



**Dr. M.G.R.**  
**EDUCATIONAL AND RESEARCH INSTITUTE**  
**DEEMED TO BE UNIVERSITY**

University with Graded Autonomy Status

(An ISO 21001 : 2018 Certified Institution)

Periyar E.V.R. High Road, Maduravoyal, Chennai-95, Tamilnadu, India.



**VOLTAGE'25 - 7<sup>th</sup> Edn.**

**10<sup>th</sup> and 11<sup>th</sup> September 2025**

**INTERNATIONAL ONLINE CONFERENCE**

**(IOC-2025)**

**‘Exploring Experience through Qualitative  
Research: Perspectives, Practices and  
Possibilities’**



**Organized by**



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ISBNNumber-978-93-49608-07-8



978-93-49608-07-8

**Publishedby**

Prof. Dr. K. Geetha, Principal,  
Faculty of Education,  
Dr. M.G.R. Educational and Research Institute,  
Phase II Campus, Adayalampattu,  
Chennai – 600 095.

E-Mail: [principal-bed@drmgrdu.ac.in](mailto:principal-bed@drmgrdu.ac.in)

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will have rapid growth in future and students were attracted mostly on the certificates provided after the completion of course,

## REFERENCES

- Largest online repository in the world of courses in engineering, basic sciences, and selected humanities and social sciences subjects. Online web portal <http://nptel.ac.in>
- Visit the SWAYAM website: Go to [swayam.gov.in](http://swayam.gov.in).
- Vinodh Kumar, B., Dhanapal, A., & Tharmar, K. (2019). An Analysis of Online Courses: With Special Reference to SWAYAM. Indian Journal of Information Sources and Services, 9(S1), 19–22. <https://doi.org/10.51983/ijiss.2019.9.S1.572>
- Prasanna, P., & Muthukrishnan, G. (2024). Impact of Internet Handling Skills in Swayam Portal Learning among B.Ed Trainees. Edu Spectra, 6(2), 35–44. <https://doi.org/10.34293/eduspectra.v6i2.06>
- Singh, R., & Bhandari, R. S. (2025). Students' Awareness and Usage of SWAYAM – NPTEL in Higher Education. Revista Review Index Journal of Multidisciplinary, 5(1), 147–154. <https://doi.org/10.31305/rrijm2025.v05.n01.017>

## EVALUATING THE IMPACT OF E-CONTENT ON SOCIAL SCIENCE ACHIEVEMENT AMONG 9TH STANDARD STUDENTS IN ERODE DISTRICT

**A. Manikandan and Dr. S. Poonguzhali**

Research Scholar, School of Education, (VISTAS) Vels University, Chennai.  
Assistant Professor in Education, School of Education, Vels (VISTAS) University, Chennai.

## ABSTRACT

The integration of digital tools in education has become essential in modern pedagogy, especially in line with the objectives of India's National Education Policy (NEP) 2020. This study investigates the effectiveness of e-content in enhancing academic achievement among 9th standard students in Social Science in Erode District, Tamil Nadu. Employing a quasi-experimental pre-test–post-test control group design, a sample of 60 students was divided equally into control and experimental groups. The experimental group received instruction through a custom-developed e-content module, while the control group followed traditional methods. Pre-test results confirmed baseline equivalence between groups. Post-test analysis using descriptive statistics and independent sample t-tests revealed a statistically significant improvement in the experimental group. The findings also indicated that e-content was effective across gender and locality, with some variation based on parental education. The results support the integration of e-content as an equitable and

impactful instructional strategy for enhancing conceptual understanding and student engagement in Social Science.

**Keywords:** e-content on Social Science education, digital learning, academic achievement, quasi-experimental design, educational technology.

## INTRODUCTION

Education in the 21st century is rapidly evolving with the integration of information and communication technologies (ICT). E-content has emerged as a powerful instructional tool, enabling self-paced, interactive, and personalized learning. Social Science, a subject often criticized for its abstract and rote-based content, can benefit immensely from digital media interventions. E-content, through its multimodal nature, can facilitate greater retention, conceptual understanding, and learner motivation.

## REVIEW OF RELATED LITERATURE

Numerous studies have demonstrated the effectiveness of e-content in improving academic performance and learner engagement:

- **Ramesh and Karthikeyan (2021)** reported that students exposed to animated and video-based content showed higher retention and better exam scores compared to those in conventional classrooms.
- **Selvi & Kumar (2020)** explored the impact of e-content in rural Tamil Nadu schools and concluded that student-centered digital learning tools improved both interest and performance in Social Science.

These studies collectively support the hypothesis that e-content serves as an effective pedagogical tool, especially in subjects requiring contextual visualization and active engagement.

## STATEMENT OF THE PROBLEM

Despite continued efforts to modernize pedagogy, students across Tamil Nadu face persistent challenges in mastering Social Science concepts. Traditional methods, reliant on textbooks and lectures, often fail to capture students' interest. This gap in instructional efficacy prompts a critical question: *To what extent can e-content improve students' academic achievement in Social Science compared to traditional classroom teaching?*

## Need for the Study

There is a growing demand to shift from passive learning environments to interactive digital learning ecosystems. With NEP 2020 emphasizing the role of technology in education and Tamil Nadu's push toward smart classrooms, there is a pressing need to empirically validate digital learning strategies. This study seeks to evaluate the instructional value of e-content, specifically in the context of enhancing Social Science achievement at the secondary level.

### **Scope of the Study**

The study focuses exclusively on IX standard students enrolled in Tamil Nadu State Board Government schools in Erode District. It examines achievement in selected chapters from the Social Science curriculum using a e content module developed by the researcher.

### **HYPOTHESIS FORMULATED FOR THIS STUDY**

- **Ho1:** There is no significant difference in pretest between control group and experimental group
- **Ho2:** There is no significant difference between boys and girls in Post test in Control group
- **Ho3:** There is no significant difference between Rural and Urban Students Post Test Achievement Score in Experiment group

### **Limitations of the Study**

- The sample size was restricted to 60 students from one school.
- The intervention was limited in duration and content scope.
- Variables such as digital exposure, and individual learning styles were not controlled.

### **Methodology of the Study**

A quantitative Experimental research was adopted.

### **RESEARCH DESIGN**

Pre-test -Post test design included:

- **Experimental Group:** Received instruction through e-content package.
- **Control Group:** Received instruction through traditional classroom methods.
- Both groups were assessed before and after the intervention using the same Criterion Test.

### **SAMPLE OF THE STUDY**

A sample of **60 from IX standard students** was selected through simple random sampling from Government Higher Secondary School, Lakkapuram in Erode District.

- **Experimental Group:** 30 students, **Control Group:** 30 students

### **Ethical Considerations**

Necessary permissions were obtained from the school authorities, and informed consent was secured from students and their parents.

### **Variables**

- **Independent Variable:** e-content module
- **Dependent Variable:** Academic achievement in Social Science
- **Demographic Variables:** Gender, locality (rural/urban),

### Implementation Procedure

- i. A **pre-test** was administered to both groups to establish baseline knowledge.
- ii. The **experimental group** underwent instruction via the e-content module, while the **control group** followed the traditional method.
- iii. After the intervention, a **post-test** was administered to measure academic progress.

Data were compiled for analysis. The entire process was completed in **8 weeks**.

### Statistical Tools

- **Descriptive Statistics:** Mean and Standard Deviation
- **Inferential Statistics:** Independent sample **t-test**
- **Visualization:** Graphical comparisons through bar and line charts

### Analysis and Interpretation

**Ho1** :There is no significant difference in pretest between control group and experimental group

**Table-1**

**Table-1 presents the Significant between Control Group and Experimental Group in Pre-Test Scores among IX standard in Social Science**

| Sl. No | Description           | C.G. Pre-Test   | E.G. Pre-Test |
|--------|-----------------------|-----------------|---------------|
| 1      | N                     | 50              | 50            |
| 2      | Mean                  | 21.6            | 21.86666667   |
| 3      | Median                | 2.895894835     | 3.501067161   |
| 4      | Mode                  | 19              | 23            |
| 5      | SD                    | 2.895894835     | 3.501067161   |
| 6      | Highest Score         | 28              | 29            |
| 7      | Lowest Score          | 17              | 15            |
| 8      | Range                 | 11              | 14            |
| 9      | t value               | 0.364796954     |               |
| 10     | Level of Significance | No Significance |               |

The mean pre-test score of the **Control Group** was 21.60, while the **Experimental Group** had a mean of 21.87.

- The standard deviations were 2.89 (C.G.) and 3.50 (E.G.), indicating a slightly wider variation in the experimental group.
- The calculated t-value = **0.3648**, which is **not statistically significant** at the 0.05 level.

**Null Hypothesis-Ho1 is accepted**, There was no significant difference in the pre-test scores, confirming group equivalence before the intervention

**Figure-1**

**Figure-1 shows the Level of Significant in Pre-Test scores between Control Group and Experimental Group in achievement of Social Science among IX standard Students**

**Ho2-**There is no significant difference between boys and girls in Post test in Control group

**Table-2**

**Table-2 shows the Level of Significance between Boys and Girls Post Test Scores in Control Group in the Achievement of Social Science**

| Sl. No | Description           | Boys            | Girls    |
|--------|-----------------------|-----------------|----------|
| 1      | N                     | 15              | 15       |
| 2      | Mean                  | 27.13333        | 27.33333 |
| 3      | Median                | 26              | 28       |
| 4      | Mode                  | 25              | 32       |
| 5      | SD                    | 2.722044        | 3.309438 |
| 6      | Highest Score         | 32              | 32       |
| 7      | Lowest Score          | 23              | 22       |
| 8      | Range                 | 9               | 10       |
| 9      | t value               | 0.43436         |          |
| 10     | Level of Significance | No Significance |          |

The mean post-test score of **Control Group Boys** was 27.13 and **Girls** was 27.33.

- The standard deviation was 2.72 for boys and 3.31 for girls, showing moderate variance within each group.
- The t-value = **0.4344**, which is **not statistically significant** at the 0.05 level.

**Null Hypothesis-II is accepted**, Traditional instruction did not produce a significant difference in Social Science achievement between boys and girls.

**Figure-2**

**Figure-2 shows the Level of Significance between the Control Group Boys and Girls in Post Test in the Achievement of Social Science**

**Ho3-** There is no significant difference between Rural and Urban Students Post Test Achievement Score in Experiment group

**Table-3**

**Table-3 shows the Level of Significance between Rural and Urban Students Post Test Scores in Experiment group**

| Sl. No | Description        | Rural       | Urban       |
|--------|--------------------|-------------|-------------|
| 1      | Number of Items    | 50          | 50          |
| 2      | Mean               | 33.21053    | 31.54545455 |
| 3      | Median             | 33          | 31          |
| 4      | Mode               | 33          | 32          |
| 5      | Standard Deviation | 3.22454     | 1.752919642 |
| 6      | Highest Score      | 41          | 35          |
| 7      | Lowest Score       | 29          | 29          |
| 8      | Range              | 12          | 6           |
| 9      | T Test             | 0.126380323 |             |

The mean post-test score for **Rural Students** was 33.21, while **Urban Students** scored 31.55.

- The standard deviation was 3.22 (rural) and 1.75 (urban), showing higher variation in rural scores.
- The t-value = **0.1264**, which is **not statistically significant** at the 0.05 level.

**Null Hypothesis-Ho3 is accepted**, E-content was equally effective for rural and urban students, with no significant difference in their post-test achievement scores.

**Figure-3**

**Figure-3 Shows The Significance between Rural and Urban Students Post Test Achievement Score in Experiment group in the Achievement of Social Science**

## **FINDINGS**

Analysis confirmed that both groups began at the same level, validating that improvements resulted from the intervention (Gay et al., 2012). While top scores were similar, the experimental group showed more consistent performance, indicating e-content supported uniform understanding. E-content was equally effective in rural and urban settings, though rural students showed greater score variability, aligning with NEP 2020's vision of equitable access (Ministry of Education, 2020).

## **SUGGESTIONS AND EDUCATIONAL IMPLICATIONS**

- **Ensure Baseline Readiness:** Assess students' ICT skills and motivation before interventions.
- **Bridge Learning Gaps:** E-content can standardize outcomes across diverse learners.
- **Support Rural Learners:** Improve infrastructure, teacher training, and local content adaptation for rural contexts.

## CONCLUSION

The study concludes that e-content is a **pedagogically effective and scalable tool** for improving learning outcomes in Social Science. It supports the broader national agenda of digital integration in schools and provides practical evidence for policymakers, educators, and curriculum developers to consider e-content as a regular instructional strategy.

## REFERENCES

- Barrows, P., & Lewis, H. (2022). Using digital visualizations to teach historical concepts. *Journal of Educational Technology*, 19(1), 77–84.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications* (10th ed.). Pearson.
- Kaur, G., & Aggarwal, M. (2019). Effect of digital content on learning achievement. *Indian Journal of Educational Technology*, 13(2), 45–51.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Ministry of Education, Government of India. (2020). *National Education Policy 2020*. Retrieved from <https://www.education.gov.in>
- Nasser, R., & Alharthi, H. A. (2022). Influence of parental education on student achievement: A study across learning platforms. *International Journal of Education and Development*, 11(4), 30–39.
- Ramesh, T., & Karthikeyan, R. (2021). Impact of e-content in improving student achievement. *Education India Journal*, 10(3), 62–70.
- Selvi, R., & Kumar, A. (2020). A study on e-content effectiveness in rural Tamil Nadu. *Tamil Nadu Journal of Pedagogy*, 5(1), 33–42.

## IMPACT OF SOCIAL MEDIA ON COLLEGE STUDENTS MENTAL HEALTH

**Mrs. K. Nithya Devi and Ms. M. Kousalya**

Assistant Professor, Department of B.Sc (IT), Shri Nehru Maha Vidyalaya College of Arts and Science, Coimbatore.

Assistant Professor, Department of B.Com (B&I), Shri Nehru Maha Vidyalaya College of Arts and Science, Coimbatore.

## ABSTRACT

Social media has become a major part of daily life, especially for young adults, shaping how they connect, communicate, and view themselves. This study focuses on university students in Coimbatore and explores how their mental health is influenced by regular use of social media platforms. Ninety postgraduate students were randomly selected, and their insights were gathered through open-ended questions and personal interviews. Many students shared that while social media helps them stay in touch with friends and offers a quick escape through entertainment, it also brings emotional challenges. Common themes that emerged included anxiety, fear of missing out (FOMO), body image insecurities, and constant comparisons with others. These