



Impact of Reading E-Journals among B.Ed. Student-Teachers

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Abstract

The rapid growth of Information and Communication Technology (ICT) has transformed the teaching-learning process, particularly through the availability of electronic journals (e-journals). E-journals contribute significantly to improving the quality of education and academic performance. They are important in fast-changing fields like education, science, and technology and student-teachers can read recent studies, trends, and innovations. They lead to better academic performance of the student-teachers and help them understand topics beyond text books. This study investigates the impact of reading e-journals among B.Ed. student-teachers. A descriptive survey method was adopted, and data were collected using a structured questionnaire. The findings reveal that e-journals significantly enhance subject knowledge, teaching competency, research skills, and self-learning ability. However, issues such as lack of training, internet connectivity, and information overload still persist. The study concludes that e-journals play a crucial role in teacher education and recommends improving digital literacy among student-teachers.

Keywords: E-journals, B.Ed. students, Teacher Education, ICT, academic performance, digital learning.

1. Introduction

The integration of ICT in education has revolutionized access to academic resources. E-journals, as digital versions of scholarly publications, provide instant, updated, and accessible information to learners. In teacher education, especially for B.Ed. student-teachers, e-journals support pedagogical understanding, research orientation, and lifelong learning.

Studies show that electronic resources improve understanding, motivation, and academic performance among students. E-journals are a good way for promoting self-learning and lifelong Learning where students become independent learners. They tend to explore more topics beyond syllabus and develop habit of continuous learning. Hence e-journals become very important for professional growth especially for student-teachers.

2. Need of the Study

B.Ed. student-teachers are future educators who must develop strong research and teaching competencies. For B.Ed. student-teachers, who are preparing to become future educators, it is essential to develop strong research skills, subject knowledge, and effective teaching competencies. Reading e-journals can significantly contribute to these aspects by promoting independent learning, critical thinking, and awareness of current educational trends. This study is important to identify the benefits, usage patterns, and challenges faced by student-teachers in accessing e-journals. The findings will help educators, librarians, and institutions to take appropriate measures for improving access, providing training, and integrating e-resources effectively into teacher education

programs. Ultimately, the study aims to enhance the quality of teaching and learning in teacher education institutions.

3. Objectives of the Study

- i). To study the awareness of e-journals among B.Ed. student-teachers
- ii). To analyze the frequency of e-journal usage
- iii). To examine the impact of e-journals on academic performance
- iv). To evaluate the role of e-journals in improving teaching competency
- v). To identify problems faced while accessing e-journals

4. Hypotheses of the Study

H₀₁: There is no significant impact of e-journal reading on academic performance of B.Ed. student-teachers.

H₀₂: There is no significant difference between male and female student-teachers in usage of e-journals.

H₀₃: There is no significant relationship between frequency of e-journal use and teaching competency.

5. Review of Literature

Luo *et al.* (2025) have done their research on library smart reading promotion. In this paper, the authors say that previous studies on library smart reading promotion have not fully explored what motivates readers to participate deeply or the factors that influence their participation. This paper examines how different external factors affect readers' willingness to actively engage in library smart reading promotion, using the TAM, SIPS, and TOE models. Technology factors (such as

personalization, interactivity, and integration), organizational factors (information quality and service quality), and environmental factors (interactive atmosphere) all positively influence readers' perceptions of smart reading promotion. Among these, interactivity and interactive atmosphere have the strongest impact. When readers' expectations are met, they are more likely to see smart reading promotion as useful. Deep participation includes willingness to read, interact, and share. Readers are more willing to participate deeply when they find the system useful and easy to use.

Libraries are no longer judged only by how many resources they have, but by how well they provide smart knowledge services. However, these services are still developing. This study done by Li *et al.*, (2026) examines the main factors that improve the effectiveness of smart knowledge services in libraries in Mainland China and suggests ways to strengthen them. Based on information ecology theory, the study uses a mixed-methods approach that combines quantitative and qualitative research. In the quantitative part, survey data from 386 respondents in Mainland China were analyzed using fuzzy-set qualitative comparative analysis and necessary condition analysis to identify important factors and their combinations. In the qualitative part, six semi-structured interviews with librarians were conducted to confirm and further explain the survey results. Combining both methods provides more reliable and detailed findings.

Chen and Chang (2025) studied the use of artificial intelligence (AI) in reference services in special libraries, using the Hakka Literary Museum as a case study. The study aimed to solve the limitations of traditional reference services, especially in handling complex and specialized information needs with limited staff. The findings showed that AI-based reference services improved response speed, quality of information and user satisfaction. The study also introduced the use of GraphRAG for organizing cultural knowledge. Overall, the research highlights the important role of AI in improving user experience and increasing efficiency in library information services.

Monyela and Tella (2024) examined how digitization and emotional design of digital textbooks affect the reading habits of Library and Information Science (LIS) students in Nigerian universities. The study focused on students' use of digital textbooks, the influence of emotional design features such as visual appeal, interactivity and storytelling on reading interest, and the reading habits of LIS students. The findings showed that students moderately used digitized textbooks and believed that emotional design features moderately increased their reading interest. However, their reading habits remained weak, with issues such as irregular reading schedules, superficial reading and multitasking. The study also found a positive and significant relationship between digitization and reading habits, as well as between emotional design and reading habits. Mbago *et al.* (2026) examined how digital skill levels influence the use of Information Management Systems (IMS) among librarians in Tanzanian university libraries. The findings showed that most librarians had beginner-level skills in important digital tools such as Discovery Services, Digital Asset Management systems and Open Access Repository Software, which limited the effective use of IMS. Higher levels of digital competence were found among librarians at the University of Dar es Salaam, Sokoine University of Agriculture and Muhimbili University of Health and Allied Sciences because of better training opportunities and stronger ICT infrastructure.

6. Research Methodology

i). Research Design

Descriptive survey method: In the present study, the descriptive survey method is used because it helps in gathering factual data regarding students' awareness, frequency of use, purpose, and perceived benefits of e-journals.

ii). Population

B.Ed student-teachers from selected colleges in the Mumbai region.

iii). Sample

100 B.Ed student-teachers selected using random sampling

iv). Tool for Data Collection

- Structured questionnaire: In this study, a structured questionnaire is used to obtain responses from B.Ed student-teachers.
- Interviews or surveys are also conducted

v). Data Analysis Techniques

The collected data are then analyzed using statistical techniques like percentage analysis, mean, standard deviation, and t-test for hypotheses testing.

7. Data Analysis and Interpretation

i). Awareness of E-Journals

Table 1: Awareness of E-journals

Response	Respondents (N= 100)	Percentage
Aware	85	85%
Not Aware	15	15%

From the above table 1, it is seen that majority of student-teachers of the selected B.Ed. colleges are aware of e-journals nearly 85% and the rest of them are not aware that is 15%.

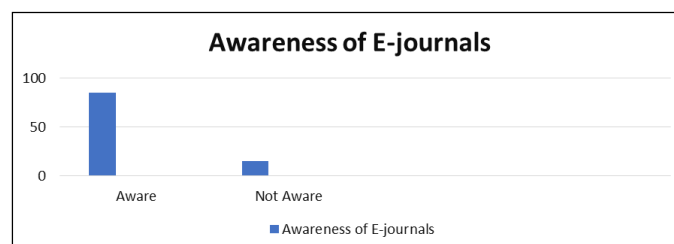


Fig 1: Awareness of E-journals

ii). Frequency of Use

Table 2: Frequency of Use

Frequency	Respondents (N= 100)	Percentage
Daily	30	30%
Weekly	45	45%
Occasionally	25	25%

From the above table 2, it is seen that frequency of use of e-journals by the student-teachers of the selected B.Ed colleges are only 30% daily and maximum 45% weekly. Most student-teachers use e-journals weekly. Least frequency of use by the student-teachers is only 25%.

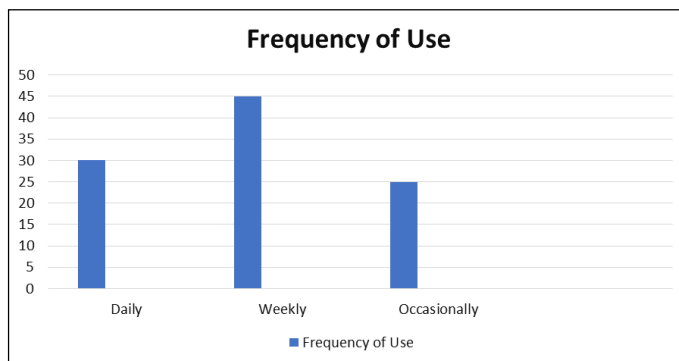


Fig 2: Frequency of Use

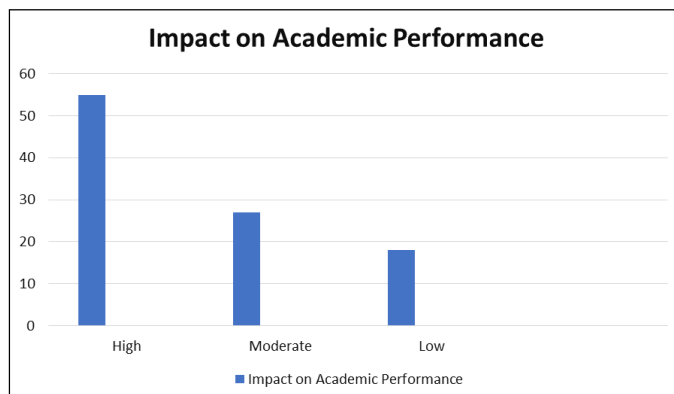


Fig 4 Impact on Academic Performance

iii). Purpose of Using E-Journals

Table 3: Purpose of using e-journals

Purpose	Respondents (N= 100)	Percentage
Assignment	60	60%
Teaching preparation	40	40%
Research work	50	50%
General Knowledge	35	35%

From the above table 3, it is seen that most of the student-teachers of selected B.Ed. colleges use e-journals for assignment which is 60% followed by Research work which is 50% next is preparation of Teaching 40% and the last 35% for general knowledge reading. E-journals are mainly used for assignments and research work.

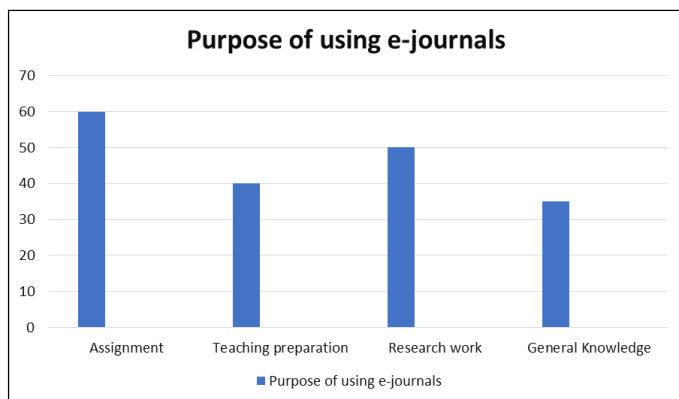


Fig 3: Purpose of using e-journals.

iv). Impact on Academic Performance

Table 4: Impact on Academic Performance

Impact Level	Respondents (N= 100)	Percentage
High	55	55%
Moderate	27	27%
Low	18	18%

From the above table 4, it is seen that the impact level among the student-teachers are very high nearly 55% and least is 18%. E-journals positively influence academic performance.

v). Problems Faced While Using e-Journals

Table 5: Problems faced while using e-journals

Problems faced	Respondents (N= 100)	Percentage
Information Overload	40	40%
Limited access to paid journals	48	48%
Lack of awareness of various databases	51	51%
Difficulty in searching relevant information	55	55%
Poor internet speed	65	65%
Lack of training/workshops	32	32%

From the above table 5, it is seen that major problem faced by the student-teachers is poor internet speed (65%) which means there is technical barrier. Followed by difficulty in searching (55%) followed by lack of awareness (51%) next is limited paid journals access (48%) followed by Information overload (40%) and the last is lack of training (32%).

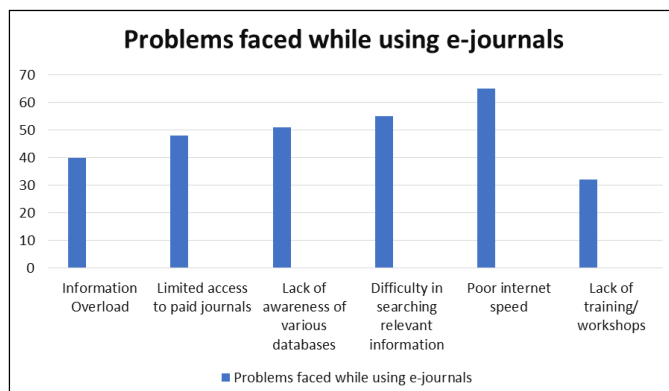


Fig 5: Problems faced while using e-journals

8. Hypothesis Testing (done using t-test)

Hypothesis H₀

"There is no significant impact of e-journal reading on academic performance."

Here, hypotheses suggests that there is no significant impact of reading any e-journals on academic performances of the respondents. For that, 2 groups are divided, 1st group is users and 2nd non-users means they do not read e-journals. Then mean is being calculated for each group followed by SD Standard Deviation and the t-test is being conducted using the standard formula.

Sample Data

Group	Mean	SD	N
Users	75	8	50
Non-users	68	10	50

t-test Formula

$$t = \frac{M_1 - M_2}{\sqrt{\frac{SD_1^2}{N_1} + \frac{SD_2^2}{N_2}}}$$

Calculated Value

t = 3.21

Table Value (0.05 Level)

t = 1.98

Since calculated value > table value,

H₀ is Rejected

Hence it is proved that, E-journal reading has a significant positive impact on academic performance.

9. Major Findings

The present study has following findings such as majority of student-teachers of the selected B.Ed. colleges are aware of e-journals nearly 85% and the rest of them are not aware that is 15%. Frequency of use of e-journals by the student-teachers of the selected B.Ed. colleges is only 30% daily and maximum 45% weekly. Most student-teachers use e-journals weekly. Least frequency of use by the student-teachers is only 25%. Most of the student-teachers of selected B.Ed. colleges use e-journals for assignment which is 60% followed by Research work which is 50% next is preparation of Teaching 40% and the last 35% for general knowledge reading. E-journals are mainly used for assignments and research work. Impact level among the student-teachers is very high nearly 55% and least is 18%. E-journals positively influence academic performance. Major problem faced by the student-teachers is poor internet speed (65%) which means there is technical barrier. Followed by difficulty in searching (55%). The present study on the impact of reading e-journals among B.Ed. student-teachers basically highlights the significant role of digital resources in modern teacher education. The findings reveal that a majority of student-teachers are aware of e-journals and use them regularly for academic purposes such as assignments, research work, and teaching preparation. The analysis indicates that e-journals have a positive influence on academic performance, subject understanding, and the development of critical thinking and research skills. Furthermore, the hypothesis testing confirms that there is a statistically significant positive impact of e-journal reading on academic performance of B.Ed. student-teachers.

However, the study also identifies certain challenges, including limited access to reliable internet, lack of proper training, and difficulties in selecting relevant information. Despite these issues, the overall impact of e-journals is highly beneficial.

10. Suggestions

To enhance the effective use of e-journals among B.Ed. student-teachers, educational institutions should take proactive steps to improve both access and awareness. Regular training programs and workshops should be organized to develop students' digital literacy and familiarize them with various e-journal platforms and databases. Colleges should ensure

reliable internet connectivity and provide adequate digital infrastructure within libraries and classrooms. Librarians and faculty members should actively guide students in selecting relevant and quality e-resources for academic and research purposes. Institutions may also promote access to national consortia such as INFLIBNET and N-LIST to provide a wide range of scholarly resources. Addressing challenges like information overload by teaching proper search strategies and evaluation skills will further help students. Overall, these measures can significantly improve the academic performance and teaching effectiveness of B.Ed. student-teachers.

11. Conclusion

E-journals play a vital role in enhancing the academic and professional development of B.Ed. student-teachers. They promote self-learning, improve research skills, and support effective teaching practices. Institutions must ensure proper access and training to maximize their benefits. e-journals are an essential tool for enhancing the academic and professional competencies of B.Ed. student-teachers. With improved access, proper guidance, and integration into the curriculum, e-journals can greatly contribute to effective teaching-learning processes and lifelong learning.

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