and mixed approach and methods to conceptualize the role of soft skills in Narrative theory.

Keywords: Soft Skills, Narrative theory, Aristotle, English Language Classroom Teaching (ELC-T), National Education Policy (NEP) 2020

I. INTRODUCTION

The world at present shows societal changes and on the other hand it signifies the globalized model of skilled workforce. The rapid increase in technology has opened the gateways to individuals to demonstrate their creativity. To guide this creativity and focus on their potential, education is a crucial tool to balance these novel streams of creativity and potential. Hence, to increase emotional understanding of human nature, intellectual ability to comprehend sensitive issues and make surrounding more aware, there is a need to inculcate social literature which is based on lived experiences in various narratives.

Human life is full of experiences and has the ability to imagine and make it more productive; hence, narrative literature which is in the form of stories, novels and dramas can be understood to signify the importance of narrative literature. Even various scholars also highlighted the role of narrative literature in significant domain of human life.

II. NARRATIVE LITERATURE: A VOICE FOR UNHEARD

The term narrative literature denotes literature written in the form of stories, novels, dramas, short plays etc. It expresses how a story creates its own meaning, how the speaker creates his or her identity. It also provides understanding about the lexical strength, the author has used in the narrative. It is also called as narratology. It is a branch of philosophical discussion and expresses literary world through characters and their lives. It tries to understand how a speaker of a literary work establishes a relation with his or her audience.

This theory broadly signifies framework or the parameters to test assumptions. It also helps in shaping human understanding. As narrative theory explains how stories function and how they create meaning. It studies characters, plot structure, point of view of storyteller or the narrator to the audience. It also talks about time and sequence, voice and perspective with making- or creating-meaning.

Hence, with narrative theory is crucial to study and understand its usage is significant as it highlights and examines:

- How society works and perceptions of individuals
- It studies the formal structure of narrative
- It demonstrates the relationship between storyteller and audience
- It talks about how narratives construct identity and reality

- It depicts how stories influence cognition, social co-existence and interaction
- It explains human thinking and provide deeper behavioral insights
- It helps in connecting literature and life

Thus, it can be considered that the narrative theory actually connect literature to human life, it also connect society to human realities in life. Hence, the study of narrative theory in classroom teaching can actually shapes the young brains and brings linguistic wealth and meaning to life. Further, it is essential to understand the types of narrative theories which were evolved into different branches; they can be understood through the given representation.

<i>Types of Narrative Theory</i>			
<i>Types</i>	<i>Key Thinkers</i>	<i>Focus</i>	<i>Key concepts</i>
Classical Narratology	Aristotle, Gerard Genette	Plot, Structure, Narrator, Sequence	Order, Frequency, Duration and Focalization
Structuralist Narratology	Roland Barthes and Claude Levi-Strauss	Deep structures, Universal story patterns	Binary opposition, Structural patters, Myth structures
Postclassical/ Contemporary Narratology	Paul Ricoeur and Mikhail Bakhtin	Identity, Ethics, power, Interaction with culture Ethical	Narrative identity, Dialogism, Cultural narratives, and storytelling
Cognitive Narratology	Jerome Bruner and David Herman	Reader response, emotional engagement of reader, mental	Narrative comprehension, Mental simulation simulation, Reader cognition, and Empathy development
Feminist and Disability Narratology	Susan Sniader Lanser and Judith Butler	Gender representation, Power structure in narratives	Gendered narration, Voice and authority, Identity performance and Patriarchal discourse
Disability Narratology	David T. Mitchell and Sharon L. Synder	Disability representation, Bodily differences and experiences	Narrative prosthesis, Social model of disability, Embodiment and Representation of disability
Cultural Narratology	Monika Fludernik	Cultural contexts, Traditions, Social practices	Cultural storytelling, social narratives, Cultural identity and Collective memory

Fig. 1: Types of Narrative Theory

Thus, figure 1 demonstrates types of narrative theories which evolved in different time in the history. This representation also explains key thinkers belong to the respective theory, their main focus and key concepts that have signified the theories over time. Hence, understanding narrative theories help the leaders (either teacher/instructor/guide/mentor/facilitator or students) to understand the context and derive the meaning. These theories are not simply explanations of texts but they provide new insights, perspectives and identity to the learner. Hence, understanding the narrative theories help individuals immensely.

III. LITERATURE REVIEW

A. Narrative Theory and the Study of Storytelling

Narrative theory generally referred to as narratology. It examines how stories are structured and how they produce meaning in literary, cultural, and social contexts. Early theoretical foundations were established by structuralist scholars who analyzed plot sequence, narrative structure, and narrative voice. Classical theorists argued that narratives consist of fundamental elements such as plot, character, and causality, which further shape readers' interpretation of events and experiences. Later developments expanded the scope of narrative theory to include psychological, ethical and cultural, dimensions of storytelling in the theory.

Further, modern scholars emphasize that narrative is not merely a literary device but a fundamental cognitive mechanism through which individuals understand and perceive the world. Narratives allow people to organize experiences, lived-experience, interprets social interactions, and constructs personal identities. According to Jerome Bruner, human cognition operates largely through narrative thinking, meaning that people interpret events and experiences through story-like structures. Narrative theory therefore provides a conceptual framework for understanding how stories influence perception, empathy, and social awareness.

Furthermore, scholars such as Paul Ricoeur expanded the concept of narrative by introducing the idea of narrative identity, suggesting that individuals construct their sense of self through the stories in literary pieces they tell about their lives. This theoretical perspective highlights the transformative power of storytelling in shaping identity and ethical reflection.

B. Narrative Pedagogy in Education System

In recent decades, researchers have explored the application of narrative theory within educational contexts, leading to the development of narrative pedagogy. Narrative pedagogy refers to teaching methods that use storytelling, literary

narratives, and reflective dialogue as tools for learning. This pedagogical approach emphasizes experiential understanding rather than rote memorization.

Further, studies also demonstrate that narrative pedagogy encourages active engagement, participation and reflective thinking among students. For instance, narrative-based teaching methods often include role-play, reflective journals, group discussions, and storytelling activities that help learners understand complex social experiences. These approaches allow students to analyze human emotions, ethical dilemmas, and interpersonal relationships through literary texts and personal narratives. (Francis Academic Press)

Narrative-based teaching has also been found to improve students' motivation, participation, learning experiences, and communication skills. Research on narrative reading strategies shows that collaborative discussion around narrative texts enhances student interaction and encourages deeper engagement with learning materials. (Umri Journals)

Furthermore, interdisciplinary studies also demonstrate that narrative approaches are increasingly used across various educational fields to improve understanding and engagement. Narrative frameworks help students connect theoretical knowledge with lived experiences, making complex concepts more meaningful and memorable. (MDPI)

C. Storytelling and Human Learning

Storytelling has long been recognized as a powerful method for transmitting knowledge, culture, and moral values. Educational researchers argue that storytelling facilitates learning because humans naturally process information in narrative form. Stories allow learners to contextualize information, remember concepts more effectively, and relate knowledge to real-world situations.

Educational studies highlight that storytelling promotes critical thinking, emotional engagement, and deeper comprehension of subject matter. Narrative-based learning environments often encourage inquiry-based learning and collaborative discussion, enabling students to explore multiple perspectives. (Research Gate)

Similarly, research on storytelling in education indicates that narratives function as vehicles for transmitting cultural values and social knowledge across generations. Through storytelling, learners engage in interpretative processes that develop analytical thinking and moral reasoning.

These findings demonstrate that narrative structures are effective pedagogical tools for promoting both cognitive and emotional learning outcomes.

D. Narrative Engagement and Soft Skills Development

Soft skills—such as communication, empathy, teamwork, and emotional intelligence—are increasingly recognized as essential competencies in modern education and professional environments. Unlike technical knowledge, soft skills involve interpersonal understanding and social awareness, which are often developed through experiential learning.

Narrative-based learning environments provide a unique opportunity for cultivating these competencies. When students engage with literary narratives, they encounter characters facing complex moral and emotional situations. This exposure encourages perspective-taking and empathy, allowing learners to understand diverse human experiences.

Research in educational psychology suggests that narrative engagement can significantly enhance empathy and social understanding. Narrative pedagogy enables students to interpret emotional contexts, recognize interpersonal dynamics, and reflect on ethical decision-making. (Science Direct)

Similarly, dialogic approaches to literature teaching have been shown to foster deeper insights into human behavior and motivation, highlighting literature's potential to promote social awareness and reflective thinking among students. (Science Direct) In this sense, literary narratives function as simulated social experiences that allow students to practice interpersonal reasoning in a safe educational environment.

E. Literature as a Framework for Soft Skills Education

Within literary studies and research, scholars increasingly argue that literature plays a crucial role in developing emotional intelligence and social awareness. Literary texts present complex narratives that require readers to interpret motivations, emotions, and ethical conflicts. Through this process, readers engage in reflective thinking and develop an understanding of diverse perspectives.

Educational researchers suggest that integrating literary narratives into classroom instruction can create a humanistic learning environment that encourages empathy and ethical reasoning. Narrative-based classroom interventions, such as reflective discussions and storytelling activities, help students analyze emotional experiences and develop interpersonal sensitivity. (VISTAS).

Furthermore, narrative competence—the ability to interpret and construct meaningful stories—has been identified as an important skill for personal development and self-reflection. Narrative learning frameworks encourage students to construct their own life narratives, promoting self-awareness and adaptive

thinking in complex social environments. (MDPI) Thus, literature can serve as a pedagogical framework that connects narrative theory with soft skills development in educational settings.

Hence, existing literature demonstrates that narrative theory provides a powerful framework for understanding how stories shape individual cognition, identity, and social interaction. Research on narrative pedagogy highlights the potential of storytelling and literary narratives to enhance student engagement, empathy, and critical thinking. Additionally, studies on narrative-based learning suggest that literature can serve as an effective medium for developing essential soft skills such as communication, emotional intelligence, and ethical awareness.

Despite growing interest in narrative pedagogy, further research is needed to explore how narrative theory can be systematically integrated into classroom practice to support soft skills development through literature.

IV. SOFT SKILLS DEVELOPMENT FRAMEWORK

Soft Skills are essential skills. They are part of life skills. Soft skills are personal traits and abilities of a person learned. These are the essential skills that remain in human behavior once learned. Soft skills are the core abilities of human personality. These skills can be learned over time. Some of the key soft skills include communication skills, personality development, leadership skills, critical thinking, decision-making, emotional intelligence, stress management and many others.

In India, after colonization western education considered soft skills as a part of learning for employment opportunities, on the other hand Indian education system since ancient India considered soft skills as a part of human personality. This mistreatment with soft skills has created wider learning gap. Thus, there is a need to consider the role of soft skills development through literature as classroom teaching now demands full engagement of the students. Thus, soft skills can play a wider role. As soft skills through literature provides

- Deeper insights of human behavior
- Insightful understanding of society
- Importance of social and cultural values
- Meaningful understanding of lived and learned experiences
- It helps to engage learners actively
- It drives learners with emotional world
- It makes learners to understand human emotions

Thus, soft skills development through literature can provide deeper insights on human life and social living. As human is a social animal; hence, society reflects essentiality of life and literature represents society. Hence, through literature one can get deeper insights. To Develop soft skills one needs to understand literature in the given aspects:

- How characters in literature interacting with others and themselves,
- Setting of a literary work,
- Choice of words, vocabulary and dialogues used in the work,
- Verbal and non-verbal behavior of characters
- Emotional signs, understanding of characters, self-awareness etc.

Through the understanding of the above aspects one can develop soft skills in the following ways.

<i>Literature and Soft Skills Development Framework</i>		
<i>Literary Aspects</i>	<i>Understanding</i>	<i>Soft Skills</i>
Characters	What kind of person a character is such as angry, emotional, sensitive, or leader like qualities, what the character possess?	Personality Development, Emotional Intelligence, Critical Thinking, or Leadership Skills etc.
Setting of a literary work	Is it joyous, tragic, peaceful, or stressful beginning of a literary work?	Adaptability, Risk Management, or Emotional Intelligence
Dialogues and choice of words	How characters talk and use words? Or they use verbal or non-verbal signs?	Communication Skills, Critical Thinking, Emotional Intelligence or Critical Thinking
Behavior of characters	How they behave in a literary work?	Personality Development, Networking, Stress Management, or Leadership Skills

Fig. 2: Literature and Soft Skills Development Framework

Thus, figure 2 highlights the role of literature in developing soft skills. In literary aspects one can understand through literary aspects such as characters, setting of play, novel or any literary work, how soft skills can be developed and inculcated. This figure demonstrates literary understanding and inculcation of soft skills.

Hence, role of literature is crucial as well as significant to develop these skills such as personality development, stress management, communication skills, emotional intelligence and leadership skills.

V. NARRATIVE THEORY TO CLASSROOM PRACTICE: A SOFT SKILLS PERSPECTIVE

Now, it is essential to understand that how narrative theories or literature can change the classroom scenario. How it helps to change teaching practices and inculcate soft skills development through literature. It is said that literature is the mirror of society it demonstrates various experiences and what individuals can understand.

As narrative theory or on the other hand, literature written in the form of stories, novels, poems and drama depicts societal experiences. Hence through narrative theory, construction of meaning, identity, values and voices can be understood. Narrative theory brings audience closure to understand the importance of human voice which can be understood in the following ways.

One of the postcolonial texts *Final Solutions* written by Mahesh Dattani, in the late 20th century depicts vivid experiences of human beings. This text realizes human beings have suffered through political turmoil at national level. As the partition in India took place along with independence, people have experienced bloody separation. This play explains pain bear by the common people. This story constructs its own meaning as the two young Muslim boys Bobby and Javed were survivors of communal violence and were given shelter by a Hindu family of Ramnik Gandhi. This crux of the play demonstrates essential traits of human beings.

This play demonstrates empathy, humanity as core, emotional intelligence, and teamwork-spirit as a part of soft skills and human values. Further, the actions of Ramnik and his daughter Smita demonstrate patience and harmony. These two personalities depict cultural coexistence as a value. On the other hand, saving an idol by common Bobby shows his values above hate and respect for each other. This play creates its own meaning by focusing human life should at the center of all affairs irrespective of all the day-today's affairs.

Hence, through such stories one can get deeper insights on human life and individual behavior. Through this one can learn soft skills such as personality development, communication skills, emotional intelligence, empathy, decision making, critical thinking and many other skills. This insightful understanding of soft skills as a literary framework can be developed as narrative theory to classroom practice by using engaging learners in different activities such as role play, poster presentation, short films and demonstrations and also including the use of Artificial Intelligence (AI). This inculcation of soft skills through a literary lens can be understood in the following representation.

<i>Narrative Literature</i>	<i>Soft Skills</i>	<i>Focus</i>	<i>Use</i>	<i>Classroom Practice</i>
Poetry, Prose, Play/drama, Novel, Essay, Short stories, Non - Fiction	Communication Skill	How speaker engages with audience, lexical strength and choice of words used	To understand human behavior, personality, essential values, gaps in communication	Through role play, group discussion and communication
	Emotional Intelligence and Critical Thinking	How human behavior has reflected through different characters and lines used by them	To understand the impacts on human mind and behavior	Using AI and different excerpt from stories and novels
	Personality Development	How the actions of characters derive meaning and influence each other	To show how one can positively impact the lives of others in real life	Use of Technology, short films etc.
	Leadership Skills and Decision-Making	How the act of one decides the course of action in a literary work	To demonstrate the importance of leading a society or the nation	Through poster presentation, and role play
	Empathy and Stress Management	How characters show their emotional aspects and empathy, how they value and can feel the pain of others	To sensitize the young learners about the importance of human life and values in nation building accompanied with humanity at the center	Through various competition such as poetry reading, influential paragraphs reading etc.

Fig. 3: A literary Framework of Soft Skills Development through Narrative Literature

.Figure 2 demonstrates a literary Framework of Soft Skills Development through Narrative Literature. It considers various literary forms to teach soft skills in the classroom teaching practice. It also shows the importance and usage of its framework with its purpose. Along with this, it also signifies its importance in classroom teaching practices. Hence, this literary framework can efficiently help to inculcate and develop soft skills through narrative literature.

Thus, literature is the ocean of gems to be picked-up and enlighten the human life. It helps to build the core aspects of human life. Soft skills development through literature especially narrative theory can bring more insights and can change the classroom teaching practices as well.

REFERENCES

- [1] Bruner, J. (1991). *The Narrative Construction of Reality*. Critical Inquiry, 18(1), 1–21.
- [2] Gulab, Tanveer. “Indian Models of Soft Skills Development: The Art of Leadership and Communication in the Literary Characterization of Shivaji Maharaj.” Journal of Research and Development, vol. 18, no. 1(XII), Jan. 2026, pp. 199-202, jrdrv.org.
- [3] Gulab, Tanveer. “Stress Management Skills as a Soft Skills in Mahesh Dattani’s Play Final Solutions.” Research Journal of English (RJOE), vol. 10, no. 4, Oct.-Dec. 2025, pp. 592-602. Oray’s Publications, doi.org.
- [4] Gulab, T., Padmarani Rao, L.V.. “Soft Skills for Sustainable Futures: Examining the Role of Literature in Social Innovation and Inclusive Growth.” International Journal of Informative & Futuristic Research (IJIFR), Vol. (13) (6), February 2026, pp. 770-775. IJIFR Paper ID: 2026/02/IJIFR/V13/E6/003.
- [5] Gulab, T., & Rao, L. V. P. (2025). *The role of soft skills in literature: Addressing challenges of the 21st century*. International Journal of English and Studies (IJOES), 7(12), 355–363. <https://doi.org/10.47311/IJOES.2025.7.12.363>.
- [6] Jiang, R., & Li, M. (2022). *The application of narrative pedagogy in social work teaching*. International Journal of Frontiers in Sociology, 4(3), 69–73.
- [7] Jiménez-Valverde, G. (2025). *Narrative approaches in science education: From conceptual understanding to classroom applications*. Encyclopedia, 5(3), 116. MDPI
- [8] Maris, S. F. (2024). *Storytelling method in learning process: A thematic analysis*. West Science Business and Management Journal.
- [9] Niedermeyer, W. J. (2020). *Driven to teach, compelled to learn: The roles of storytelling in education*. IDE Journal.
- [10] Ricoeur, P. (1984). *Time and narrative* (Vol. 1). University of Chicago Press.
- [11] *Transformative dialogic literature teaching fosters adolescents’ insight into human nature and motivation*. (2019). Learning and Instruction, 63.
- [12] *The influence of narrative pedagogy on academic achievement and humanistic care ability of nursing students: A systematic review and meta-analysis*. (2025). Nurse Education Today.
- [13] Singh, S.R. *Soft Skills*. APH Publishing Corporation, 2011.
- [14] “Soft skills.” *Oxford Advanced Learner’s Dictionary, 9th ed.*, Oxford UP, 2015, p. [1484].
- [15] “Soft Skills.” Oxford Advanced Learner’s Dictionary, Oxford UP, www.oxfordlearnersdictionaries.com. Accessed 16 Dec. 2024.

Chapter 58

Teaching English in The Era of Artificial Intelligence: AI – Powered Tools For Language Learning

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ABSTRACT

The rapid growth of Artificial Intelligence (AI) has transformed language learning by strengthening the development of core skills - Listening, Speaking, Reading, and Writing (LSRW). AI-driven tools are reshaping education by making learning more personalized and offering learners improved learning outcomes. (Holmes, Bialik, & Fadel, 2019; Zawacki-Richter et al., 2019). This paper investigates how the latest advancements and technological applications, such as ChatGPT, Claude AI, Gemini AI, Perplexity, and Grammarly, assist language learners in upgrading their language skills by receiving real-time feedback, which in turn helps them to be proficient in their Language.

The study recommends an AI-integrated teaching framework which is organised with a model input given to the student, progresses by practice, timely feedback and reflective learning. This helps the team develop Language Autonomy and establish a student-centred environment. Researchers have proved that the rise of digital tools has increased the learners' accessibility, and immediate feedback and enhances learners' motivation (Godwin-Jones, 2018; Kukulska-Hulme, 2020). However, challenges such as overdependence on technology, ethical concerns, and the need for digital literacy among

educators remain significant (Ranalli, 2021). The paper concludes that while AI cannot replace teachers, it serves as a powerful pedagogical aid when integrated thoughtfully, significantly enriching English language learning in the digital era.

1. INTRODUCTION

Language learning has undergone a significant shift from a teacher-centered approach to the upgrading of technology and a learner-centered pedagogical framework. With the increase of digital technology, English is very crucial for both educational and language learning, which has undergone a significant shift from a teacher-centered approach to the advancement and career development. However, students often encountered linguistic barriers in a teacher-centered approach, such as individualized feedback, speaking practice and latent feedback in the evaluation of learners' performance. The latest decades have witnessed a revolution due to the onset of technology and have changed the dynamics of education. This rapid rise and development of information technology offered a better opportunity to explore the new learning tools for the learners.

The Advent of Artificial Intelligence (AI) in education has come up with advanced tools that facilitate students' personalized learning experience, from delayed evaluation to synchronous feedback. Some innovative tools were introduced to enhance language learning core skills – listening, speaking, reading and writing.

This paper explores AI -powered tools for language acquisition and a pedagogical framework for learners' effective integration.

2. LITERATURE REVIEW

For implementing language learning technology has been examined through Computer-Assisted Language Learning (CALL). With refinement in AI, CALL has evolved into more intelligent and adaptive systems (Godwin-Jones,2018). The design of CALL materials generally takes into consideration principles of language pedagogy and methodology, which may be derived from the different learning theories (e.g. behaviorist, cognitive and constructive). Language learning through technology has important perspectives and highlights various challenges in the process of learning and offers practical suggestions to iron out the wrinkles.

Research indicates that AI – based tools enhance learner autonomy and engagement by providing immediate feedback and personalized learning pathways (Luckin, 2018). Additionally, mobile-assisted language learning has demonstrated significant improvements in learner motivation accessibility (Kukulska - Hulme,2020).

Despite these advancements, emphasis on the study of a pedagogical framework that roadmaps the application of AI in the classrooms rather than on tool adoption.

AI in Language Learning: Conceptual Framework

Artificial intelligence refers to a structure for accomplishing tasks that human intelligence commonly requires. In Language Learning, AI integrates:

1. **Natural language processing (NLP):** It supports learner to have better interaction with the computer and enables language learning through communication. It allows computer to understand, translate, and generate human language.
2. **Speech recognition:** The spoken language is analyzed and converted into text. It recognizes the pronunciation, accents and tone. It also provides accurate feedback. This enables learner interact more with the technology and improves language speaking and pronunciation.
3. **Machine learning:** A branch of Artificial Intelligence that supports computers to learn from the data and perform without any interruption. It reduces human efforts, and efficiency is encouraged through learning. Speech recognition helps in reducing complex problems and is lately being used more in the educational system.

3. AI- POWERED TOOLS FOR LANGUAGE LEARNING

Based on the contribution to LSRW skills, AI tools can be categorized.

3.1. Listening skills

AI demonstrates listening by means of verbal processing and auditory instruction, facilitating an encounter with different accents and enhancing comprehension. AI tools such as Listen lab, Descript, and Diction.io have supported in listening to the long podcasts which can be turned into a simplified version for the listener to understand the plot.

Here are some effective tools for strengthening Listening skills using AI-Powered tools:

- AI tools help in listening to the audio in loop for better understanding.
- Learners can listen to podcasts, dialogues, and stories which are generated by the AI. It helps in improving cohesion and vocabulary.
- Classroom activities are assigned by the facilitator in knowing the accuracy and pace of the learner.
- Quizzes, task-based questions are given as prompt, the learner receives the feedback instantly.

- For personalized learning, they can take the support of captions, subtitles and transcripts for better understanding.

3.2. Speaking skills

To enhance speaking skills, some innovative speaking tools have emerged. Tools like ELSA Speak, CHATGPT, and LANGUA.TALK, which gives instant feedback on the learner's performance. The learner receives the corrections on pronunciation, fluency, and vocabulary. Practicing daily with the peer group, friends, and colleagues may help in building fluency and confidence. For the improvement, the AI tools provide accurate suggestions.

- Duolingo is one of the best tools to introduce for the learner as it focuses more on pronunciation and gives instant feedback.
- To improve communication and expression, role-playing, debates, and group discussions must be conducted in the classrooms as activity.
- Listening and speaking with a native speaker assists in increasing accuracy and fluency.
- Recording the audios and speeches may facilitate learners' capacity in developing the skills.

3.3. Reading skills:

Reading is one of the most important receptive skills. Reading emphasizes on how a reader can change the perspective and enhance the abilities. It refers to the understanding of text, analyzing the written format and interpreting. An AI tool provides flexible reading, which allows complex sentences can be simplified and allows learners to adapt to their own experience.

- Reading proficiency serves as a gateway to enhance learners' competence.
- Vocabulary development: Through reading, new words can be learned.
- Fluency: The reader must develop accuracy and smoothness while reading.
- Critical thinking: the content must be observed and analyzed.
- Scanning the main information: skimming and scanning must be learned by the reader for specific information.

Here are some tools that enhance the learners' reading skills:

Quillbot – which turns long articles into simple bullet points.

Chat pdf – the learner can ask questions in the research paper or PDF and receive feedback and quick answers.

Spreeder – This tool helps in enhancing learners' reading fluency.

Rewordify – The complex words can be turned into simpler words. Makes it easy for the learner to understand the text easily.

Some ways to develop reading skills are by:

- AI tools help in changing complex sentences to a simplified version for learners, which makes reading easier for them.
- For making learning attractive and interesting, AI provides text based on the learner's pace.
- It gives meanings, synonyms and understandable examples to build vocabulary.
- To understand the main idea, the long paragraphs are shortened to a simple plot.
- The AI tools have personalized exercises for the improvement of comprehension skills.

3.4. Writing skills

Tools such as CHATGPT, GEMINI, and COPY.AI enables in generating the outline and help in editing the text easily. Writing skills are very useful in learning a language. Another tool, like GRAMMARLY, helps in grading the text, inserts suitable words and also helps in generating new ideas and gives organizing writing structure.

For the improvement of writing skills:

- The learner should focus on the sentence structure, which helps in accuracy.
- It also helps in refining the text, improving clarity and style.
- For encouraging regular writing, AI generated topics and prompts are to be learned for practice.
- AI gives suggestions, outlines ideas for the Learner to correct the mistakes and fix the errors.
- For enhancing the skill, AI guides in writing essays, paragraphs and reports. Which improves coherence and flow of writing.

4. PROPOSED AI- INTEGRATED PEDAGOGICAL FRAMEWORK:

This paper proposes a four-level framework.

- **Input stage:** Initially, the facilitator assigns a task to the learner by introducing some AI tools that must be used in their work.

- **Practice stage:** In the second stage, learners start practicing by using the tools on the data collected and they learn where to apply the AI tools.
- **Feedback stage:** The learner gives the input to a particular tool for correction and feedback. It gives accurate feedback and suggests some inputs to be corrected and checked.
- **Reflection stage:** The learner works along with the teacher on the given result and gets some suggestions and ideas revised from the facilitator.

For example, the facilitator assigned a task to the learner to write a blog about an unforgettable travel experience. The learner uses AI tools to write by using (CHATGPT) and receive some suggestions and implementations about the trip. It also suggests some corrections and assists in how to write and present. After all the data is collected and after submitting the presentation, the learner gets the feedback, and more input can be added from the facilitator. Here, AI tools should not act as a conductor. It should be working as a complementary tool.

5. CLASSROOM APPLICATIONS:

AI tools that help in enhancing the classroom language:

- **Listening:** For listening practice, some tools like ELS AI and SPEAKLY help in personalized learning exercises for active listeners.
- **Speaking:** For the speaking activity, Mizou and Redment help in custom role-playing, which helps increase learners' fluency and pronunciation.
- **Reading:** For reading, AI tools like Jigsaw reading, Goodreads – style chats help the learner to participate actively engaged in the given task.
- **Writing:** For the reading activity, AI tools like NotebookLM, Openeducat, and Microsoft Immersive Reader help in adjusting complex text to simpler text. It could transform academic text into conversational text.

6. ADVANTAGES OF AI IN LANGUAGE LEARNING:

- **Enhanced involvement:** The learning process is more interesting and effective for the learner. The learner's Active involvement may help in acquiring the language accurately.
- **Accessibility:** learners are allowed to study at any time of the day at their own pace and access the internet on their own to explore new learning skills.
- **Personalized learning experience:** They can adopt the lessons based on the learner's needs and level. They can design work or tasks on their own for experience.
- **Grading is automated and provides accurate feedback:** AI tools help

in checking the corrections for assignments, quizzes and essays. It gives quick feedback about pronunciation, fluency and vocabulary check also.

- **Removes fear and anxiety:** AI tools create a relaxed environment for the learner to learn without any fear, as they have personal space while learning.
- **High-quality resources:** The learning quality is high; resources are more and very easily accessible for any type of learning.

These advantages help learners in language proficiency and learner motivation (Luckin,2018).

7. CHALLENGES AND LIMITATIONS

Apart from the benefits, Learners face some challenges.

- **Over-dependency on technology** - Due to excessive use and dependency on AI tools, students may lose their quick learning capability.
- **Lack of emotional attachment and motivation** - Heavy reliance may lead to less communication with peer group, colleagues and friends. The learner might not know when to begin and when to end the conversation. They may also struggle speaking with older people.
- **Losing critical thinking**- The overdependency on technology may cause a loss of ability to think and not be able to handle work on their own.
- **Digital inequality**- Among different learners, some may not have internet access and a lack of digital skills is referred to as digital inequality. Economic differences also come under this category of inequality. The difference between knowing how to use digital technology and a lack of knowledge in technology is the gap, which is referred to as digital inequality.
- **Need for facilitator training** - In modern classroom teaching, Artificial Intelligence has been influencing the learners. But still, the facilitator's guidance and support are required for the learners. To ensure better learning outcomes, effective teaching, accuracy in feedback and enhancing classroom management facilitators are essential for the learners.
- **Limitations in accuracy** - The inability to use digital tools and AI tools which provide accurate information may result in incorrect and misleading answers. Sometimes data quality may be low, and outdated knowledge can be the reason in limitations of accuracy.
- Sometimes, the lack of understanding context can be the reason for misunderstanding, and many questions are raised due to a lack of knowledge and experience.

8. ETHICAL CONSIDERATIONS

Artificial intelligence raised some important issues:

- **Overdependency on AI:** This may lead to a decline in critical thinking and deterioration in language skills. Thinking capacity can be reduced in the learner due to over-reliance on the AI tools.
- **Data privacy and security concerns:** AI often requires data to suggest personalised learning for the required feedback. But be cautious about the prompts being given to the AI tool. Precautions and measures must be taken for privacy.
- **Transparency and responsibility:** Transparency shows how and when to use the tool for collecting data.

9. RECOMMENDATIONS

- We must use an AI tool as a complementary and a supplementary tool. Since, AI tools can never be replaced as a conductor.
- By encouraging, learners need to increase their critical thinking, they must rely on the tool for guidelines and context. But the content must be done on their own.
- Training educators in integrating Artificial intelligence (AI) is not about developing. It is very much about teaching.
- Encourage learners to use AI properly – Encouraging learners for using AI, helps learners in generating new ideas, methods and concepts.
- Combine tradition method and AI – By combining both the (traditional teaching and digital teaching) , the result from the facilitator and the learner would be a phenomenon.

10. CONCLUSION

The introduction of AI-powered tools has brought new advancements and possibilities for enhancing and developing language learning. An AI tool has great potential to change language learning by making it more effective, interesting and adaptive. Facilitators play a vital role in suggesting and guiding learners for meaningful engagement in learning a language. A balanced approach is the main key to achieving meaningful outcomes through learning. AI can never replace the facilitator, but it can work as a complementary and supplementary tool while acquiring language. As a result, technology plays a very important role in learning the language. Using AI tools to create unique patterns and advantages, the study aims to make English learners aware of the methods and strategies for effective

language learning. The paper concludes by saying that, AI tools are very much in use as of now in this Era.

REFERENCES

1. Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language learning and technology*, 22(3), 1-17.
2. Holmes, W., Bialik, M., Fadel, C. (2019). *Artificial Intelligence in education: Promises and implications for teaching and learning*. Centre for Curriculum Redesign.
3. Luckin, R. (2020). *Machine learning and human intelligence: the future of education for the 21st century*. UCL Institute of Education Press.
4. Warschauer, M. (1996). Computer-assisted language learning: an introduction. In S. Fotos (Ed.), *Multimedia Language teaching*. Logos InterFotos (al).
5. Xu, W., & Warschauer, M. (2020). Exploring the effectiveness of AI in language learning. *Journal of Educational Technology Development and Exchange*.

EXPANDED REFERENCES

1. Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge University Press.
2. Beatty, K. (2013). *Teaching and researching computer-assisted language learning* (2nd ed.). Routledge.
3. Godwin- Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language Learning & Technology*, 22(3), 1-17.
4. Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (ED.), *Multimedia language teaching*. Logos Internatiional.
5. Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview language teaching, 31(2), 57-71.
6. Reinders, H., & White, C. (2016). 20 years of autonomy and technology: How far have we come and where to next? *Language Learning & Technology*, 20 (2), 143-154.
7. Luckin. (2018). *Machine learning and human intelligence: The future of education for the 21st century*. UCL institute of education press.
8. Kukulska- HULME, a., & Viberg, O. (2018). Mobile collaborative language learning: State of the art. *British journal of Educational Technology*, 49(2), 207-218.
9. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in education: Promises and implications for teaching and learning*: center for Cirriculum Redesign.
10. Zawacki-Richter, O., Marin, V.I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 39.

Chapter 59

Cross Cultural Communication and AI

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ABSTRACT

Communication and Culture go hand in hand in the academic scenario. The present-day classrooms became platforms for cross cultural communication since a long time. Cross-cultural communication plays a vital role in modern education, where students and teachers from diverse cultural backgrounds interact in shared learning environments. Differences in language, tone, nonverbal communication, and contextual understanding can often lead to misunderstandings in the classroom. This paper examines key aspects of cross-cultural communication, including direct versus indirect speech, nonverbal cues, high-context and low-context communication styles, and real classroom scenarios that highlight these differences. The paper also explores how Artificial Intelligence (AI) supports cross-cultural communication in education. AI-powered tools such as translation systems, personalized learning platforms, and virtual tutors help overcome language barriers, adapt to individual learning needs, and create inclusive learning experiences. Additionally, AI enables global collaboration through virtual classrooms and promotes culturally sensitive content. However, the use of AI in education also presents challenges, including bias in AI systems, misinterpretation of cultural context, and the digital divide, which can limit access for some students. To address these issues, the paper suggests best practices such as combining AI with human teaching, promoting cultural awareness, using multiple learning sources, and encouraging inclusive communication. Overall, this study highlights the importance of integrating AI thoughtfully to enhance cross-cultural communication while ensuring fairness, inclusivity, and equal opportunities for all learners.

1. INTRODUCTION

Communication has been a buzz word in the academic context. Students seeking career growth are more serious in enhancing their communication skills. During their course of study they focus on different academic issues where communication has been at its top. The ability of communication is influenced by various factors like family standards, social back ground, speaking ability, schooling background etc, but all these are connected to the cultural background of a student. Hence culture is of prime importance in improving the ability to communicate at any age. The study aims at the impact of culture on communication and how AI could address some of the issues in cross cultural communication.

1.1. Cross Cultural Communication and AI

Cross-cultural communication refers to how people from different cultural backgrounds interact and understand each other (Gudykunst, 2004). For example, in many Western countries, people greet others with a handshake, whereas in some Arab cultures, people may use verbal greetings or gestures such as saying “Adab” instead of physical contact. In certain contexts, touching someone (such as shaking hands) may be avoided due to cultural or religious beliefs. Even within the same region and language, communication styles can differ because of variations in culture and dialects (Hofstede, 2001). Cross-cultural communication plays an important role in the classroom. Differences in language, tone, nonverbal cues, and communication context can lead to misunderstandings between students and teachers (Gudykunst, 2004).

a) Language & Tone – Direct vs Indirect Speech

In countries like the USA and Germany, people usually communicate in a direct manner. For example, a student might say to a teacher, “I don’t understand this concept. Can you explain it again?”. In contrast, students from countries like India and Japan may use a more indirect style of communication (Hofstede, 2001). For instance, a student might say, “This part is a little difficult...”, expecting the teacher to understand that they need further explanation. Because of these differences, teachers from direct-communication cultures may expect clear and explicit questions, while students from indirect-communication cultures may rely on subtle hints to express their needs (Gudykunst, 2004).

b) Nonverbal Communication in Cross-Cultural Classrooms

Nonverbal cues such as eye contact, gestures, and body language can convey different meanings across cultures and languages (Hall, 1976). For example, in Western classrooms like those in the USA, students who maintain eye contact with the teacher are seen as attentive and engaged. In contrast, in some Asian cultures,

including India, students may look down as a sign of respect. Because of these differences, a teacher from Western culture might mistakenly think that a student who avoids eye contact is not paying attention. This can lead to miscommunication between students and teachers. Similarly, silence can have different meanings in different cultures. In many Western classrooms, silence is often interpreted as a lack of participation or understanding. However, in cultures like Japan, silence may indicate that a student is thinking carefully or showing respect (Hall, 1976).

c) Context: High-Context vs Low-Context Communication

Communication styles can differ based on cultural context, which may lead to misunderstandings between students and teachers from different backgrounds. In low-context cultures, such as Germany and the USA, communication is usually direct and explicit (Hall, 1976). For example, a teacher may give clear instructions like: “Write a 500-word essay, submit it by Monday, and include three references.” In this case, all expectations are clearly stated. In contrast, high-context cultures, such as Japan, rely more on implicit communication. A teacher might say: “Prepare something about this topic for next week.” Here, students are expected to understand the expectations based on context, prior experience, or shared understanding (Hall, 1976). These differences can sometimes create confusion in the classroom if students and teachers are not aware of each other’s communication styles.

d) Real Classroom Scenario

In a classroom, there can be many differences between students and teachers due to cultural backgrounds (Hofstede, 2001). For example, if a teacher asks a question:

- An American student may quickly raise their hand and answer confidently.
- A Japanese student may remain quiet, thinking carefully and waiting to be invited to speak.
- An Indian student may hesitate to speak unless directly asked by the teacher.

In such a situation, the teacher might assume that only the American student understands the topic, which may not be true. The other students may also understand but express their knowledge differently due to cultural communication styles (Gudykunst, 2004).

2. HOW AI SUPPORTS CROSS-CULTURAL COMMUNICATION IN EDUCATION

2.1. Language Support & Translation

Artificial Intelligence (AI) supports cross-cultural communication in education by helping students overcome language barriers (Holmes et al., 2019). Tools such

as Google Translate and Microsoft Translator enable students to understand lectures delivered in different languages, translate assignments and notes, and communicate more effectively with teachers and peers. For example, a student in India can follow a lecture delivered in French or Spanish using real-time translation features. This allows the student to understand key concepts without needing full fluency in the language (UNESCO, 2021). AI tools can also translate textbooks, provide subtitles, and assist with writing using correct grammar and vocabulary (Holmes et al., 2019).

2.2. Personalized Learning Across Cultures

AI-powered platforms can personalize learning by adapting to each student's needs, background, and cultural context (Luckin et al., 2016).

- **Learning pace:** AI adjusts lesson speed based on student performance.
- **Cultural context:** AI uses familiar examples (e.g., local currency) to improve understanding.
- **Educational background:** AI provides beginner or advanced content depending on prior knowledge.

This personalization helps create a more inclusive and effective learning environment (Baker & Inventado, 2014).

2.3. AI Tutors and Chatbots

AI tutors and chatbots provide personalized assistance and improve cross-cultural communication (Holmes et al., 2019).

They can:

- Explain concepts in simple language
- Adjust tone (formal or informal) based on cultural expectations
- Provide 24/7 learning support
- Allow students to ask questions privately without fear of judgment

This is especially useful for students from cultures where speaking openly in class may be less common (Reinders & White, 2016).

2.4. Global Classrooms & Collaboration

AI enables global learning by connecting students from different countries (UNESCO, 2021).

Students can collaborate on projects, attend virtual classrooms, and participate in cultural exchanges. AI tools support translation, communication, and organization, making international teamwork easier and more effective (Holmes et al., 2019).

2.5. Cultural Sensitivity in Content

AI helps create inclusive and culturally sensitive educational materials (UNESCO, 2021). It can:

- Include diverse cultural examples
- Reduce biased or stereotypical language
- Adapt content to local contexts

This ensures that students from different backgrounds feel represented and respected (Holmes et al., 2019).

3. CHALLENGES IN AI POWERED CONTEXT AND CROSS CULTURAL COMMUNICATION

a) Bias in Educational AI

AI systems may reflect biases present in their training data, often favoring dominant cultures (UNESCO, 2021). This can lead to unequal representation in educational content.

b) Misinterpretation of Cultural Context

AI may struggle to understand cultural nuances such as idioms, humor, and gestures, leading to misunderstandings (Holmes et al., 2019).

c) Digital Divide

Not all students have equal access to AI tools and technology, creating educational inequality (UNESCO, 2021).

3. BEST PRACTICES IN EDUCATIONAL USE OF AI

1. **Combine AI with human teaching** to provide emotional and cultural understanding (Luckin et al., 2016).
2. **Encourage cultural awareness training** to reduce misunderstandings (Gudykunst, 2004).
3. **Use multiple sources** to avoid bias and improve accuracy (Baker & Inventado, 2014).
4. **Promote inclusive communication** to respect all cultural backgrounds (UNESCO, 2021).

4. CONCLUSION

While AI offers many benefits in education, challenges such as bias, cultural misunderstanding, and unequal access must be addressed. Ensuring fairness, inclusivity, and accessibility is essential for effective use of AI in cross-cultural education. By combining AI with human teaching, promoting cultural awareness, and encouraging inclusive communication, educators can create a balanced and effective learning environment (Holmes et al., 2019; UNESCO, 2021).

REFERENCES

1. Hall, E. T. (1976). *Beyond culture*. Anchor Books.
2. Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Sage Publications.
3. Gudykunst, W. B. (2004). *Bridging differences: Effective intergroup communication* (4th ed.). Sage Publications.
4. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education.
5. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Centre for Curriculum Redesign.
6. UNESCO. (2021). *AI and education: Guidance for policy-makers*. UNESCO Publishing.
7. Baker, R. S., & Inventado, P. S. (2014). Educational data mining and learning analytics. In *Learning analytics* (pp. 61–75). Springer.
8. Reinders, H., & White, C. (2016). 20 years of autonomy and technology: How far have we come and where to next? *Language Learning & Technology*, 20(2), 143–154.

Chapter 60

Developing 21st Century Skills: AI Integrated Teaching

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ABSTRACT

Development of 21st century skills and competencies in teaching and learning remains a key strategic imperative. Moreover, 21st-century skills is a combination of knowledge, skills, work habits, and character traits deemed essential for success in today's world. It empowers students to identify the complex challenges, adapt to change, and contribute meaningfully to society. 21st Century skills can be categorized into three main areas, viz., learning; literacy and life skills. Integrating AI in education holds significant potential for advancing 21st-century competencies by providing adaptive learning environments that respond to individual learners' cognitive and emotional needs. The use of AI technologies drives innovation and fosters creativity. Teachers and learners gain new knowledge, skills and experiences through the use of AI technologies in the classroom. There is widespread consensus, however, that our education systems are failing to adequately prepare all students with the essential 21st century skills necessary to succeed in life. This paper articulates thematically the role of AI technology integration in the development of 21st century skills and competencies in teaching and learning process. The 21st Century skills include ***communication, problem-solving, critical thinking and collaboration***. Further, it focuses on pedagogical affordances of AI integration in relation to 21st Century skills. Additionally, an attempt is made to identify challenges like access to bandwidth and internet connectivity which are afflicting coherent AI integration in teaching learning process for developing 21st Century skills.

Key Words: 21st Century Skills; Artificial Intelligence (AI); Integrated Teaching; communication; Problem-solving; Critical thinking and collaboration.

1.0 INTRODUCTION

The 21st century has marked a paradigm shift in educational practice, driven by a rapid technological revolution wherein Artificial Intelligence (AI) is increasingly embedded into instructional strategies, curriculum frameworks, and institutional administration. Amidst a global emphasis on fostering digital literacy, critical thinking, and lifelong learning, AI-driven solutions are progressively transforming conventional pedagogical models (Marulasiddappa, 2025).

Further, the 21st century is characterized by rapid technological advancements, globalization, and complex social changes, requiring individuals to be equipped with a diverse set of skills. These skills, often categorized as 21st century skills, include critical thinking, creativity, collaboration, communication, and digital literacy. These competencies are essential not only for success in the workplace but also for personal growth and active citizenship in an increasingly interconnected world.

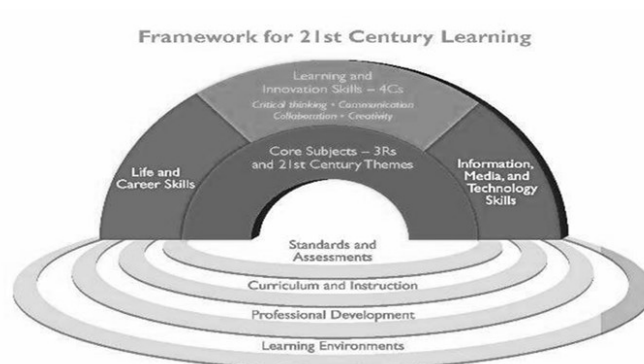


Figure 1. Showing Framework for 21st Century

Classification of 21st Century Skills

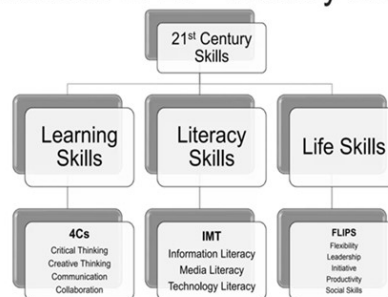


Figure 2. Showing 21st Century skills -classification

Various international frameworks have defined 21st Century skills as follows:

Table showing skills focused in 21st Century

<i>Framework</i>	<i>Skills Focused</i>
P21 Framework (2009)	4Cs: Critical thinking, Creativity, Communication, Collaboration + ICT
OECD Future of Education, 2030	Global competence, adaptability, responsibility
UNESCO ICT Competency Framework (2018)	ICT literacy, pedagogical use of Technology
World Economic Forum Skills Outlook (2020)	Problem-solving, resilience, innovation

Pedagogical Approaches – 21st Century

Embedding 21st-century skills requires teachers to adopt student-centered pedagogies such as:

- a) **Project-Based Learning (PBL):** Pre-service teachers design and implement projects, simulating real-life classroom practices that promote inquiry and collaboration (Bell, 2010).
- b) **Flipped Classroom Approaches:** Trainees experience blended learning models, where they learn content independently and use classroom time for collaborative problem-solving.

Collaborative Micro-Teaching: Instead of individual demonstrations, teacher trainees conduct joint lessons, emphasizing teamwork and peer feedback.

Artificial Intelligence (AI) in education can be broadly conceptualized as the integration of intelligent computational systems designed to replicate, augment, or simulate aspects of human cognition with the objective of enhancing teaching and learning processes. These technologies encompass a spectrum of capabilities, including intelligent tutoring systems (ITS), natural language processing (NLP), machine learning algorithms, and educational robotics—each contributing uniquely to the personalization and automation of instructional delivery (Holmes, Bialik, & Fadel, 2019).

In an era marked by rapid technological advancements and dynamic societal demands, the role of education in fostering critical skills such as collaboration, communication, creativity, problem-solving, digital literacy, and adaptability has become paramount. By integrating technology into pedagogical practices, this study highlights how interactive and personalized learning environments can enhance critical thinking and innovative capabilities among students.

1.1 REVIEW OF RELATED LITERATURE

Mekala and Harishree (2020) investigated the capability of the students with respect to innovation skills, life and career skills of 21st Century Skills. It was found that it is very important to integrate the 21st Century Skills to meet the demand.

Sanchez (2021) examined integrating technology to foster 21st Century Skills among the students. The results offered practical strategies to successful technology integration student-centered model.

Jamali, K., (2021) iterated fostering 21st Century Skills using an online discussion forum. The results showed that online discussion forum gave an inclusive venue for developing critical thinking, leadership, discipline, time management and digital skills.

Abdul lateef (2021) examined the impact of four digital tools in fostering 21st Century Skills. The results revealed that the four digital tools (Discussion Forums, Kahoot, Padlet, and FlipGrid) empowered learners and fostering 21st Century Skills.

Ogegbo and Aina (2022) studied early childhood educators' perceptions of technology in facilitating the development of 21st Century Competencies in young children. The findings demonstrated that the use of technology tools assisted educators in fostering 21st-century competencies.

Fung, and Ng (2022) conducted a study on fostering student teachers' 21st century skills by using flipped learning. The findings suggested that by using Flipped learning could foster students' 21st Century Skills.

Rahman, Zhang, Mahmood et al. (2023) appraised fostering twenty-first century skills among primary school students through math project-based learning. The findings showed that by using project-based learning, students' active participation and effective collaboration were observed.

Pramasdyahsari, et al. (2023) examined mathematical critical thinking skills on number patterns through digital book. The findings revealed that the digital book was valid and significant in fostering students' critical thinking skills and had a positive impact on other 21st century learning skills.

Dhakal (2023) examined pedagogical use of 21st century Skills and found that moderate usage of 21st Century Skills in pedagogical activities were found.

Coskun (2024) conducted a study on the role of digital learning materials in fostering 21st-Century Skills found that one group reported the development of 21st-century competencies in 12 themes with low achievement scored while the other group scored high achievement in 15 themes.

Mohapatra Soumyadarshan Nayak (2025) assessed the integration of Artificial Intelligence (AI) in education significantly enhances the development of 21st-century competencies such as critical thinking, creativity, collaboration, and communication, alongside fostering socio-emotional learning skills.

Sanjeedah Khatoon (2025) highlights how digital tools and platforms can create interactive, personalized, and engaging learning environments. By leveraging technologies like Artificial Intelligence (AI), Learning Management Systems (LMS), virtual reality (VR), and gamified learning, educators can enhance students' critical thinking and prepare them for the demands of a knowledge-driven global economy.

1.2 AI AND 21ST CENTURY SKILLS

Integrating AI in education holds significant potential for advancing 21st-century competencies by providing adaptive learning environments that respond to individual learners' cognitive and emotional needs. The use of AI technologies drives innovation and fosters creativity. Teachers and learners gain new knowledge, skills and experiences through the use of AI technologies in the classroom. There is widespread consensus, however, that our education systems are failing to adequately prepare all students with the essential 21st century skills necessary to succeed in life. This paper articulates thematically the role of AI technology integration in the development of 21st century skills and competencies in teaching and learning process. The 21st Century skills include communication, problem-solving, critical thinking and collaboration.

A) Communication Skills

Communication is a primary influence on social and personal relationships. Communication is what creates, transforms, maintains friendships and family relationships.

Communication in 21st century is characterized by the nature of the communication itself which tends to be more and more globalized. Regarding communication skills, Partnership for 21st Century Skills defines 21st Century Communication Skills as communicating effectively in diverse environments.

Society's digital transformation has reshaped the nature of communication. As virtual interactions increase, the need for clear, effective, and flexible communication is rising in educational, social, and professional settings. Artificial Intelligence (AI) has become a key enabler, providing tools that imitate human behavior, offer real-time feedback, and customize learning. AI-powered communication tools, including Natural Language Processing (NLP), chatbots, and automated language tutors, are becoming more accessible and are influencing how people and organizations share and understand information.



Figure 3. Showing Core Communication Skills

B) Problem Solving skills

Problem-solving is defined as a cognitive process that focused on accomplishing an objective for which the students do not primarily know a solution technique. Problem-solving is an intellectual process of the brain, which explores the explanation to a specified problem or discovers a technique to comprehend the given goal. Thus, Problem-solving needs logical reasoning to process certain information in a way that can be used to solve the problem effectively and efficiently. Critical thinking is very essential in the case of problem-solving. Critical thinking and problem-solving skill are interrelated with each other. Sometimes these are used as synonym words.



Figure 4. Showing Problem solving skills

C) Critical Thinking Skills

Critical thinking involves actively questioning, analyzing, and evaluating information before forming a judgment or making a decision.

Trilling and Fadel (2009) suggested that the capability to analyze, understand, evaluate, abridge, and generating new information are known as critical thinking. Cottrell (2005) identified critical thinking is a complex process of thought, which includes a wide range of abilities and attitudes, such as:

1. recognizing other people's situations, point of view, and conclusions;
2. assessing the evidence for alternative perspectives,
3. weighing up a contrasting point of view and evidence impartially;
4. being able to read between the lines, seeing behind surfaces, and recognising wrong or partial assumptions;
5. recognizing procedures used to make certain positions more appealing than others, and persuasive procedures;
6. reflecting on problems in an organized way, bringing rationality and reasonable, based on good evidence and functional assumptions;
7. drawing inferences about whether the argument is effective and reasonable, constructed on good proof and functional expectations,
8. Presenting evidence in a planned, clear, well-reasoned way that satisfies others.

Similarly, Facione (2011) expressed that there are several cores of critical thinking skills viz., (1) interpretation, (2) analysis, (3) inference, (4) evaluation, (5) explanation, and (6) self-regulation. Thus, critical thinking skills can be split into six sub-skills.



Figure 5. Showing critical thinking skills

D) Collaboration

Collaboration skills refer to the competencies required to engage and interact productively with others. In the words of Hakkarainen et al.(2005), collaboration means communal activity between pupils based on the reliance that everyone makes an effort to achieve shared goals. Ideas and thoughts must be elaborated on together, and the goal is for pupils to excel when getting ideas, help, and support from each other and the teacher.

According to Moseley (2019), Collaborative skills are about working well with others and achieving a common goal. However, it is more than just finishing a project with a group of people. It also means building relationships with the team, resolving conflicts, and creating a work environment where everyone feels included and respected.

Niyonsaba et al. (2022) discovered that students who were taught using collaborative learning methods performed better compared to those who received traditional lectured teaching. Building on this, Saka (2021) revealed that students taught by collaborative teachers achieved higher scores in their academic achievements compared to those taught by isolated teachers.

Collaborative skills play a significant role in the field of education. According to the Partnership for 21st Century Skills (P21), Collaboration is considered an essential and innovative skill that encompasses various sub-skills. These sub-skills include:



Figure 6. Showing collaboration skills

1.3 CHALLENGES IN DEVELOPING 21ST CENTURY SKILLS

1. **Need for technical expertise:** It may be challenging for teachers who are unfamiliar with AI to incorporate this technology into their teaching practices, and they may require assistance and training to get started to inculcate 21st Century Skills among students.
2. **Cost of AI tools and applications:** Most of educational institutions lack the funds to purchase and maintain the equipment required to implement 21st Century Skills integrating AI in the classroom.
3. **Ethical concerns** associated with incorporating AI into the classroom: Concerns have been raised regarding the implications of AI on privacy, security, and the job economy as it gets more sophisticated. Teachers must be aware of these problems and work to protect their students as they experiment with rapidly growing technology in accessing various 21st Century Skills.
4. **Ensuring inclusion and equity for AI in education:** With the development of AI, the least developed nations run the risk of experiencing new technological, economic, and societal gaps. To create the fundamental circumstances for putting novel tactics that make use of AI to enhance learning into practice, some major challenges including the fundamental technological infrastructure must be overcome.
5. **Inaccurate data:** Since AI is developed using data, the underlying data may contain implicit or explicit biases that could lead to prejudice against particular groups based on gender or race. This may worsen already-existing disparities in society and endanger the values of equality and equity in education.
6. **Data protection:** data security and privacy issues are also receiving more and more attention.. Institutions implementing 21st Century Skills along with AI must ensure that data collected is utilized for that purpose, is not mistreated and doesn't get shared with unauthorized individuals.
7. **Access to bandwidth and internet connectivity problems** can be caused by various factors, including outdated equipment, poor Wi-Fi signals, and network congestion. To troubleshoot these issues, users can run a speed test, restart their routers, limit background apps, and upgrade their equipment if necessary.

1.4 ADVANCED AI APPLICATIONS

There are many educational applications tailored for students covering various subjects and levels. These apps can enhance learning experiences and support students in different subjects and areas of interest. To mention a few:

1. **Duolingo:** It is a well-known language-learning website worldwide. In addition to many other languages, it offers courses in Hindi, English, Spanish, French, German, and many more.
2. **Quizlet:** Quizlet is a flexible learning tool that is popular throughout the world, including in India. It provides students with a variety of study aids, including games, quizzes, and flashcards, to help them learn a range of subjects quickly.
3. **Google Classroom:** In India, Google Classroom is a commonly utilized virtual learning environment. Students can access assignments, turn in work digitally, work on group projects with classmates, and get teacher feedback. Google Classroom makes it easy for teachers and students to share and work together on documents and presentations because it integrates seamlessly with other Google products like Google Drive, Docs, Sheets, and Slides.
4. **Photomath:** Students use Photomath, a well-known educational app, both in India and globally. Using the camera on their device, users can solve mathematical problems by just snapping a picture of the issue. After that, the app offers detailed answers, justifications, and graphs for a wide range of math issues, covering arithmetic, algebra, trigonometry, calculus, and more.
5. **TED-Ed:** A vast selection of interesting and educational videos covering a variety of subjects is available on the educational website TED-Ed. It is a continuation of the TED (Technology, Entertainment, and Design) brand, which is well-known for its provocative speeches. Videos from TED-Ed address a variety of topics, including science, technology, math, literature, and history.
6. **Coursera:** Coursera offers courses, specializations, and degrees in a variety of subjects, including technology, business, humanities, health, and more, in collaboration with universities and organizations around the globe. With so many self-paced courses available on Coursera, students can learn whenever it is most convenient for them. Furthermore, Coursera provides certificates upon course completion and financial aid options, making it advantageous and accessible for Indian students wishing to further their education or develop their skills.
7. **Quora:** Quora is a question-and-answer platform where users can ask questions on virtually any topic and receive answers from the community. Users can also contribute their knowledge by answering questions, up

voting or down voting answers, and engaging in discussions. It covers a wide range of topics, from technology and science to personal development and entertainment. Quora aims to connect people with valuable information and insights shared by experts and enthusiasts from around the world.

8. **Scratch:** A visual programming language and online community based on blocks, Scratch was created by the MIT Media Lab's Lifelong Kindergarten Group. It is intended to introduce children and novices to programming concepts in an engaging and participatory manner. To teach students how to code and think computationally, schools, coding clubs, and educational programs all use Scratch extensively in India.
9. **Unacademy:** Provides instructor-led courses covering a broad spectrum of topics and competitive examinations, such as SSC, UPSC, banking, and railroads.
10. **Meritnation:** Offers ICSE and CBSE students live classes, interactive exercises, and study materials.
11. **Vedantu:** Provides live online tutoring in a variety of subjects, such as science, math, and English, to students in grades 1 through 12.
12. **Doubtnut:** Uses live sessions and videos to assist students in clearing up their doubts about arithmetic and science problems.

1.5 CONCLUSION

The 21st Century skills are essentially the outcome of experiential learning, i.e. they are imbibed through observing, understanding, practicing and experiencing. AI can facilitate personalized learning paths that promote communication skills, critical thinking and problem-solving while supporting collaborative learning through AI-mediated communication tools. Moreover, emerging AI applications can assess and support socio-emotional skills by recognizing emotional cues and providing timely interventions. Thus, AI is positioned not merely as a tool for content delivery but as an enabler of comprehensive skill development in the 21st Century. In our increasingly digital world, having a reliable internet connection isn't just a luxury – it's a necessity. As streaming services, online gaming, and remote work become the norm, bandwidth issues can lead to frustration. Adapt proactive steps such as optimizing your equipment, managing your connection strategically, and considering advanced solutions, this would help in conquering connectivity challenges.

REFERENCES

1. B. Trilling, and C. Fadel, (2009) 21st Century Learning Skills. San Francisco, John Wiley & Sons, CA.
2. Co^okun, T. K. (2024). Unlocking the Future: The Role of Digital Learning Materials in Fostering 21st-Century Skills Among University Students. In *Augmented Reality and the Future of Education Technology* (pp. 229-252). IGI Global
3. Dhakal, B. P. (2023). Pedagogical Use of 21st Century Skills in Nepal. *Chintan-Dhara*, 17(01), pp.1-13.
5. Fung, C. H., Poon, K. K., & Ng, S. P. (2022) Fostering student teachers' 21st century skills by using flipped learning by teaching in STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, 18(12).
6. Hah Abdullateef, S. (2021). Remote learning: Fostering learning of 21st century skills through digital learning tools. *Arab World English Journal (AWEJ) Special Issue on CALL*, (7).
7. Jamali, M., & Krish, P. (2021). Fostering 21st Century Skills Using an Online Discussion Forum in an English for Specific Purpose Course. *Malaysian Journal of Learning and Instruction*, 18(1), 219- 240.
8. Mekala, S., & Harishree, C. (2020). Fostering 21st Century Skills of the Students of Engineering and Technology. *Journal of Engineering Education Transformations*, 34(2).
9. Mohapatra Soumyadarshan Nayak (2025) Analyzing the Integration of Artificial Intelligence in Fostering 21st-Century Competencies and Socio-Emotional Learning in Education: Opportunities and Challenges. *International Journal for Multidisciplinary Research*. Volume 7, Issue 3, pp.1-7.
10. Marulasiddappa N T (2025) AI-Driven Education in the 21st Century: Transforming Teaching and Learning Paradigms. *International Journal of Innovative Research in Technology*. Volume 11 Issue 12. pp.8982-8987.
11. Md. Mehadi Rahman (2019) 21st Century Skill Problem Solving : Defining the Concept. *Asian Journal of Interdisciplinary Research* 2(1):71-81.
12. Ogegbo, A. A., & Aina, A. Y. (2022). Fostering the Development of 21st Century Competencies Through Technology in Young Children: Perceptions of Early Childhood Educators. *Education and New Developments*, 10.
13. Pattiwael, A., S. (2016). Addressing 21st Century Communication Skills: Some Emerging Issues from Eil Pedagogy & Intercultural Communicative Competence. *IJEE (Indonesian Journal of English Education)*, 3(2), 158-170.
14. Priyanka A. (2025) AI-Driven Tools for Developing Effective Communication in the Digital Age. *SANKALPA*.;1(1):1002.
15. Pramasdyahsari, A. S., Setyawati, R. D., Aini, S. N., Nusuki, U., Arum, J. P., Astutik, I. D., & Salmah, U. (2023). Fostering students' mathematical critical thinking skills on number patterns through digital book STEM PjBL. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(7),
16. Rehman, N., Zhang, W., Mahmood, A. et al. (2023). Fostering twenty-first century skills among primary school students through math project based learning. *Humanities and Social Sciences Communications* volume 10, Article number: 424.

17. Sanchez, C. (2021). Integrating Technology to Foster the Development of Students with 21st Century Skills. San Diego State University
18. S. Cottrell, (2005) Critical Thinking Skills Developing Effective Analysis and Argument, Palgrave MacMillan, NY.
19. Sanjeedah Khatoon., (2025). Fostering Students for 21st Century Skills by Using Technology, *International Journal of Emerging Knowledge Studies*. 4(1), pp.50-58.
20. Yarriswamy MC (2025) Integrating 21st Century Skills in Teacher Education: A Comprehensive Thematic Review on Pedagogical Innovation, Digital Competence, and Professional Development. *Asian Journal of Basic Science & Research* .Vol. 7, Issue 4, pp. 28-39,

Chapter 61

Reconfiguring English Language Teaching in The Age of Artificial Intelligence: Pedagogical Transformations, Ethical Challenges, and Critical Futures

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ABSTRACT

The fast adoption of AI technologies within educational settings has drastically impacted the realm of ELT, posing both challenges and possibilities for the field. In this paper, the impacts of AI-based technologies such as writing assistants, adaptive learning systems, etc., on the methods of teaching, learner involvement, and assessment will be discussed. Not focusing solely on the technological aspects, the consequences of AI adoption on teachers' autonomy, students' creativity, and critical thinking skills will be critically analysed.

Based on theories by authors such as Michel Foucault, Paulo Freire, and Digital Humanities researchers, the current paper seeks to place AI in a wider context of power, teaching, and knowledge-making. Furthermore, the analysis also involves contemporary scholarship on the use of AI in educational settings to identify possible benefits and threats that may arise in relation to AI and its applications in the field of ELT.

Although there are benefits associated with personalization and immediate feedback, there are also issues relating to algorithmic bias, epistemic control, and the undermining of the humanistic aspect of teaching. It can be stated that while the position of the English teacher does not become less relevant due to AI, it gets transformed into something else.

Ultimately, this study proposes a balanced, critically informed pedagogical model that integrates AI as a collaborative tool while preserving the humanistic core of English studies.

Keywords: Artificial Intelligence, English Language Teaching, Pedagogy, Digital Humanities, Algorithmic Bias, Critical Thinking, AI Literacy.

INTRODUCTION

The advent of AI heralds a crucial change in today's educational system, especially within ELT, where language, translation, and interpersonal communication have played fundamental roles. The integration of technologies based on AI—from automated writing aids to interactive chatbots—is beginning to redefine the manner in which learners interact with languages, lessons are taught by educators, and learning achievements are evaluated.

Nevertheless, such a change is not simply technological but also pedagogical and ideological in nature. It leads to important questions regarding: How does human agency get affected in classrooms run through the medium of AI? How does AI affect knowledge creation and validation? And finally, how does AI alter power structures in education?

Building upon the power, knowledge approach by Michel Foucault, the critical pedagogy perspective by Paulo Freire, and the framework developed through digital humanities, this paper questions the nature of AI not only as technology but as an apparatus entangled in the mechanisms of control, ideology, and epistemology. The understanding of the relationship between power and knowledge developed by Michel Foucault can help shed light on the process by which language learning is conditioned by AI technologies.

This paper makes a case that the incorporation of AI in ELT requires critical engagement rather than mere acceptance. Even though the technology provides limitless possibilities for personalization and efficiency, it can potentially homogenize language, perpetuate bias, and weaken critical thinking skills.

LITERATURE REVIEW

Some recent findings on the application of AI in education stress its revolutionary capabilities and constraints. In this regard, Holmes et al. state that

AI is capable of improving personalized learning and enhancing academic achievements using adaptive systems (Holmes et al. 34). Likewise, Luckin points out that AI is also capable of aiding teachers in automation of certain activities, thus focusing more on engaging students (Luckin 67).

Critical perspectives also dispute this optimistic view. Selwyn asks if technologies based on artificial intelligence may turn education into a purely data-driven process and thus strip away its humanizing qualities (Selwyn 52). In his turn, Williamson contends that most educational technologies function under neoliberal conditions that favor efficiency over critical thinking (Williamson 89).

As per the Digital Humanities approach, the researchers emphasize the significance of seeing AI not just as an instrument, but also as culture and knowledge itself. As per Zawacki-Richter et al., there is still progress to be made for AI in education since the impact on pedagogy has not been fully explored (Zawacki-Richter et al.).

Moreover, the issue of ethics has gained considerable attention. As stated by Floridi et al., the development of ethical principles to facilitate AI use is crucial, especially in terms of transparency, fairness, and accountability (Floridi et al. 689).

However, while making all these valuable contributions to the area, scholars overlook one aspect of bridging theory and practice in teaching ethics. The current paper aims at filling this gap.

THEORETICAL FRAMEWORK

Foucault: Power, Knowledge, and Surveillance

The idea of power, knowledge by Michel Foucault serves as an essential framework for analysing AI within ELT. AI technologies especially those involving assessment and feedback are instruments of control and regulation, watching over and controlling students' performance. Automated writing assistance software corrects the use of language while imposing the normativity of such correction. Thus, AI is employed as a disciplinary tool, defining what counts as "acceptable" language. In this case, the classroom turns into a digital panopticon.

Freire: Critical Pedagogy and Dialogic Learning

The critique of the "banking concept of education" by Paulo Freire becomes especially pertinent when analysing AI. The danger of using AI applications in education is that they can make learners passive recipients of information rather than critical thinkers.

Freire supports dialogue-based education, which presupposes joint creation of knowledge. In an AI-integrated classroom, educators should be responsible for preventing AI from becoming a means of domination.

Digital Humanities: Technology and Interpretation

The Digital Humanities provides a way to comprehend how technological mediation impacts the interpretation of texts. Artificial intelligence can find patterns and themes within a text, but it is not able to interpret nuance, ambiguity, or culture. Therefore, artificial intelligence can be considered an enhancement to human interpretation.

Pedagogical Transformations in the AI Era

Pedagogical practices in English Language Teaching (ELT) have been radically transformed by AI technology. For instance, adaptive learning systems promote personalized learning, while AI chatbots encourage conversation practice.

Case Study 1: AI-Assisted Writing Classroom

In a college English composition class, students employed artificial intelligence technology to generate drafts of their essays. Although the first drafts were more grammatically correct, the faculty noted a reduction in the creativity of the students. To counteract this problem, professors instituted a requirement that students evaluate AI-generated feedback. The implementation of this strategy promoted critical thought and reclaimed student autonomy.

Case Study 2: Chatbot-Based Language Learning

In a secondary classroom, students engaged with AI chatbots for conversational practice. While fluency improved, students struggled with cultural nuance. Teachers supplemented chatbot use with discussions on context and meaning. These examples illustrate that AI is most effective when integrated with critical pedagogy.

AI and Assessment Practices

AI tools used for assessments provide efficiency and reliability. Essay scoring software can grade vast amounts of papers efficiently. However, these systems focus on superficial aspects of writing such as grammar and style rather than on deeper issues such as creativity. According to Foucault's theory, such software imposes normative standards, thus hindering varied self-expression. Hence, it is necessary to use human assessment alongside AI.

Ethical Challenges and Algorithmic Bias

However, such models are not impartial, since they are built using biased data. Therefore, there is a possibility that the algorithm will generate discriminative outputs, especially with respect to the non-native population. Moreover, privacy issues may emerge when dealing with student data.

Critical Thinking and AI

Another issue is that AI could possibly reduce critical thinking skills. But when used correctly, AI can increase critical thinking skills through analysis. Instructors need to formulate assignments where students will be able to critically assess AI outputs.

Counterarguments and Rebuttals

Many believe that AI ensures democratization of education because information becomes readily available to all. Indeed, availability of materials does not necessarily mean that education is effective. It is further stated that AI will ultimately replace teachers. This paper strongly opposes such views.

Future Directions

In terms of the future of ELT, hybrid systems combining AI and humans should be seen. For example, future technologies like virtual reality might improve educational outcomes even more. Policy systems need to guarantee ethical applications of AI technology.

CONCLUSION

Indeed, there is no doubt that Artificial Intelligence has brought significant change to the field of English Language Teaching. It has not only opened up new opportunities but also revolutionized the way languages can be taught, acquired, and assessed. Yet, as demonstrated throughout this paper, the incorporation of Artificial Intelligence in ELT goes beyond being a purely technological endeavour. Instead, it represents an epistemological as well as ethical shift.

Although there are many benefits associated with AI, including the ability to provide individualized instruction, instant feedback, and greater autonomy for learners, there are equally many drawbacks that must not be ignored. These include the risk of biased algorithms, an excessive reliance on artificial intelligence-generated material, and the danger of promoting mindless learning. AI-driven systems, developed based on the information used to train them, tend to reflect

dominant linguistic norms and suppress alternative expressions. Thus, AI technology is not a value-neutral instrument but an active agent in the construction of knowledge and language.

Application of theoretical lenses reinforces this point even more. In terms of Foucault's theories, AI could serve as a tool for monitoring students and establishing certain standards for language behaviour. Freire's idea of critical pedagogy suggests that education should not transform into a one-sided relationship between the learner and some automated processes but should still be a dialogue that enables learners' personal growth and self-emancipation. Finally, lessons from Digital Humanities prove that although AI could help in the process of textual analysis, it cannot replace the cultural context brought by humans.

Within this dynamic framework, the position of the English teacher gains even greater significance. Instead of becoming redundant due to technological innovations, the teacher is now required to take on an altogether different set of obligations as an enabler, mediator, and moral guide. It is imperative that they guide their students through the use of AI systems wisely, inspiring them to be critical of AI outputs and to respond to them constructively. This calls for not just technological proficiency but a deep humanistic sensibility as well.

Furthermore, the way forward in ELT is to reach a harmonious balance between human intelligence and artificial intelligence. AI ought to be treated as an intelligent assistant that improves the process of teaching and learning and not a substitute for human interactions. The success of the integration process will require careful planning and design in teaching, ethical consciousness, and teacher development. In addition, policy makers and institutions must contribute towards the creation of frameworks for ensuring that there is fairness in accessing AI technology within educational contexts.

In conclusion, the aim should be to embrace technology and learn from it rather than oppose it and fear it. By merging the strengths of AI with human-focused approaches in teaching, educators will be able to develop an education system that is both cutting-edge and intellectually stimulating. This will allow ELT to move forward while maintaining focus on its primary objectives of developing critical thinking skills and promoting language acquisition and cultural awareness.

REFERENCES

1. Floridi, Luciano, et al. "AI4People-An Ethical Framework for a Good AI Society." *Minds and Machines*, 2018.
2. Freire, Paulo. *Pedagogy of the Oppressed*. Continuum, 1970.
3. Foucault, Michel. *Discipline and punish*. Vintage, 1977.

4. Holmes, Wayne, et al. *Artificial Intelligence in Education*, 2019.
5. Luckin, Rose. *Machine Learning and Human Intelligence*, 2018.
6. Selwyn, Neil. *Should Robots Replace Teachers?* 2019.
7. Williamson, Ben. *Education and Technology*, 2015.
8. Zawacki-Richter, Olaf, et al. "AI in Higher Education." 2019.

Chapter 62

Teaching English with AI and without AI

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ABSTRACT

English language teaching is always dynamic and has been subjected to radical changes and innovations in methods, approaches or strategies. It has started its boom during the early part of the twentieth century, as applied linguists and others sought to develop principles and procedures for the design of teaching methods and materials drawing upon linguistics and psychology to support the new proposals that were thought to be more effective teaching methods.

In the 21st century, English language teaching has undergone a remarkable transformation. The emergence of Artificial Intelligence (AI) has introduced innovative methods that complement and sometimes challenge traditional teaching practices. While conventional classroom teaching emphasizes human interaction, emotional connection, and teacher-guided learning,

AI-based teaching brings personalization, speed, data-driven feedback, and round-the-clock support. Recent large-scale studies show that AI has a medium-to-large positive impact on language learning, especially in vocabulary, writing, and reading, and works best when used as a supplement to face-to-face teaching rather than a replacement.

The present paper highlights the need for balanced AI integration that supports both academic success and student well-being, advocating for further empirical studies to comprehensively understand these dynamics. As AI becomes more embedded in education, it is crucial to develop strategies that mitigate its negative effects while promoting holistic well-being among students.

Key words: English Language Teaching, Traditional approach, Artificial Intelligence (AI), Language learning, blended learning.

INTRODUCTION

Language learning has always been more than just a skill - it's a gateway to new cultures, career opportunities, and personal growth. For generations, mastering a language meant sitting in a classroom, flipping through textbooks, memorizing endless vocabulary lists, and practicing conversations face-to-face. While effective, this traditional approach often required time, discipline, and access to quality instruction.

Artificial intelligence is now a part of everyday learning. The emergence of AI, particularly large language models, introduces tools that can generate language, simulate interaction, and provide instant feedback at scale. Today, with AI, language learning is built on adaptive algorithms, speech recognition, and personalized feedback, reshaping the way people acquire new languages through a faster, more interactive, and tailored approach to individual needs.

Both traditional and AI-powered language learning methods offer unique advantages and challenges, and the best choice depends on the individual learning style, goals, and accessibility.

Let's dive into the pros and cons of traditional and AI-powered language learning to see which one might be the perfect fit for the learners.

I. Teaching English without AI (Traditional Teaching)

Traditional teaching is the human-centered method in which the teacher plays the role of instructor, motivator, evaluator, and mentor.

Core characteristics:

- **Teacher-centered or communicative instruction:** Lessons rely on textbooks, workbooks, teacher-led drills, group activities, and peer interaction.
- **Fixed resources:** Audio recordings, printed handouts, prescribed readers, and classroom whiteboards form the material base.

Strengths :

- **Human Interaction:** Language is social. Students learn better when they speak with real people. Face-to-face interaction builds rapport, empathy, and cultural nuance that motivates learners. The teacher can understand hesitation, identify fear of speaking, encourage shy learners, and motivate weak students.

- **Critical thinking emphasis:** Without instant, fixed answers, students spend more time on problem-solving skills, analytical skills, critical thinking skills, and creativity independently.
- **Emotional and Moral Support :** A teacher understands student confidence, classroom behavior, learning pace, psychological barriers, and AI cannot fully replace this human dimension.
- **Literary Appreciation - Poetry, Prose, Drama, and Novel :** The traditional teaching approach enhances literary appreciation of poetry, prose, drama, and novels by enabling students
 - to experience deeper emotional engagement,
 - develop interpretative skills,
 - understand cultural contexts,
 - make thoughtful value judgments.
- **Speaking Environment Activities such as:** The traditional teaching approach fosters a rich speaking environment through live activities such as seminars, JAM sessions, role plays, debates, and extempore speeches, which help learners develop and improve their fluency naturally.
- **Low tech dependency:** Works in low-resource settings without electricity or internet.

Limitations : Traditional teaching also has drawbacks

- **Time constraints and Teacher work load:** Teachers spend significant hours on lesson preparation, grading, and repetitive drills. It increases the workload of teachers significantly.
- **Same pace for all learners:** It follows the same pace for all learners, regardless of their individual learning needs. The whole class often moves at the same speed, making differentiation challenging.
- **Limited individual attention:** It provides limited individual attention to students in the classroom.
- **Delayed correction:** Writing and speaking are typically assessed after submission, with turnaround times of days. Feedback and error correction are often delayed in this approach.
- **Less practice outside classroom:** It offers less opportunity for practice outside the classroom.
- **Difficult in large classes:** It becomes difficult to manage effectively in large classes.

II. Teaching English with AI (Augmented approach)

Technology now helps deliver personalized learning experiences through machine learning, Natural Language Processing (NLP), and Adaptive Algorithms. It is about streamlined content creation, its delivery, and learning and is being widely used by both educators and learners. It is proven that AI systems are 38% faster in adapting their teaching styles than tutors, which demonstrates that technology can supplement rather than take the place of traditional teaching.

AI-based English teaching uses smart systems that adapt to student needs. Today, AI significantly improves English proficiency, especially for writing, vocabulary, and lower-level learners. AI Tools Used in English Teaching includes : ChatGPT, Perplexity, Duolingo, speech recognition apps, AI chatbots, quiz generators, vocabulary trainers, and reading assistants etc.

Strengths :

- **Instant Feedback :** Students immediately know their grammar mistakes, spelling errors, sentence structure problems, and vocabulary suggestions. This saves time and increases practice.
- **Personalized Learning :** AI studies student performance and gives - Easy tasks for beginners, Advanced tasks for top learners, Targeted vocabulary lists, and Customized comprehension passages.
- **24/7 Practice :** Students can practice anytime at home, hostel, library, and travel. Every student can hold a 20-minute conversation with an AI tutor without waiting for turns. This increases exposure to English.
- **Improve Speaking and Pronunciation:** AI pronunciation tools help students improve their Stress, Intonation, Accent, Fluency, and pause control.
- **Teacher Support:** AI helps teachers by generating-lesson plans, worksheets, MCQs, Rubrics, model answers, and vocabulary exercises. This reduces preparation time.

Limitations :

- **Over dependence:** Students may stop thinking independently. They may use AI for - essay writing, assignments, paraphrasing, and summaries. Students may submit AI-generated work without understanding. It may reduce creativity.
- **Limited Human Interaction (Lack of Human Emotion):** AI cannot fully understand-student anxiety, classroom mood, motivation issues, and

cultural sensitivity. AI struggles with humor, irony, cultural subtext, and emotional support. AI-powered chat bots often cannot sufficiently explain complex topics in a way that learners can fully grasp. This is where AI yields real human interactions and emotional intelligence that can provide deeper insights into the issue.

- **Contextual Understanding Limitations:** AI may struggle with idioms, slang, and cultural references that human teachers naturally explain.
- **In-correct or Generic Output:** Sometimes AI gives-unnatural sentences, culturally inappropriate examples, vague writing, and repetitive answers.

Moral and Ethical Issues :

- **Plagiarism :** The use of artificial intelligence in teaching raises ethical issues, with plagiarism being a major concern.
- **Academic Dishonesty :** It also contributes to academic dishonesty among learners.
- **Copy-paste culture :** The increasing reliance on AI tools encourages a copy-paste culture in academic work.
- **Loss of original voice :** Furthermore, it may lead to the loss of students' original voice and creativity.
- **Dependence on Technology:** Language learning apps, as a rule, work online, so learners need a stable internet connection, electric power and compatible devices.

III. The Future of Language Learning : A Blended Model

Modern research strongly supports blended teaching, where AI and teacher work together. Acknowledging the fact that traditional learning is no longer effective as a separate method, educators worldwide adhere to a blended approach in teaching languages through the combination of online and offline lessons. AI-driven tools with human interaction create a magical blend and offer the best of both worlds, leading to academic heights.

- **Emerging Trends:** AI Tools such as gamification in learning, voice recognition, augmented reality, and AI-powered tutors are popular and efficient trends that enhance digital language learning experiences. Both traditional and AI language learning courses include video tutorials that are an important component for training listening and comprehension skills. These learning materials, which are frequently delivered by native speakers, can be challenging for learners to understand.

- **The Role of Human Touch:** Even with the rise of AI, human instructors are still crucial for teaching story-telling, cultural context, debate, motivation, and complex language issues. Teacher reviews AI-flagged errors and adds socio-pragmatic notes that AI misses. While technology-rich apps and platforms offer flexibility and scalability, they cannot ensure the emotional background that is so important for navigating a foreign language.

However, the teacher will remain central because language learning is deeply human. AI can support learning, but it cannot replace - empathy, emotions, feelings, Inspiration, motivation, value-based teaching, and classroom leadership.

CONCLUSION

Education has always absorbed new tools, and AI is the latest. Teaching English without AI preserves human interaction, communication, deep thinking, accessibility, confidence, emotional intelligence, and literary understanding. Teaching English with AI improves speed, personalization, flexibility, affordability, practice volume, quick feedback quality and teacher capacity.

The future belongs to classrooms that integrate both : using AI to handle what it does best — speed, scale, and repetition — while reserving human expertise for what matters most — meaning, values, and creativity.

Therefore, the most effective method is AI-assisted human teaching. It is important to choose and blend the benefits of both techniques based on individual preferences, learning goals, and available resources to improve one's learning curve and master a new language effectively. The best English classroom of the future is not “Teacher or AI”; it is “Teacher with AI.”

REFERENCES

1. Jack C. Richards and Theodore S. Rodgers. *Approaches and Methods in Language Teaching*. Cambridge : Cambridge University Press: 2005.
2. Laura, Jones. *Learning Languages: Human or AI ? Insights from a Recent Survey*. Lingoda. 2023.
3. Mariano, Felice. *AI in education: Putting language learners first in the age of AI*. British Council. United Kingdom. 2026.
4. Pokrivcakova, S. *Teaching English with Artificial Intelligence : Possibilities and Challenges*. Peter Lang. 2023.
5. *Direct comparison of AI-augmented vs traditional ELT across all four skills*. UNESCO. 2023.

Chapter 63

Bang of Artificial Intelligence in Learning English Language Teaching

A Three Day International Conference

Teaching English in the Era of AI: Challenges and Opportunities

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ABSTRACT

Artificial intelligence (AI) has made noteworthy paces in numeral of pastures recently, and it is opening to have a big impact on education, especially English language teaching (ELT). AI technologies endow with inventive answers that progress verbal communication learning procedures, adjust to the needs of each human being, and give tailored feedback. The ability of AI to deliver individualized learning experiences is one of the main advantages of ELT. AI-powered adaptive learning systems assess students' learning preferences, areas of strength, and weaknesses to customize lessons. In addition to encourage engagement, this individualized approach makes language acquisition more effective. This study examines the various ways that AI is influencing English Language Teaching (ELT), looking at the advantages, disadvantages, and implications for both teachers and students.

Keywords: Artificial Intelligence, English, Language, Teaching

INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative power crosswise different sectors, reshaping industries and redefining the way tasks are performed. In the dominion of education, predominantly in English Language Teaching (ELT), AI technologies are modernizing traditional academic approaches and offering ground-breaking solutions to augment language learning experiences. This introduction sets the stage for exploring the thoughtful impact of AI in ELT, highlighting its latent to personalize teaching facilitate immersive learning environments, and tackle the diverse needs of learners.

Over the past decade, advancements in AI have paved the way for the development of intelligent tutoring systems, adaptive learning platforms, and natural language processing algorithms, all of which have significant implications for language education. These AI-driven tools analyze vast amounts of data, including learners' interactions, preferences, and performance metrics, to deliver tailored instruction that caters to individual learning styles and proficiency levels.

Furthermore, AI technologies make possible real-time response and evaluation, allowing students to accept immediate supervision on grammar, vocabulary, pronunciation, and other language skills. Whether through interactive chat bots, automated grading systems, or virtual language assistants, AI enhances the effectiveness and efficacy of language instruction by providing personalized prop up and fortification.

Ahead of personalized learning, AI enables the conception of immersive language learning environments that replicate genuine linguistic milieu and cultural experiences. Practical reality (PR) technologies, tied with AI algorithms, submerge learners in virtual scenarios where they can practice speaking, listening, and interacting in English with simulated native speakers. These immersive experiences not only enhance language understanding and confidence but also promote cultural awareness and cross-cultural communication skills.

Technological advancements in artificial intelligence (AI) have drawn more attention because AI is a form of computational creativity (Cheng and Day, 2014). Many artificial intelligence technologies have been used to help computers become more creative. Rahman, 2009, p. Artificial intelligence (AI) is defined as the creation of software that performs autonomous tasks like computation and student search (p. 343). Computer systems (online platforms) and computerized machines (robots) are examples of "intelligent" devices that are created using artificial intelligence (AI) that function and respond similarly to the human brain (Karsenti, 2019). Maherotra (2019) notes that machine intelligence (MI) is another name for artificial intelligence. The natural intelligence exhibited by

humans is the basis for the machine's prediction of intelligence. Put differently, artificial intelligence (AI) involves imbuing a machine with human intelligence to perform tasks. AI, according to Mehrotra (2019), is a computer science technology that investigates the creation and analysis of intelligent devices and applications.

The science behind making a machine think and act like an intelligent human is called artificial intelligence. As Wang (2019) notes, intelligence is the key to AI technology. Whitby (2009) asserts that artificial intelligence (AI) investigates intelligent behaviors in people, animals, and machines in an effort to discover solutions. When something is said to be "artificial," it means that it is not entirely fraudulent, but rather mimicked or unreal. Conversely, since genuine goods have superior qualities in some situations, "intelligence" can take its place. It is difficult to define intelligence. It encompasses a variety of manifestations, including creativity, self-awareness, emotional awareness, reasoning, and awareness. Developing a machine with human-like capabilities rather than creating an extraordinarily intelligent computer that can solve every issue is what artificial intelligence may entail. Building hardware or software systems with human-like thought processes or characteristics that are typically associated with human intelligence is the goal of artificial intelligence (Campesato, 2020). According to computer system theory, artificial intelligence (AI) is capable of carrying out tasks that typically require human intelligence. Artificial intelligence can understand some aspects of human intelligence, such as speech recognition, language awareness, decision-making, and visual perception. Expert systems and solutions to challenging issues like recognition and natural language processing are in need of artificial intelligence (Devi et al. by 2020). AI serving as a language tutor. AI provides continuous, personalized instruction in a low-stakes environment where students are more willing to take risks and make mistakes. It also gives students the abundance of feedback and scaffolding activities they need to become fluent. AI's main benefit.

Furthermore, AI-driven language learning applications offer unparalleled accessibility and scalability, breaking down barriers to access and reaching learners across geographical boundaries and socio-economic backgrounds. With AI-powered platforms available anytime, anywhere, students have the flexibility to engage with English language materials at their own pace, facilitating continuous learning beyond the confines of the classroom.

However, the integration of AI in ELT is not without challenges and considerations. Issues such as algorithmic bias, data privacy concerns, and the role of teachers in AI-driven learning environments must be carefully addressed to

ensure equitable and ethical language instruction. Moreover, educators need adequate support and training to harness the potential of AI effectively and integrate it into their teaching practices.

The impact of Artificial Intelligence in English Language Teaching is profound and multifaceted, offering unprecedented opportunities to enhance language learning experiences and empower learners to achieve proficiency in English language skills. By leveraging AI responsibly and collaboratively, educators can revolutionize language education and prepare students for success in a globally connected world.

SIGNIFICANCE AND JUSTIFICATIONS FOR EMPLOYING AI IN ENGLISH LANGUAGE TEACHING

The significance and justifications for employing Artificial Intelligence (AI) in English Language Teaching (ELT) are rooted in its potential to revolutionize traditional pedagogical approaches and enhance language learning outcomes. Firstly, AI enables personalized learning experiences tailored to individual learners' needs, preferences, and proficiency levels. By analyzing vast amounts of data, AI-driven adaptive learning platforms can deliver targeted instruction, provide immediate feedback, and identify areas for improvement, thereby optimizing the learning process.

Moreover, the integration of AI in ELT addresses the challenges of scale and accessibility, particularly in diverse and resource-constrained educational settings. AI-powered language learning applications extend access to quality education by providing anytime, anywhere learning opportunities, thus promoting equity and inclusivity in language education. Additionally, AI facilitates innovative pedagogical approaches that foster active engagement, collaboration, and creativity among learners. From interactive chatbots for conversational practice to immersive virtual reality simulations for cultural immersion, AI technologies offer diverse and dynamic learning experiences that motivate and empower students to develop their English language skills.

Furthermore, the employment of AI in ELT aligns with the evolving demands of the digital age, preparing students for success in a globalized and technologically driven society. As AI continues to advance, its integration in language teaching not only enhances language proficiency but also cultivates critical thinking, problem-solving, and digital literacy skills essential for lifelong learning and professional success. Overall, the importance of employing AI in English Language Teaching lies in its capacity to transform language education, empower learners, and foster a more inclusive and interconnected world.

RELATIONSHIP BETWEEN ARTIFICIAL INTELLIGENCE AND ENGLISH LANGUAGE LEARNING TEACHING

The relationship between Artificial Intelligence (AI) and English Language Learning Teaching (ELT) is vibrant and complex characterized by the amalgamation of AI technologies into language learning and teaching processes. This rapport manifests in several ways, each contributing to the transformation of traditional ELT approaches and enhancing the overall language learning experience.

Below are some key aspects that demonstrate the relationship connecting AI and ELT :

- **Personalized Learning:** AI technologies enable personalized learning experiences by adapting instruction to individual learners' needs, preferences, and ability levels. Through smart tutoring systems and adaptive learning platforms, AI analyzes learners' interactions and performance data to deliver tailored instruction, ensuring that each student receives targeted support and feedback.
- **Immediate Feedback and Assessment:** AI-powered tools provide immediate feedback and assessment, offering students timely guidance on grammar, vocabulary, pronunciation, and other language skills. Automated grading systems, interactive chat bots, and language assessment software facilitate learners to identify and exact errors in real-time, accelerating the language learning process and enhancing self-directed learning.
- **Improved Language Practice:** AI facilitates language to put into practice through interactive simulations, language games, and virtual reality (VR) environments. Virtual language assistants and chat bots employ students in everyday practice, while VR technologies plunge learners in reliable language contexts, enabling them to practice speaking, listening, and cultural interaction in English.
- **Access and Equity:** AI-powered language learning applications widen access to quality education by flouting down geological and socio-economic barriers. With AI-driven platforms available anytime, anywhere, learners have the flexibility to engage with English language materials at their own pace, regardless of their location or background, thus promoting evenhandedness and inclusivity in ELT.
- **Educator Support and Professional Development:** AI technologies support English language teachers by providing tools for lesson planning, instructional blueprint and student assessment. AI-driven analytics offer insights into students' learning development and presentation enabling

teachers to adapt their teaching strategies and make available targeted interventions. Moreover, AI can facilitate professional development for teachers through personalized training modules and resources tailored to their specific needs and interests.

- **Modern Pedagogical Approaches:** The assimilation of AI in ELT encourages the study of innovative didactic approaches that promote active learning, teamwork and creativity. AI-driven collaborative learning environments, project-based activities, and peer tutoring systems encourage student rendezvous and self-sufficiency transforming traditional classroom dynamics and inspiring the learning experience.
- **Research and Development:** It also covers research and development hard work meant at advancing AI technologies and their applications in language education. Researchers and developers work together to discover new AI-driven solutions, assess their effectiveness, and address challenges related to preconception, ethics, and scalability in AI-powered language teaching.

Overall, the relationship between Artificial Intelligence and English Language Learning Teaching is symbiotic, with AI technologies reshaping language learning and teaching practices and ELT informing the improvement and sophistication of AI-driven solutions. As this relationship prolongs to advance it holds gigantic prospective to enhance language education, authorize learners, and viaduct linguistic and cultural divides in an increasingly interrelated world.

CHALLENGES AND DELIBERATIONS

The use of AI in ELT is not lacking issue and concern, in spite of its perceptible advantages. The opportunity of partiality in AI algorithms is one issue; these systems might inadvertently emphasize pigeonholes or give penchant to some linguistic variants over others. To address bias in AI, diverse data representation, methodical algorithm design, and continual oversight are necessary to warranty fair language instruction. Furthermore, there are moral ramifications for AI-driven language learning, especially in regards to learner autonomy and data privacy. Protecting students' privacy rights while utilizing learner data to personalize instruction is a delicate balance that educators must strike. In addition, the dependence on AI technologies prompts concerns about the function of educators in the educational process and the possibility of replacing them with artificial intelligence experts. In order to enable teachers to fruitfully slip in AI into their lesson plans, they also entail continual professional development. To use AI tools, analyze data insights, and generate engaging learning experiences that sustain AI-driven instruction, educators must gain the obligatory digital literacy skills.

CONCLUSION

In conclusion, the bang of Artificial Intelligence in English Language Learning Teaching is thoughtful and multifaceted, offering copious benefits next to challenges and considerations. AI technologies has the potential to modernize language learning by providing personalized instruction, facilitating immersive experiences, and extending access to quality education. However, addressing issues such as bias, ethics, and teacher readiness is crucial to harnessing the full potential of AI in ELT. By embracing AI responsibly and collaboratively, educators can enrich language learning experiences and give power to learners to accomplish aptitude in English language skills.

BIBLIOGRAPHY

1. Chandra, K. Ram, M. Ramachandran, and Soniya Sriram Kurinjimalar Ramu. "Exploring The Possibilities of Web Based Learning." *Contemporaneity of Language and Literature in The Robotized Millennium 4.1* (2022): 19-27.
2. Chandra, K. Ram, Et Al. "Understanding Blended Learning Advantages and Limitations." *Contemporaneity of Language and Literature in the Robotized Millennium 4.1* (2022): 10-18.
3. Chandra, K. Ram, Et Al. "Recent Trends in Workplace Learning Methodology." *Contemporaneity of Language and Literature in the Dr. K. Ram Chandra, Dr. Javed Alam, Dr. K. S. V. K. S. Madhavi Rani, Dr. V. Nagalakshmi Robotized Millennium 4.1* (2022): 28-36.
4. Chala Wata Dereso, Dr. Om Prakash H. M.,. "Education beyond Covid-19 –The World Academic Coalition". *Annals of the Romanian Society for Cell Biology*, Vol. 25, No. 2, Mar. 2021, Pp. 2062-76.
5. K Ram Chandra, Bbrg Vijaya Lakshmi, Mrs G Rani, Raghavendra Kumar. "Farmer Digital Marketing System" *Solid State Technology*, Vol. 63, No. 5(2011), 3250-3257.
6. Ram Chandra Kalluri. "Meaning Reorganization View Vis-A-Vis Hidden Reality View- Revisiting The Allotropes of Psychodynamics of Insight". *International Journal of Human Resources Management and Research*, Vol. 3 No. 4 (2013), 69-74.
7. K Ram Chandra. "Hetero-Balancing Approach to Curriculum Planning Using the Systemic-Functional Analysis" *Proceedings of Isfc 35: Voices Around the World*, 78.
9. Arun, Bernard Edward Swamidoss, Venkatesan (2023), Impact of Hospitality Services on Tourism Industry in Coimbatore District, *Journal of Namibian Studies -History Politics Culture*, Volume 33, Special Issue 3, Pp. 2381-2393.

Chapter 64

An Analytical Study of The Social and Economic Status and Problems of Korku Tribal Women: Special Reference to The Melghat Region (Period: 2010–2025)

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OPERATIONAL DEFINITIONS

Melghat – The region nestled in the lap of the Satpuda mountain range.

Social and Economic Status – The social and economic condition of women in tribal society.

Korku – The community residing in the Chikhaldara and Dharni talukas of Melghat.

INTRODUCTION

The history of Indian women's lives begins from the Vedic age. Women's lives in the Vedic period were highly dignified and of a high standard. The Aryans praised goddesses like Usha, as seen in many Vedic hymns. The concept of Ardhanarishvara also emerged from this tradition. Women in the Vedic era lived with dignity and had independent intellectual and spiritual lives, just like men.

Regarding the status of women in various tribal societies, there is no consensus among educated people. Some believe that women are given a very low status in

tribal society, while others hold the opposite view — that women are considered the mistress of the household and are always treated as equals to men. Differences of opinion may exist due to specific reasons.

American social psychologist Robert Lowie, while evaluating the status of women in primitive societies, suggested considering four things: direct behavior, legal status, opportunity for public work, and the nature and scope of work. Each of these aspects is independent of the others.

Korku tribals are found in the Melghat area of Amravati district, as well as in Khandwa in Madhya Pradesh and Chhattisgarh. When studying the educational perspective of women in Melghat, one notices that Korku women remain entangled in social restrictions and spend their entire lives within the traditional framework set by society. Korku tribal women work extremely hard to improve their family's financial condition. Although women are generally considered delicate, these women have a strong will to sustain their families — they are mentally as well as physically strong. While living their lives, the women of Melghat bear full family responsibility and face many problems. The study of these problems forms the basis of the present research.

Objectives of the Study:

1. To examine the social and economic status of Korku tribal women in Melghat.
2. To study the participation of Korku tribal women in decision-making within their society.
3. To understand the educational status and level of Korku tribal women.
4. To examine the use of modern technology by Korku tribal women.
5. To study the impact of addiction of male members on Korku women's lives.
6. To study which aspects of other societies are particularly adopted by Melghat tribal women through acculturation.
7. To understand the interest of tribal women in religious activities and cultural preservation.

Hypotheses:

1. The economic status of Korku tribal women in Melghat has declined.
2. Korku tribal women hold an important place in decision-making processes.
3. There is awareness and desire for education among Korku tribal women, but educational standards remain low.

4. Use of modern technology is found in their daily lives.
5. The impact of addiction has been observed on the lives of Korku women.
6. A significant influence of surrounding communities on tribal women of Melghat has been noted.
7. Tribal women have shown initiative in religious activities and cultural preservation.

RESEARCH METHODOLOGY

Interviews with tribal women will be conducted to understand their problems. A 10% sample will be drawn from the female population of the entire Melghat region using simple random sampling. Data collection methods include interviews, questionnaires, case study method, direct observation, and surveys. Conclusions will be drawn based on the collected data.

BACKGROUND DATA

According to the 2011 Census, the total population of Amravati district is 2,887,826. Among all tribal communities in the district, the Korku tribe has the highest proportion. The Melghat sub-division includes the two talukas of Dharni and Chikhaldara, with a total area of 4,012 sq. km. Chikhaldara taluka has 197 villages — 170 inhabited and 27 deserted — with 53 gram panchayats. Dharni taluka has 153 villages — 148 inhabited and 5 deserted — with 63 gram panchayats.

Statistical Analysis (Table):

<i>Sr.</i>	<i>Taluka</i>	<i>Total Villages</i>	<i>Tribal Villages</i>	<i>Tribal Area (sq. km)</i>	<i>Total Population</i>	<i>Tribal Population</i>	<i>Percentage</i>
1	Chikhaldara	197	197	2476	118815	115526	78.32%
2	Dharni	153	156	1896	184665	171443	92.84%

The above table shows that 75% of the Dharni and Chikhaldara talukas of Melghat are inhabited by the Korku community.

CONCLUSION

A review of prior literature shows that Korku tribal women of Melghat are still unaware of their basic rights. Although gender equality exists in theory, Korku women remain burdened by old customs and traditions.

This research attempts to identify the problems of Korku tribal women, their causes, and possible solutions. This study will inspire tribal Korku women to fulfill

their family responsibilities while also creating their own independent identity. Education will increase their awareness of new opportunities for their children, and ultimately they will bring positive change and emerge as capable women in society and family.

REFERENCES

1. Dr. Sangve Vilas (1978): *Social Life of Tribals* – Popular Prakashan
2. Aglawe Deepa (2007): *Social Research Methodology and Techniques* – Sainath Prakashan, Nagpur
3. Karhade B.M. (2018): *Scientific Research Methods* – Pimpalpure & Company Prakashan
4. Dr. Kumar M. (2009): *Tribal Culture and Politics* – Vishwabharati Publication, New Delhi
5. Devgaonkar S.G. (1990): *KORKU TRIBALS* – Ashok Kumar Prakashan, Delhi
6. Kumar Deepak (2022): Research Article – *Apni Mati: Socio-Economic System*
7. Dr. Gaikwad Vijay (2022): *Inclusion and Exclusion of Tribals in Education* – Hariti Publication, Pune
8. Lanjewar Jyoti (2005): *Indian Society and Women* – Sugawa Prakashan
9. Mahajan, Vandana (2013): *Feminism and Social Change* – Atharv Publication
10. Dr. Nadgonde Gurunath (1991): *Indian Social Structure* – Pimpalpur Prakashan, Nagpur

Chapter 65

Human-Centred ELT in the AI Era: Transforming ELT through Artificial Intelligence

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ABSTRACT

The high rate of growth of Artificial Intelligence (AI) technologies has dramatically changed the educational environment, especially in English Language Teaching (ELT). As intelligent tutoring systems and generative AI-based instruments, the adoption of AI has transformed the process of teaching and learning, evaluating, and engaging with students. This paper critically analyses the complex effect of AI on ELT, considering its opportunities and challenges within the industry in terms of pedagogical, ethical, psychological and socio-cultural aspects. It discusses how the role of the teacher has evolved, how personalized learning environments come into being, and what AI-driven content creation and assessment entails. The paper also raises the issues of algorithmic bias and academic integrity, as well as the loss of essential skills in critical thinking. Combining the existing trends and theoretical considerations, the paper is going to support the idea of a balanced and human-centered approach to integrating AI that will promote learning without endangering the main idea of the education process. The research ends with the strategic suggestions regarding curriculum design, teacher education, and policy formulation in an AI-driven educational environment.

Keywords: Artificial Intelligence, English Language Teaching, Digital Pedagogy, Personalized Learning, AI Ethics, Critical thinking, Educational

Innovation

1. INTRODUCTION

The 21st century has experienced an experience like no other in terms of technological revolution and Artificial Intelligence (AI) is already being pledged as revolutionary, one of the fields it is promised to impact is education. In Digital Age, AI has offered a new tools and approaches by introducing unprecedented cyborgan resources to English Language Teaching (ELT) with which we disrupt the traditional pedagogy paradigm. Transitioning from a textbook format classroom-based uptake process, which evolutionarily lacked interactive, adaptable and personalisation infusions, to where we are today with technology-led solutions delivering an interaction-based, adaptive and personalised nature overall language learning journey has magnified all but the oldest of education infrastructures. Advancements in AI technologies like Natural Language Processing (NLP), machine learning algorithms and generative AI models has led to the emergence of complex and advanced language learning applications. These tools offer real-time feedback, personalized learning journeys and experiential approaches to learning which support a variety of learner needs. This is where a big change happens in what teachers do, forms of assessment and the learning environment. However, the set-in sophistication comes with integration of AI in ELT. Sure, as with so many things there are significant benefits but it has also been the source of such major challenges as ethics, equity and even dehumanization or “commoditization’s” of education. Questions about data privacy, the harm of algorithmic bias, and eliminating the human element in decision-making require analysis sensitive to nuances and high-stakes contexts. The paper discussed the duality landscape of AI in ELT, how it can change language education and some issues it raises. The analysis of various dimensions of integrating AI is a try to give an overall notion about impacts of integration and measures needed to integrate AI in the right way and ethically.

How AI impacts ELT at both an educational and social level has had both a positive (potential transformation of language education) and negative (ethical issues; in terms of education, AI creates many challenges; e.g., data privacy; algorithmic bias (making assumptions based on societal norms); loss of human interaction)) effect for ELT. The purpose of this paper was to review aspects (effectiveness) of AI integration into ELT to give a clear and comprehensive view of AI integration. The conclusion is that the effective and ethical integration of

AI into ELT will yield effective and ethical solutions to the challenges faced by ELT educators, which can act as a basis for future research and policy development.

2. LANGUAGE LEARNING AI-BASED LANGUAGE LEARNING TOOLS

The use of AI tools has become a common feature in the modern learning environment in relation to learning a language. These technologies exploit the extremely advanced algorithms in order to provide interactive and personalized learning experiences. The intelligent tutoring systems, speech recognition and automated writing analysis software are only a few examples of how AI can be used to enhance language acquisition. Among the advantages of AI tools one of the most conspicuous advantages of AI tools, is the ability to provide immediate and personal feedback. An instance is the speech recognition system that will gauge the pronunciation and will present corrective and correct suggestions to ensure that a learner works on his speaking independently. Similarly, using writing aids that are operated by AI evaluates and provides comprehensive feedback of grammar, syntax and coherence that is aiding in the writing process. The adaptive learning platforms are also value adding to the learning process since the platform is tailored to certain learner types. Such systems examine the performance data which in turn shows the strengths and weaknesses and offers an opportunity to focus instruction. This method not only works better in the learning outcomes, but also results in the increased level of motivation and involvement of the learners. Although these benefits are present, there is also the worry about learner dependence and authenticity of language production with the use of AI tools. Application of automated systems particularly when overused can hinder certain opportunities to express creativity and to interact critically with language. Therefore, the use of AI tools can be viewed as a successful way of support but such operations should be balanced with the classic way of pedagogy.

The English Teacher. As far as the introduction of AI in ELT is concerned, the idea of the role of the teacher will have to be re-defined. Previously viewed as the key provider of knowledge, teachers are currently changing to learning facilitators, where they guide students through learning mediated by computers. Needless to say, in AI-enhanced classroom, the role of teachers is multifaceted, i.e., their responsibilities include those of a mentor, curator and critical evaluator. They are charged with the responsibility of making appropriate decisions in regards to the selection of the appropriate AI tools, to develop meaningful learning experiences, and to make sure that technology is used in a wise and morally upright manner. This change demands educators to gain digital literacy and teaching

flexibility. Besides, the human nature of teaching, on the one hand, empathy, cultural sensitivity, emotional support, and others. No matter how powerful it is, AI will never be capable of performing the subtle knowledge and individual connections that teachers can introduce to the classroom. This way, AI will not occupy the place of teachers, rather it will be utilized as a supplementary tool which will supplement the teachers and make them perform better. However, there are issues with this change as well. Educators might experience problems in changing to new technology, especially where there are no or limited resources or training opportunities. Improving these challenges needs extensive professional development programs and institutional resources.

3. LANGUAGE PROFICIENCY ASSESSMENT USING AI

The evaluation is an essential part of language education and AI has offered great innovations in this field. Automated testing instruments are able to review different features of language mastery such as writing, speaking, reading comprehension.

Moreover, having algorithmic bias may result in biased evaluation. When the set of training data which is used to create AI systems is biased, then the set of assessments will serve to disadvantage some groups of learners. It is, therefore, necessary that fairness and transparency are ensured in the AI-based assessment. AI-based assessment systems have a number of strengths, including consistency, efficiency, and scalability. They also offer real time feedback, and thus learners are in position to decipher and deal with their downfalls in the most timely manner. Also, these systems can manage large quantities of data thus they are appropriate in large scale assessments. Nonetheless, the AI Assessment also brings some crucial issues. Among the major issues, there is the possibility of the absence of the contextual knowledge. Language is very complex and situational and artificial intelligence might not be able to accurately comprehend some of the nuances of the language including tone, humour, and cultural references.

4. BIAS AND ETHICAL IMPLICATIONS OF AI

The problem of ethics plays a key role in incorporating AI into education. The data privacy, logic bias and dishonesty in academics are issues that should be carefully addressed to advance the responsible use of technology. The training data that will be utilized to develop AI systems are biased, and the array of tests will be used to disadvantage certain groups of learners. It follows that fairness and transparency need to be considered in the AI-based evaluation. through the analysis of performance information. The AI systems are founded on large datasets, which

may at times entail sensitive information on the learners. The protection of this data against abuse and ensuring that the privacy regulations are adhered to is a very serious matter that should be addressed. In addition, since no transparency exists in the algorithms of AI, there may be issues with understanding the way the decisions are made, which brings up concerns about accountability.

Algorithms bias is another obstacle. By developing the AI systems based on biased information, it can be turned into the source of reinforcement of the existing disparities. ELT case, it can result in marginalization of a certain linguistic or cultural group. Another issue of concern is academic integrity, especially now that generative AI tools have become popular. Students can utilize AI to create assignments, raising the question of originality and authenticity of assignments. To tackle these problems, it is necessary to have clear guidelines, ethical frameworks and awareness of educators and learners.

5. AI AND THE DEVELOPMENT OF 21ST-CENTURY SKILLS

The integration of AI in education is strongly associated with acquiring the 21st-century skills, such as critical thinking, creativity, collaboration, and digital literacy. These competencies are key to success in a world that is continuously growing bigger and bigger and is dominated by technology. The AI tools would come in handy in the development of these skills through development of interactive and problem-based learning environments. As an illustration, students have an opportunity to take part in simulations, analyze data, and cooperate on online platforms.

However, there is one potential disadvantage that an AI dependence may cause one to lose the capacity to think independently. Provided that learners use AI-generated responses too often, they will hardly be able to immerse themselves into the learning process. Therefore, it is upon the educators to come up with activities that will help in triggering the critical thinking process and creativity.

6. AI FOR CONTENT CREATION AND CURATION

AI has totally transformed how educators create: generating lessons, quizzes, reading passages...whatever they want to! This ability takes a ton of workload off the shoulders of educators and lets them provide a more dynamic, diverse, inclusive learning experience. The individualization of learning styles and the differing rates of individuals learning make it easier for all students to be included. However, just like learning is getting personalized in this manner there are many concerns

about the privacy of personal information as well as limiting collaboration among students. It is imperative to find a balance between individuality and socialization in the process of personalizing students' education.

7. IMPACT OF GENERATIVE AI ON WRITING AND CRITICAL THINKING

The advent of generative AI tools has flipped writing on its head, allowing for coherent, well-organised texts to be churned out at a speed that's nothing short of amazing. While this can be a huge help for learning, it also brings with it a whole raft of problems around originality and critical thinking. When students rely too heavily on GAI to knock out their content, they tend to disengage from the actual writing process and miss out on the chance to develop some pretty essential skills - like being able to argue a point, tear apart an argument, & think creatively for themselves. As a result, educators need to ramp up focus on process-based writing and make sure that students are critically evaluating the stuff they're generating with these tools. Assignments that make them dig deep and offer up their own thoughts, alongside some level of analysis & reflection, are a great way to keep their work intact when they're using GAI to power it.

8. PERSONALIZED LEARNING THROUGH AI

Personalized learning is really where AI makes a mark in education. These smart systems tweak lessons for each student, which keeps things interesting and actually moves kids forward. They're constantly analyzing how students do, picking up on what's tough, and then stepping in with help right when it's needed. That means nobody's left out just because they learn differently or at their own pace school gets a lot more inclusive this way. Still, there are real concerns here. All that personal data has to go somewhere, and people worry about privacy. Plus, when you focus too much on individual paths, it can take away from working together in a group. So, figuring out the sweet spot making lessons fit each person while still building chances for teamwork is really important.

9. CROSS-CULTURAL COMMUNICATION AND AI

AI helps people from different cultures talk to each other by translating languages and letting them respond instantly. This is really helpful in English Language Teaching (ELT) because when students hear and experience lots of

different ways of using language, they learn better. But, translations created by AI sometimes miss the subtle cultural understandings that are important, and this can cause confusion. Because of this, getting good at understanding culture is still crucially important if you want to communicate effectively.

10. PREPARING STUDENTS FOR AN AI-DRIVEN WORLD

Because AI is becoming more and more a part of what we do daily, what's important in education is changing. Language learners now require not just being able to use a language, but also knowing how to use digital tools, think for themselves, and change to new situations. Being able to understand AI means understanding how its systems work, being able to spot when AI is showing a preference, and using AI in a sensible way. Yuval Noah Harari says that in the future, education should focus on being able to think carefully and being flexible, more than just memorizing things (Harari 267). So, for teachers of English to speakers of other languages, this means getting students to ask questions about answers AI gives them, and to use those answers to help their learning, not to treat them as being completely correct. Colleges and schools need to plan courses differently, to include understanding AI and how to use it in a moral way.

11. AI AND ACCESSIBILITY IN LANGUAGE LEARNING

Artificial intelligence has really changed how available education is, specifically by offering tools that welcome students with disabilities. With things like converting speech into text, text into speech, and learning systems that change to suit the student, people with sight, hearing, or thinking difficulties can get much more involved. These approaches fit with the ideas of Universal Design for Learning (UDL) and make sure everyone can use educational materials. As Rosemary Luckin has pointed out (Luckin 112), AI has the potential to make education fairer for everyone by tailoring the learning process to what each person requires. Because of this, AI helps to create a fairer environment for learning languages, getting rid of the usual obstacles.

12. TEACHER TRAINING AND PROFESSIONAL DEVELOPMENT

How prepared and capable teachers will have a major impact on whether AI can be successfully integrated into English language teaching (ELT). Teachers need to receive continuous professional development in order to develop the skills they need to use AI tools successfully. This training must focus on digital pedagogy, critically evaluating the AI tools, as well as being aware of issues of ethics or

ethical considerations, including data privacy. Punya Mishra points out that teachers' technological pedagogical content knowledge (TPACK) is critical in order for teachers to effectively integrate technology into their teaching (Mishra and Koehler 1029). Without an adequate level of training and preparation of teachers in relation to these issues, any potential positive effect of AI on ELT may be minimal or underutilized.

13. PSYCHOLOGICAL AND AFFECTIVE DIMENSIONS OF AI

Artificial intelligence tools impact how students feel emotionally, their enthusiasm for learning, and their belief in their abilities. Motivation and lessened worry are both results of using engaging platforms, applications that use game-design elements, and receiving feedback immediately. Yet, depending on AI too much could mean fewer chances for people to connect with each other, and connecting with others is essential for emotional and social growth. As Lev Vygotsky explained, social interaction is at the heart of how we develop our thinking skills (Vygotsky 57). For these reasons, teachers should combine AI with opportunities for human connection to ensure a learning space that is both encouraging and involves a back-and-forth exchange.

14. POLICY AND CURRICULUM DEVELOPMENT

Robust policy frameworks in conjunction with a redesign of educational curricula are necessary to ensure successful integration of Artificial Intelligence into education. The education policies related to the use of AI must address ethical concerns such as data privacy, algorithmic bias and equitable access to the technologies. Governments and educational institutions must establish standards or guidelines for the responsible and ethical use of AI technologies in the classroom. UNESCO (UNESCO 18) has suggested the need for principles of inclusivity, transparency and accountability to govern the use of AI in education. The successful implementation of AI in education will require collaborative efforts between policymakers, educators and technology professionals.

15. INTEGRATING AI-POWERED FEEDBACK TOOLS

AI-based feedback solutions offer instantaneous, specific, and customized feedback regarding a user's language production. These services will permit learners to verify their errors in grammar, pronunciation, and vocabulary, and will facilitate their progress through on-going feedback; however, automated feedback systems may not provide sufficient notice of contextual occasions during learning or of pedagogical approaches to be taken. Rod Ellis (45) asserts that feedback must be

useful and contextually relevant to be effective for language learning. Therefore, it is necessary for the teacher to provide mediation to identify and add to what has been produced through AI-assisted feedback.

16. UPSKILLING AI LITERACY IN THE CLASSROOM

AI literacy is considered an essential component of digital literacy today. It allows students to decipher AI-generated responses critically, as well as identify any biases present in these responses, while utilizing AI ethically. Moreover, it is imperative that learners have a clear understanding of the capabilities and limitations of AI. According to Selwyn, digital literacy ought to feature critical awareness regarding the social and ethical consequences of technology (89). If we are to help develop learners who are responsible digital citizens, we must build AI literacy into ELT.

17. AI AS A COLLABORATIVE ASSISTANT FOR TEACHERS

Rather than removing teachers, Artificial Intelligence (AI) will serve as a collaborative tool that improves the effectiveness of teaching. AI will automate several administrative areas of education where teachers spend most of their time, including grading, lesson planning, and maintaining attendance, so that teachers can concentrate their time on teaching methods and engaging with students. As Geoffrey Hinton points out, AI is at its strongest when it supports human intelligence; therefore, pairing the two creates more efficient and personalized approaches to delivering education (Hinton 14).

18. CREATING IMMERSIVE LEARNING ENVIRONMENTS

Virtual reality (VR) and augmented reality (AR) are examples of artificial intelligence (AI) technology that provides immersive learning experiences for students to simulate real-life communication contexts. Such environments provide students with opportunities to practice language skills in real-world situations, which leads to improved long-term memory retention and increased engagement with the content of their coursework. Richard Mayer (223) states that students will learn better when using multimedia instructional materials if there is an appropriate match between the audio and visual elements of the content. There are many different types of immersive learning environments, and all have some application in ELT today.

19. TEACHING ENGLISH WITH AI VS WITHOUT AI

The results from the study comparing AI-supported learning versus traditional classroom instruction show the benefits and limitations of each type of learning method are distinctly different. One area in which AI is an asset is that it creates increased efficiencies, personalized learning and increased accessibility to more learners. On the other hand, traditional instruction is about human interaction, creativity and the ability to connect emotionally with another person. A combination of the two types of learning styles is the best way to achieve desired or successful outcomes. David Crystal states “Technology should support but not replace human communication when learning languages” (Crystal 156). Thus, integrating AI into traditional instructional methodology would produce the most balanced and comprehensive learning experience possible.

CONCLUSION

The way in which Artificial Intelligence is transforming English Language Teaching is significant. Its potential for improving learning is vast, but its use must be integrated carefully and ethically. The future of English Language Teaching will depend on developing a balance between technology and teaching methods focused on people.

REFERENCES

1. Crystal, David. *Language and the Internet*. Cambridge UP, 2006.
2. Ellis, Rod. *The Study of Second Language Acquisition*. Oxford UP, 2015.
3. Harari, Yuval Noah. *21 Lessons for the 21st Century*. Penguin, 2018.
4. Hinton, Geoffrey. “Deep Learning—A Technology with the Potential to Transform Education.” *AI Journal*, 2020.
5. Holmes, Wayne, et al. *Artificial Intelligence in Education*. Pearson, 2019.
6. Kramsch, Claire. *Language and Culture*. Oxford UP, 1998.
7. Luckin, Rosemary. *Machine Learning and Human Intelligence*. UCL Press, 2018.
8. Mayer, Richard. *Multimedia Learning*. Cambridge UP, 2009.
9. Mishra, Punya, and Matthew Koehler. “Technological Pedagogical Content Knowledge.” *Teachers College Record*, vol. 108, no. 6, 2006, pp. 1017–1054.
10. Selwyn, Neil. *Education and Technology: Key Issues and Debates*. Bloomsbury, 2016.
11. UNESCO. *Artificial Intelligence in Education: Challenges and Opportunities*. UNESCO, 2019.
12. UNESCO. *AI in Education*. UNESCO Publishing, 2021.
13. Vygotsky, Lev. *Mind in Society*. Harvard UP, 1978.
14. Warschauer, Mark. *Technology and Social Inclusion*. MIT Press, 2003..

Chapter 66

Teaching English with AI versus Without AI: A Comparative Study of Pedagogy, Outcomes, and Implications

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ABSTRACT:

The integration of Artificial Intelligence (AI) into English Language Teaching (ELT) has created a pedagogical divide between AI-augmented classrooms and traditional, non-AI instruction. Artificial Intelligence (AI) is transforming the field of education, especially in the teaching and learning of English. AI-powered tools such as grammar checkers, chatbots, and language learning applications are making English learning more personalized, interactive, and accessible. Students can now practice reading, writing, listening, and speaking skills with instant feedback and adaptive learning systems that match their proficiency levels. This paper compares teaching English *with AI* and *without AI* across key dimensions: personalization, feedback, interaction, motivation, and equity. While AI offers scalability, immediacy, and adaptive practice, traditional teaching retains advantages in empathy, cultural nuance, and classroom community. However, AI offers significant opportunities

to improve English teaching by enhancing engagement, supporting differentiated instruction, and assisting teachers in assessment and content creation. The role of teachers is evolving from traditional instructors to facilitators of learning. This paper explores the major opportunities and challenges of AI in English teaching and suggests strategies for effective integration. The findings suggest that the most effective model is not either/or, but a blended approach where AI handles routine practice and teachers focus on higher-order communication and mentorship.

Keywords: Scalability, immediacy, adaptive practice, empathy, cultural nuance, personalization, feedback, interaction, motivation, equity

INTRODUCTION

English teaching has long been characterized by teacher-centered lessons, textbooks, chalk & talk and standardized assessments. In the past five years, generative AI tools like Chat GPT, Meta AI, Claude etc., and speech tools like Elsa Speak, Speak & Improve, and adaptive platforms such as Duolingo, Lingvist etc have entered the mainstream use. Students can now practice conversations anytime, receive instant writing corrections, and access personalized vocabulary practice. This shift prompts a direct comparison between what is gained and what is lost when English is taught using AI versus without using AI.

TEACHING ENGLISH WITHOUT AI

Traditional ELT emphasizes human interaction, structured syllabi, and teacher expertise which are completely teacher centric. In this method Teachers provide motivation, empathy, and cultural context; classroom discussion builds confidence and enhances social skills; discipline and handwriting practice develop academic habits (Harmer, 2015). But the feedback is delayed, personalization is difficult in large classes, exposure to native accents is limited, and shy students may avoid speaking.

TEACHING ENGLISH USING AI

AI-augmented ELT uses intelligent tools as tutors, coaches, and content generators. This is a student-centric approach in which students get immediate feedback on pronunciation and grammar while using Elsa Speak, Grammarly and other tools; adaptive learning paths tailored to errors (Kukulska-Hulme, 2020); low-anxiety practice with non-judgmental chatbots (Tai & Chen, 2023); teacher workload reduction via automated materials. But there is high risk of over-reliance, AI hallucinations (fluent but incorrect output), reduced peer interaction, and inequity in device/internet access (UNESCO, 2023).

COMPARATIVE ANALYSIS

<i>Dimension</i>	<i>Without AI</i>	<i>With AI</i>
Feedback	Delayed, teacher-mediated	Instant, automated
Personalization	Limited by class size	Highly adaptive
Interaction	Human, socially rich	Simulated, low anxiety
Motivation	Teacher-driven, peer-based	Gamified, self-paced
Accuracy	Teacher-vetted	Requires verification
Equity	Depends on school resources	Depends on tech access

Neither model is superior in isolation. Without AI, learners benefit from human mentorship and authentic community but lack practice volume. With AI, learners gain practice volume and immediately but risk passive consumption and isolation. Godwin-Jones (2023) notes that AI works as the best cognitive partner, but not as a replacement to a teacher or a mentor. Teachers' roles shift from drill instructors to designers of communicative tasks, evaluators of AI output, and guides in digital literacy.

6. CONCLUSION AND RECOMMENDATIONS

The comparison shows that using AI and without using AI represent complementary, not competing, paradigms. For publication and practice, the recommendation is a blended pedagogy.

1. Use AI for drills, pronunciation, writing feedback, and vocabulary practice.
2. Reserve class time for discussion, debate, storytelling, and cultural exploration.
3. Teach AI literacy as part of language competence—prompting, verifying, and ethical use.

Future research should examine longitudinal outcomes of blended models and equity interventions for low-resource contexts.

REFERENCES

- Godwin-Jones, R. (2023). *Emerging technologies: AI and language learning*. *Language Learning & Technology*, 27(1), 5–12.
- Harmer, J. (2015). *The practice of English language teaching* (5th ed.). Pearson.
- Kukulska-Hulme, A. (2020). *Intelligent personal assistants in language learning*. In *Innovative language pedagogy report*. The Open University.
- Tai, T.-Y., & Chen, H. H.-J. (2023). *The impact of AI chatbots on EFL learners' speaking performance*. *Computer Assisted Language Learning*, 36(4), 623–645.
- UNESCO. (2023). *Guidance for generative AI in education and research*. Paris: UNESCO.