

A Study on Awareness of E-Learning among B.Ed. Students

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Abstract: *In the current study, the awareness about e-learning on the part of B.Ed. students and their variations in relation to some chosen personal and demographic factors have been investigated. The research followed the normative survey approach, and a sample size of 250 B.Ed. students has been selected through simple random sampling technique. The data have been analyzed through mean, standard deviation, and independent samples t-test. The results indicated that the B.Ed. students had a moderate level of awareness about e-learning. Significant differences were found with regard to gender, locality, and some types of Internet usage.*

Keywords: E-learning, Awareness, B.Ed. Students, Teacher Education, Digital Learning

1. Introduction

Education is an ongoing process in which individuals develop their intellectual, social, emotional and other kinds of potentials. Rapid expansion of knowledge and technology has resulted in the need for education processes in which independent learning, critical thinking and other key skills should be promoted. E-learning is one of the tools which can contribute greatly to the success of contemporary education processes.

E-learning facilitates learning through various electronic and digital technologies. It allows individuals to access learning resources regardless of time and location, thus facilitating the process of individualized learning (Ituma, 2011; Smedley, 2011). E-learning involves the use of many different resources like text, audio, video, animation, multimedia and virtual worlds. Therefore, it offers varied opportunities for interaction (Wilson et al., 2006; Pulman et al., 2010).

The feature of flexibility is very important in relation to e-learning. Individuals can access and review learning materials and engage in self-paced learning activities (Ituma, 2011; Smedley, 2011). Multimedia resources, interactive activities, and simulations can enhance learners' understanding, engagement, and active participation in the learning process (Wilson et al., 2006; Pulman et al., 2010). Such learning environments can also provide opportunities for learners to practise skills, make decisions, and learn from their responses (Wilson et al., 2006).

In teacher education, awareness of e-learning is particularly important because B.Ed. students are prospective teachers who will be expected to use technology-supported learning resources in their future teaching practices. Their awareness can contribute to their understanding and effective engagement with digital learning environments. However, the effective use of e-learning depends not only on the availability of technological resources but also on learners' awareness and understanding of e-learning opportunities (Smedley, 2011).

Therefore, the present study attempts to examine the level of awareness of e-learning among B.Ed. students and provide useful information for strengthening technology-supported learning in teacher education.

2. Review of Literature

Sino Cruz, Nanlabi and Peoro (2023) examined the *Level of Awareness of PSU Bayambang Campus Students towards E-Learning Technologies*. The study adopted a quantitative research approach and examined students' familiarity and knowledge of existing e-learning technologies. From the results, it was clear that 52.50% of the respondents had an understanding of e-learning ideas but more needed to be done regarding their exposure and application. Technology, organization, and user were recognized as key influencers of their awareness. The researchers recommended appropriate policies, ICT infrastructure, and training to strengthen e-learning implementation. This study demonstrates the importance of assessing students' awareness as a foundation for effective use of e-learning technologies.

Varghese and Arya (2024) studied *Exploring 21st Century Digital Literacy Skills among the Prospective Teachers for Holistic Learning*. The research emphasized on the digital literacy of the prospective teachers, which includes media literacy, ICT literacy and their capability to acquire, evaluate, and share information. The research also studied the difference in digital literacy among different demographic factors, such as gender, locality, educational qualifications, and subjects. It was emphasized that there is a need for techno-pedagogical integration and adaptability. The study is highly relevant to the present research because B.Ed. students, as prospective teachers, require adequate technological awareness and competencies for effective participation in technology-supported learning.

Singh, Kaushik, Chopra and Acharya (2024) investigated *Awareness Towards Utilization of E-Learning Resources Among Teacher Trainees in Special Reference to School of Education in SGVU*. The study focused on B.Ed.-M.Ed. integrated teacher trainees and examined their awareness and utilization of e-learning resources. A descriptive survey

approach was used, with data collected from teacher trainees through a questionnaire. The study is directly relevant to the present investigation because it focuses on teacher trainees and their awareness of e-learning resources. It supports the need for examining the extent to which future teachers are familiar with and prepared to use technology-based learning resources.

Chaurasiya and Singh (2025) investigated *Prospective Teachers' Perception and Preparedness towards ICT during Virtual School Internship*. The study assessed the prospective teachers from the five Central Universities of India with regard to their knowledge, readiness, and experiences of using ICT in virtual school internship. The results indicated that prospective teachers knew about the connection between ICT and inclusive education, but their use of ICT was hampered by digital divide, insufficient resources, weak internet connectivity, lack of parental support, and inattention of students. The researchers recommended professional ICT training to enable prospective teachers to integrate technology more effectively into education. This study provides recent evidence that awareness of ICT does not necessarily ensure effective utilization, making awareness an important area for investigation among B.Ed. students.

Olawale, Omodan and Saddiq (2025) conducted a systematic review entitled *X-Raying the Enablers and Barriers of E-Learning in Higher Education Institutions*. The review analysed empirical studies published between 2015 and 2025 and examined factors that facilitate or hinder e-learning in higher education. The review identified technological and institutional factors as important considerations in the implementation of e-learning and emphasized the continuing transformation of higher education through technological advancement and flexible learning opportunities. The study provides a recent broader perspective on the conditions that influence successful e-learning in higher education.

Das (2025) studied the evolution and future trends of MOOCs in India in *MOOCs in India: Evolution, Innovation, Impact, and Roadmap*. This paper focused on how India evolved with open education and digital education efforts, such as SWAYAM, NPTEL, Virtual Labs, and National Digital Library.

3. Research Gap

Previous studies have examined e-learning, digital literacy, and ICT preparedness among students and prospective teachers. However, limited studies have specifically focused on the awareness of e-learning among B.Ed. students and its variation across selected demographic variables. Therefore, the present study attempts to fill this gap by assessing the awareness of e-learning among B.Ed. students and examining differences based on selected personal and demographic variables.

4. Objectives

- To find out the level of awareness of e-learning among B.Ed. students.

- To find out whether there is any significant difference in the awareness of e-learning among B.Ed. students with respect to selected personal and demographic variables.

Hypothesis

There is no significant mean difference in the awareness of e-learning among B.Ed. students with respect to selected personal and demographic variables such as gender, locality, type of college, year of study, computer knowledge, and frequency of Internet usage.

5. Methodology

The normative survey method was adopted for the present study. The normative survey method is used to study, describe, and interpret existing conditions. The method was considered appropriate for assessing the awareness of e-learning among B.Ed. students and examining differences based on selected demographic variables.

Population

The population of the present study comprised B.Ed. students studying in Colleges of Education. B.Ed. students were selected as the target population because they are prospective teachers who are expected to engage with various technology-supported learning environments and digital educational resources. Their awareness of e-learning provides important insights into their preparedness to access, understand, and utilize e-learning opportunities in the teaching-learning process. The population therefore provides an appropriate basis for examining the awareness of e-learning among B.Ed. students.

Sample

For the purpose of this study, a sample of 250 B.Ed. students was selected using the simple random sampling method. Simple random sampling was adopted to provide an equal opportunity for the members of the population to be selected for the study. The sample consisted of B.Ed. students studying in Colleges of Education in Namakkal District, Tamil Nadu. Students from different genders, localities, years of study, types of college management, levels of computer knowledge, and frequencies of Internet usage were included in the sample.

Ethical Consideration

The entire study was voluntary for all the respondents. Before gathering any data, the objectives, purpose, and significance of the study were explained to each respondent. The employees were informed that participation in the study was totally voluntary, and that they could decline taking part in the study without suffering from any kind of repercussion. The participants were informed that the gathered data would be used only for academic purposes. The confidentiality and anonymity of the respondents was strictly maintained throughout the process, and there was no disclosure of any identity of the participants. The researcher conducted the study adhering to high ethical standards.

It highlighted the increasing importance of online and open learning in Indian higher education and the potential of emerging technologies to expand digital learning opportunities. The study is relevant to the present investigation because awareness of e-learning among

prospective teachers is increasingly important in an educational environment where online learning resources and MOOCs are becoming significant components of higher education.

Tool Used

Awareness of E-Learning Questionnaire prepared and standardized by Dr. M. Suresh Kumar (2012) was used to evaluate the awareness of e-learning among 250 B.Ed. students. The questionnaire contains 30 questions and one mark is awarded for every correct answer while zero marks are given for an incorrect answer. The highest score will be 30 while the lowest score would be 0.

The reliability coefficient through test-retest and split-half techniques is 0.83.

Procedure for Data Collection

Before commencing the data collection process, permission was obtained from the respective Colleges of Education, and the selected B.Ed. students were invited to participate voluntarily. The Awareness of E-Learning Questionnaire, designed by Dr. M. Suresh Kumar (2012), was distributed among the participants who had been chosen. They were made aware of the aim and significance of the research and assured that their answers would be kept in strict confidence for academic purposes only. Enough time was given to them to complete the questionnaire.

Statistical Techniques

The collected data were subjected to suitable descriptive and inferential statistical techniques. Frequency, percentage, mean and standard deviation were used to describe the awareness of e-learning among B.Ed. students. To find out the significance of the difference between the mean scores of two groups in terms of selected demographic characteristics like gender, locality, type of management, year of study and computer knowledge, independent samples t test was applied. To make comparisons between the three types of Internet usage i.e. daily, weekly twice and monthly once, t-test was applied. The findings derived from the application of statistical techniques were used to interpret the level of awareness of e-learning.

6. Result

The present study consisted of 250 B.Ed. students studying in Colleges of Education in Namakkal District, Tamil Nadu. The sample was selected using the simple random sampling technique. The selected sample was considered representative of the population under study. Proportionate weightage was given to the various sub-samples to ensure appropriate representation of the selected demographic categories. The distribution of the sample is presented in figure.

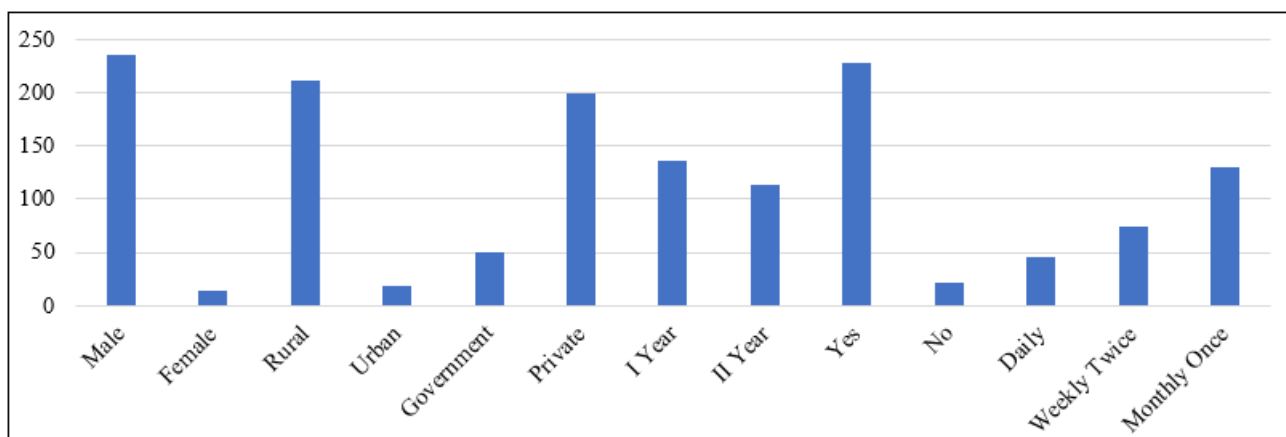


Figure 1: Showing the Distribution of Sample Selected for the Present Study

Determining the level of awareness of e-learning among the B.Ed. students was one of the objectives of this study. For this purpose, the investigator made use of the Awareness of E-Learning Questionnaire that has been developed and standardized by Dr. M. Suresh Kumar (2012). The questionnaire consisted of 30 items and its range was 0-30.

According to the criteria of scoring, those B.Ed. students who scored below 12 were categorized under low awareness of e-learning; the B.Ed. students scoring 12 to 21 belonged to the category of average awareness of e-learning and those scoring more than 21 were considered to have high awareness of e-learning.

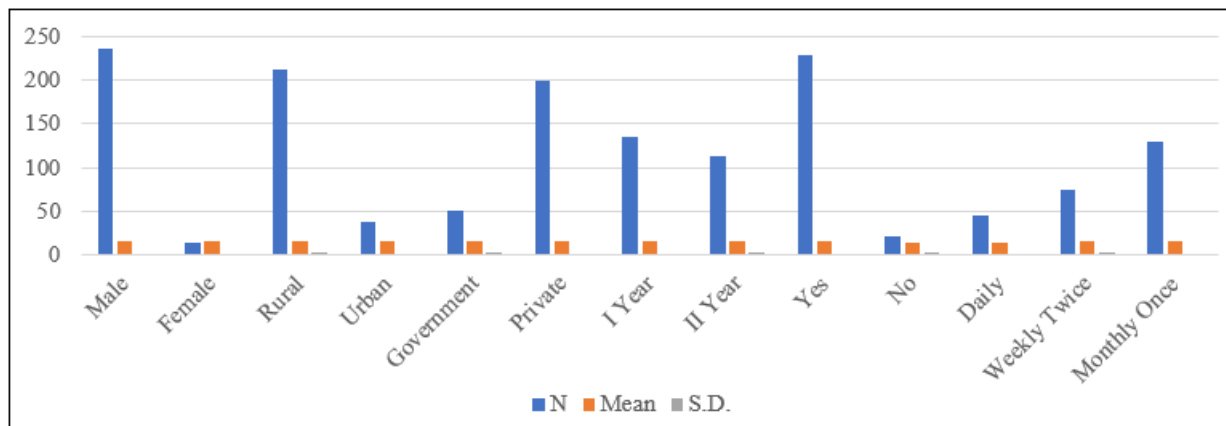


Figure 2: Mean and Standard Deviation of Awareness of E-Learning Scores of B.Ed. Students

In order to determine the level of awareness of e-learning among B.Ed. students, the investigator calculated the Mean and Standard Deviation (S.D.) for the entire sample and the selected sub-samples. The results are presented in figure 2. The Mean score of the total sample was 15.86, with a Standard Deviation of 2.56. This obtained mean score is lower than the 75th percentile score which is 20. Therefore, it can be stated that the B.Ed. students are aware of e-learning moderately.

The mean scores of the various sub-samples varied between 14.90 and 16.85. All the mean scores obtained were lower than the 75th percentile score which is 20. Hence, it is inferred that, irrespective of the selected sub-samples, the B.Ed. students possessed a moderate level of awareness of e-learning.

There is a terminology issue in the original text: earlier you classified scores from 12 to 21 as “average”, whereas this paragraph calls the same range “moderate.” For consistency

throughout the paper, I recommend using “moderate level” everywhere if that is the terminology you want to adopt. Also, the statement about the 75th percentile value of 20 should be retained only if this value is actually established from the tool's norms.

This section deals with the differential analysis of the data collected for the present study. One of the important objectives of the study was to determine whether there was any significant mean difference in the awareness of e-learning among B.Ed. students with respect to selected personal and demographic variables.

For this purpose, the independent samples *t*-test to determine the significance of the difference between the mean scores of the selected two-group sub-samples. The corresponding null hypotheses were formulated and tested at the appropriate level of significance. The calculated *t*-values and their significance levels are presented in the following figure.

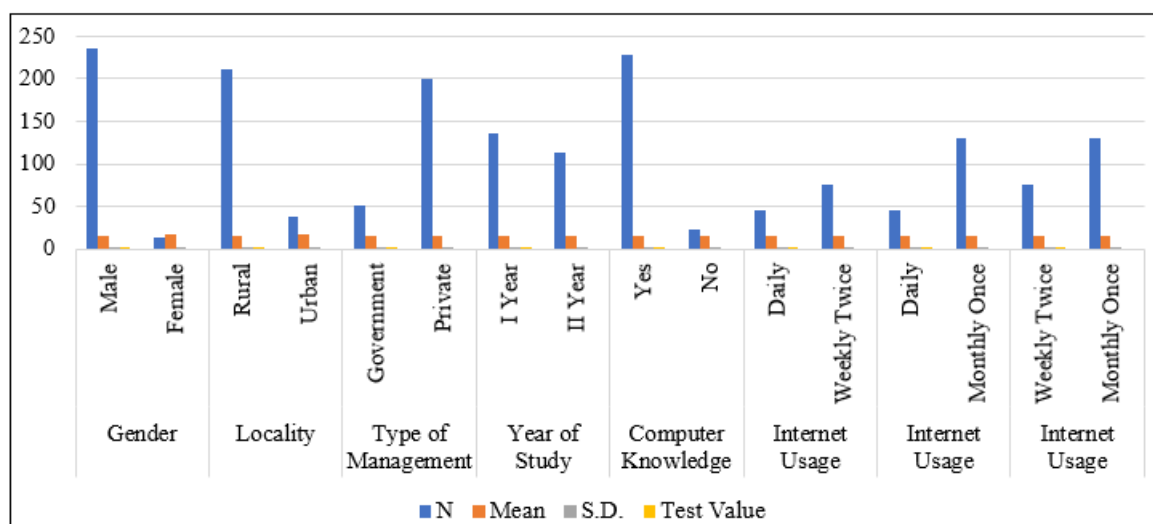


Figure 3: Showing the Analysis of Awareness about E-Learning

The *t*-test was used to determine the significant mean difference in the awareness of e-learning among B.Ed. students with respect to selected variables. Significant differences were found with respect to gender (1.97), locality (2.60), and Internet usage between daily and monthly once users (1.99) at the 0.05 level. Hence, the respective null hypotheses were rejected.

No significant differences were found with respect to type of management (0.77), year of study (0.25), computer knowledge (1.66), daily and weekly-twice Internet usage (1.53), and weekly-twice and monthly-once Internet usage (0.40). Hence, the respective null hypotheses were accepted.

7. Findings

The study has been examined the light of the data gathered. The following are the main findings of the present investigation

- It is inferred that male and female students differ significantly in their awareness about e-learning
- It is inferred that rural and urban area students differ significantly in their awareness about e-learning.
- It is inferred that private and aided students do not differ significantly in their awareness about e-learning.
- It is inferred that 1 year and II-year students do not differ significantly in their awareness about e-learning.
- It is inferred that the students who are having and not having computer knowledge do not differ significantly in their awareness about e-learning
- It is inferred that the students who are using internet daily and weekly twice do not differ significantly in their awareness about e-learning
- It is inferred that the students who are using internet daily and monthly once differ significantly in their awareness about e-learning.
- It is inferred that the students who are using weekly once and monthly once do not differ significantly in their awareness about e-learning.

8. Recommendations

The present study gives a clear-cut view about the awareness about e-learning level of B.Ed. students in Namakkal district. Based on the important findings stated the following recommendations were made.

- B.Ed. students are having moderate level of awareness about e-learning. The irrespective of sub samples the B.Ed. students are also having moderate level of awareness about e-learning. So, the teachers, parents and counsellors in the college should take suitable strategies to improve the awareness about e-learning level among the B.Ed., students
- The sub samples of gender, locality and internet usage show significant mean difference in their awareness about e-learning and also the sub samples of management year of study and computer knowledge shows do not significant mean difference in their awareness about e-learning
- The colleges should conduct orientation programme periodically; it is used for improve their level of awareness about e-learning. And also, the colleges should arrange adequate facilities like internet for obtain the computer knowledge and aware about e-learning for improve their level.

Delimitations

- The study was confined to selected personal and demographic variables.
- The study was confined to B.Ed. students studying in Colleges of Education.
- The sample consisted of 250 B.Ed. students.
- The study was conducted among B.Ed. students in the selected area of the study.

9. Conclusion

B.Ed., students are having moderate level of awareness about e-learning. The irrespective of sub samples the B.Ed., students are also having moderate level of awareness about e-learning. The sub samples of gender, locality and internet usage show significant mean difference in their awareness about e-learning and also the sub samples of management, year of study and computer knowledge shows do not significant mean difference in their awareness about e-learning.

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