

## *Original Research Article*

# **Opinions of B.Ed Faculty Members in the Cuddalore district of Tamil Nadu about e-learning Materials for the Course 'Understanding Disciplines and School Subjects'**

### **Abstract**

A conceptual framework facilitates comprehension of the research problem and the organisation of the study. The utilisation of technology in education is revolutionising the learning process in the era of digitalisation. E-learning has revolutionised education via internet platforms, digital documents, and electronic resources. In this context, it is necessary to inquire with B.Ed faculty members regarding e-learning resources for professional development. In recent years, there has been an increase in the utilisation of e-learning and digital instructional tools. This study examines the perspectives and utilisation of e-learning resources by faculty members with a Bachelor of Education (B.Ed) degree. The integration of technology into teaching methods is pertinent for higher educational institutions. Course Evaluation: This study pertains to the topic of 'Understanding Disciplines and School Subjects,' thus making it pertinent to the field of education. The study's findings can assist B.Ed faculty members in evaluating the suitability of e-learning materials for their course requirements. Research objectives: To investigate the perceptions of B.Ed faculty members regarding the quality, accessibility, and usability of e-learning materials about this subject. The study population consisted of all faculty members of the B.Ed. programme at Tamil Nadu Teachers Education University in the Cuddalore district of Tamil Nadu during 2023. Study Sample: The study sample consisted of forty-two faculty members from Tamil Nadu Teachers Education University who were selected using a cluster sampling technique. The study utilised a questionnaire to gather data. Many faculty members responded positively to the survey about their previous experience with e-learning and their utilisation of e-learning resources in their teaching of the B.Ed programme. They also expressed their comfort in using technology for teaching purposes. Gaining insight into the viewpoints of B.Ed faculty members regarding e-learning materials is crucial for improving the overall quality of education. This study's findings can enhance and optimise the content and delivery of e-learning resources.

**Keywords:** e-learning, accessibility, usability, content quality and preferences

## **1. Introduction**

A conceptual framework facilitates comprehension of the research problem and the organization of the study. Technology is revolutionizing education in the digital era. E-learning has revolutionized education using internet platforms, digital documents, and electronic resources. In this context, it is necessary to inquire with B.Ed faculty members about e-learning resources for professional development.

Teacher education programs, specifically B.Ed degrees, prioritize the development of discipline and subject knowledge. Prospective educators acquire fundamental knowledge and pedagogical competencies for instructing diverse academic disciplines. With the advancement of technology, educators now have a more comprehensive range of e-learning materials and resources available for teaching. Digital information, such as interactive modules and multimedia presentations, enhances learning and comprehension.

The perspectives of B.Ed faculty members on e-learning materials are crucial in determining the future of integrating educational technology in classrooms. Learners' experiences significantly shape their approaches as educators. Therefore, it is essential to investigate the perceptions and engagement of B.Ed faculty members with e-learning materials for Understanding Disciplines and School Subjects.

## **2. Research Significance**

This study investigates the perspectives of B.Ed faculty members regarding the utilization of e-learning materials for Understanding Disciplines and School Subjects. The objective is to fill a research gap in the current literature on this topic. Understanding the perspectives of future educators is essential for various reasons.

This study offers valuable insights for informing teacher education programs and curriculum designers in enhancing the preparation of teachers for their roles in a digital educational environment. Effective resource development involves creating e-learning materials that align with the preferences and needs of B.Ed faculty members, meeting their expectations and catering to their learning styles. The attitudes of B.Ed faculty members towards lifelong learning and professional development in their teaching careers can be influenced by their experiences with e-learning materials.

Policymakers can benefit from understanding B.Ed faculty members' perspectives on e-learning integration. This understanding can guide the formulating of policies and guidelines for digital education in pre-service programs. This study explores the perspectives and opinions of B.Ed faculty members in the Cuddalore district of Tamil Nadu regarding e-learning materials developed for the 'Understanding Disciplines and School Subjects' course. This study aims to analyse the significance and potential impact of its findings. Evaluate the viewpoints and attitudes of B.Ed faculty members towards e-learning resources.

Analyse the perception of e-learning materials in the 'Understanding Disciplines and School Subjects' course. Evaluate the strengths and weaknesses of the existing e-learning materials. Examine the possibilities for enhancing e-learning resources within this educational context. The study's significance lies in its potential to contribute valuable insights and knowledge to the field. The study is significant for multiple reasons.

### **3. Review of Related Literature**

Investigator reviewed about nineteen studies related to the following topics

- i. Research that is generally associated with e-learning.
- ii. Studies in Bachelor of Education programs that focus on e-learning research.
- iii. Research related to e-learning in different subjects in B.Ed.
- iv. Studies concerning a variety of topics included in the B.Ed. programme.
- v. Research in the Bachelor of Education program relevant to the issue of 'understanding disciplines and school subjects.'

#### **3.1 Research that is generally associated with e-learning.**

Mamattah (2016) examined students' e-learning perceptions. The thesis explores students' attitudes toward e-learning, an alternative to classroom instruction. The investigation was done because technology enables e-learning. They know what students think is essential as they are the key beneficiaries. The study employed 80 HO Polytechnic, Ghana questions. Most students think e-learning is creative and should be supported, while some worry about workplace bias. Additionally, respondents choose hybrid learning, which mixes online and face-to-face education. Students prefer hybrid learning. Thus, according to the report, Ghanaian schools should invest more in e-learning resources than satellite campuses.

Thakkar & Joshi (2017) examined student attitudes toward e-learning. Teaching and learning are increasingly electronic. E-learning can help India, with a large population and few resources, satisfy its education needs. E-learning requires student readiness. Although beneficial, E-learning only works if learners adapt. This study investigates diploma engineering students' e-learning perspectives. Surveys are used in this investigation. A sample of 56 diploma engineering IT students was used. Data was collected using attitude scales. Students' E-learning attitudes were contrasted by gender, locality (rural/urban), and caste (General/Reserved).

Encarnacion , Galang, & Hallar (2020) studied the impact and efficacy of e-learning on teaching and learning. This article explores how e-learning affects Oman Tourism College's Undergraduate Program (UGP) and General Foundation Program (GFP) in Muscat, Oman. The method Mixed-method online questionnaires assessed instructor and student E-Learning experience. E-learning efficacy was assessed using five parameters. The five aspects assessed teachers' and students' E-Learning effectiveness consensus and target measures. The study contrasted student and teacher E-Learning opinions. Also explored were E-Learning's effects on teaching and learning.

Mseleku (2020) COVID-19 triggered global economic problems. Many countries have banned social gatherings and encouraged social distancing to reduce infection. Virtual learning will replace classroom education when universities fail. Covid-19 brought higher education online, but its impacts on teaching and learning remain unknown. This literature discusses COVID-19-related e-learning and e-teaching results, difficulties, and opportunities. We searched 16 databases for 2020 studies. More relevant papers were located in the initial search's references. COVID-19, coronavirus, online, E-learning, E-teaching, higher education. The top papers were selected for final evaluation using inclusion and exclusion criteria. Eligible COVID-19 papers explored higher education E-learning and E-teaching outcomes, problems, and prospects. Elearning and E-teaching results, difficulties, and potential were less studied during COVID-19. The literature encompassed academic and student learning. Inability to access online learning and teaching materials, transitioning, especially for rural and low-income students, stress, despair, and anxiety.

Almahasees, Mohsen, & Amin (2021) studied faculty and student perceptions of online learning. COVID-19 has disrupted multiple schools. Academic institutions' crisis management was assessed. Online learning dominated Jordanian education during the

pandemic. After four months of online education, two online surveys were given to professors and students to evaluate learning. Two surveys assessed teacher and student attitudes toward online learning. One was randomly allocated to 50 instructors and 280 students to evaluate Jordan's online education. Jordan's top interactive classroom and student communication technologies were Zoom, Microsoft Teams, and WhatsApp. The study found that professors and students find online education helpful during pandemics. It is less effective than in-person instruction. Faculty and students highlighted online learning issues like adapting to online education, especially for deaf and hard-of-hearing students, loss of contact and motivation, technical and Internet issues, data protection, and security. The benefits of online learning were also agreed upon. Key benefits were self-learning, low prices, simplicity, and adaptability. Online learning is a temporary COVID-19 answer but cannot replace face-to-face learning. The study recommends blended learning for rigorous learning.

Gopal, Singh, & Aggarwal (2021) studied the impact of online classes on student happiness and performance during the COVID-19 epidemic. The study seeks to determine how the COVID-19 pandemic affects online students' satisfaction and performance. An online poll collected quantitative data from 544 Indian university students studying business management (B.B.A or M.B.A) or hotel management and modelling hypotheses with structural equations. According to the study, instructor quality, course design, timely feedback, and student anticipation boost student happiness and performance. For online course satisfaction and performance, educational management must consider these four variables. This study is being done during the COVID-19 epidemic to see how online education influences student performance.

A study by Muthuprasad, Aiswarya, Aditya, & Jha (2021) examined Indian students' perceptions and choices for online education during the COVID-19 epidemic. COVID-19 has closed schools globally, disrupting classes. Most schools do educational programs online. However, e-learning planning, design, and efficiency must be defined, especially for a developing country like India, where technical constraints like device appropriateness and bandwidth availability are significant. This study polls 307 agriculture students online about online learning. We also investigated student preferences for online class characteristics to help them create effective online learning environments. Most responders (70%) would prefer online classes to manage the curriculum throughout the pandemic. Most students preferred cell phones for online studying. Content analysis showed that students prefer recorded classes

with end-of-class tests to learn. Students found online classes flexible and handy, although remote access was difficult. Many agriculture courses are practical, so converting to online may be challenging. This article may aid hybrid curriculum development.

A study by Rawashdeh, A.Z., et al., (2021) examined the pros and cons of e-learning in university education from students' perspectives. Even with diverse technologies, integrating e-learning into a bright, flexible, time-scalable, and long-lasting learning system is complex. Higher education in the UAE is evolving rapidly due to accessibility. Thus, the study covers UAE university e-learning pros and cons. The 2018/2019 Ajman University students were randomly selected using descriptive research. Student data was collected via a closed-ended structured questionnaire. Data was analyzed using frequencies and percentages. Science is fascinating to 81% of students using e-learning. E-learning increases student-to-student and student-to-teacher communication for 80% of students. Social isolation causes 73% of students to spend more time on social media and in person. 70% of kids say parents' tech ignorance affects monitoring. Potential e-learners must grasp the merits and cons of e-learning in both contexts, which may affect grades.

The investigators Venkataraman & Manivannan (2021) conducted a literature review on teachers' perceptions of ICT usage for teaching in India and other countries. The purpose was to understand the existing research and identify areas that require further exploration concerning student teachers' attitudes towards e-learning and technology usage.

Citation analysis is used in this paper for e-Learning. A systematic literature review was conducted using citation indexes from relevant journal citation reports in the e-learning field from 2015-2020, using search databases like Emerald Insight. Search documentation is used to analyze e-learning literature, using keywords like “e-learning”, “obstacles”, “risks”, “impact technology”, and “e-learning technology” with inclusion and exclusion criteria. The Science Citation Index publishes answers to questions about the citation index of names and journals. Literature reviews, particularly in e-learning, help identify journal references for reference material. (Nurmiati, Mohamad, & Razali, 2021)

Ninsiana et al. (2022) study examines high schoolers' e-learning views. This study examined how online learning affects high school English. Study participants included 50 intermediate-level students and 73 OQPT takers. These subjects were then randomly assigned to experimental (EG) (n=25) and control (CG) (n=25) groups. EG received WhatsApp after both groups took a general English pretest. Three Vision Book 3 lessons arrived via WhatsApp.

Participants in CG needed online training—personalized learning. After three lessons, both groups took the general English posttest. E-learning attitude questionnaires, and interviews were given to 10 students. The posttest showed that EG beat CG. EFL students favoured e-learning for teaching English, according to a one-sample test. In interviews, e-learning obstacles included computer literacy, screen attentiveness, and slow Internet.

### **3.2 Studies in Bachelor of Education programs that focus on e-learning research.**

A Study on B.Ed. Pupil Teachers' E-Learning Attitude was undertaken by Srivastava (2023). This study examines B.Ed student teachers' E-Learning views. The survey was descriptive—all B.Ed. students from self-financed and government state and central universities of Varanasi are included in this study. 100 B.Ed. Students from central and state institutions, 50 self-funded and 50 government-funded. Stratified random sampling is selected. The average e-learning score was 294. The mean score reveals a B.Ed. student teachers like e-learning. While gender and school management did not differ, location did.

### **3.3 Research related to e-learning in different subjects in B.Ed.**

ReechaJrall & Kiran (2022) studied 'Development of E-content Module and Measuring Effectiveness in the Topic Understanding ICT and its Application at B.Ed Level'. Electronic content is popular in education because students and teachers may customize learning. We built, validated, and evaluated an E-Content module to teach Bachelor of Education students ICT. One group was pre- and post-tested. The 52 B.Ed College student-teachers were chosen at random. E-Content Module and achievement tests collected data. Achievement tests were done before and after the e-content module intervention to determine effectiveness. E-content boosts B.Ed grades. Studies suggest teachers should use it to attract new teachers.

Anand (2023) examined 'An Evaluative Study of the B.Ed. Curricula Operative in Universities with Specific Reference to Environmental Education. Environmental education's history, progress, and function in teacher education are studied in this paper. It examines global and Indian ecological challenges, concerned citizens' efforts, and environmental movements. The study design contains the title, objectives, essential terms, delimitations, population, sample, data collection, and analysis. Two sections cover data collection, analysis, and interpretation. B.Ed. environmental education syllabus is examined first. Part 2 of the B.Ed. curriculum uses a self-created questionnaire to assess pre-service teachers' environmental education syllabus awareness, knowledge, and attitude.

### **3.4 Studies concerning a variety of topics included in the B.Ed. programme.**

Fatima & Naaz (2015) Fatima, Naaz (2015). This study assesses B.Ed. Geography students' interactive learning performance and enrichment. The goal was to compare B.Ed. applicants' mean content test scores between experimental and control groups and men and women. Systematic sampling was used in the "two-group post-test design" study—70 of 130 B.Ed. geography students were tested. The experimental group received knowledge-enhancing therapy, whereas the control group received everyday teaching. This study revealed that interactive learning increased B.Ed. topic knowledge and performance.

### **3.5 Research in the Bachelor of Education program relevant to the issue of 'understanding disciplines and school subjects.'**

Matthiessen (2021). researched register cartography and Giovanni Parodi's Registerial profiles of school and university themes. We cover school and university enrollments. Giovanni Parodi's systematic functional school topic profiles complement university discipline registerial profiles. These pioneering contributions enhance the complete approach, so future studies may address gaps as personal registerial repertoires increase. They compared register and 'genre' methods to situational language functional diversity for conceptual clarity.

Hudson et al. (2023) explored 'Trajectories of powerful knowledge and epistemic quality: examining the transitions across disciplines throughout school subjects'. Comparative topic didactics studies school subject-related academic discipline changes. According to the theoretical Framework, classroom-to-society transfer incorporates 'powerful knowledge', 'transformation', and 'epistemic quality'. The Framework examines KOSS network empirical studies on school topic knowledge and quality. Footnote 1 The study examines discipline transitions across school topics after defining *powerful knowledge* as specialized creation and transfer. Pioneering empirical data analysis covers broad subjects. Compare higher education fields using the classic Biglan classification. Curriculum planning, teacher education policy, and subject-specific instruction conclude our discussion.

Padmini & Ramani (2023) studied B.Ed students' views on 'Understanding the Disciplines and Academic Subjects' in teacher education. Teacher education curricula like B.Ed. aim to develop an academic understanding of several topics. The Tamil Nadu Teachers Education University B.Ed programme involves various skills. TNEU B.Ed students' views on 'Understanding Disciplines and School Subjects' subtopics? B.Ed students' opinions on Tamil Nadu Teachers Education University's "Understanding Disciplines and School Subjects"

course. Studying 2023 Tamil Nadu Teachers Education University Cuddalore B.Ed. students. Three thousand students learn B.Ed at 30 Cuddalore colleges. In 2023, 523 randomly selected Cuddalore B.Ed. Tamil Nadu Teachers Education University students were studied. This study sampled clusters. Five of 30 colleges were randomly investigated. Study Hypothesis: Null hypothesis: B.Ed. 'Understanding Disciplines and School Subjects' viewpoints are similar. The study's findings will help educators improve pedagogy and rethink the teaching-learning process to make education more accessible, especially for B.Ed students who want to teach.

Padmini & Ramani (2023) studied *Crafting E-Learning Pathways: A Student's Insight into the Teacher Education Course 'Understanding Disciplines and School Subjects' at Cuddalore, Tamil Nadu, India*. Conceptual frameworks simplify study organisation and research problem understanding. New teaching and learning methods are coming from technology. Online platforms, digital papers, and technological tools have transformed education. This study fills a research vacuum by examining B.Ed students' perceptions of e-learning technology for 'Understanding Disciplines and School Subjects' Sample: Researchers selected 540 Cuddalore-based 2023 Tamil Nadu Teachers Education University B.Ed. students. The study sampled purposefully. Surveys were used to acquire qualitative data for this investigation. Content analysis of open-ended questions. Data Collection: This study used an open-ended questionnaire. Students' e-learning positive and negative responses were balanced. Eight e-learning resource generation recommendations were made. Indian language e-learning tools promote 'Understanding Disciplines and School Subjects,' the report says. E-learning producers need content and tech skills.

Thompson (2023). Thompson edited *Subject Disciplines and Teachers' Identities* (2023). This chapter examines how topic disciplinary identification shapes teachers' identities. The chapter begins with the idea that teachers must teach well-studied subjects morally and logically. Teachers must comprehend subject principles and evidence regardless of expertise. This chapter proposes that conceptualizing teaching a topic in unique situations affects teachers' sociocultural identities. Beginning English teachers demonstrate how the chapter challenges academic disciplines, school subjects, and teacher identities.

#### **4. Identifying the Research Gap and Rationale of the Study**

Studies by Mamattah (2016), Thakkar & Joshi (2017), Encarnacion, Galang, & Hallar (2020), Ninsiana et al. (2022), and Srivastava (2023) on e-learning, its effectiveness, and its use in

education, especially teacher education, are valuable. They discussed students' e-learning material preferences, attitudes, and opinions. Almahasees, Mohsen, & Amin (2021), Gopal, Singh, & Aggarwal (2021), and Muthuprasad, Aiswarya, Aditya, & Jha (2021) found that online learning was influential during the COVID-19 epidemic. E-learning benefits B.Ed topics, according to studies by ReechaJrall& Kiran (2022), Fatima & Naaz (2015), and Anand (2023). To understand their specific problems and needs, researchers investigated Matthiessen (2021), Thompson (2023), Hudson, Gerickeb, Schellerc, and Political (2023) literature on Understanding Disciplines and School Subjects. There are B. Ed studies on e-learning, but none on 'Understanding Disciplines and School Subjects'. Thus, in 'Understanding Disciplines and School Subjects', B.Ed faculty viewpoints on e-learning material development must be examined.

## **5. Research Purpose**

Understanding the perspectives of B.Ed faculty members on e-learning materials is essential for enhancing educational quality. The findings of this study can contribute to the improvement and optimisation of e-learning resources in terms of their content and delivery. This study examines the faculty's level of adaptation to technological changes and the challenges they encounter in the context of the growing prevalence of e-learning in education. This information is valuable for educational institutions seeking effective integration of technology. B.Ed faculty members are crucial in the training of prospective teachers. The study's findings can inform institutions in customising faculty training and development programmes to better meet the changing needs and preferences of educators and students.

**Policy Implications:** This study may have implications for educational policy in Tamil Nadu and could provide insights for decisions regarding the implementation and assistance of e-learning resources.

**The study's impact:**The study has the potential to make a significant impact.

**Enhancing e-Learning Resources:** By evaluating current e-learning materials, this study aims to create more efficient, captivating, and personalised resources. This study could improve the learning experience for current and future B.Ed students in Tamil Nadu. Institutions can utilise the findings to design faculty development programmes aimed at enhancing educators' utilisation of e-learning materials and technology in their teaching methodologies. The study's findings can inform policymakers' decisions regarding the

integration of technology and the implementation of e-learning initiatives in the education system.

**Research Contribution:** This study aims to contribute to the existing academic literature on e-learning, education technology, and teacher perspectives, enhancing knowledge in this field.

This study seeks to investigate the perspectives of B.Ed faculty members on e-learning materials in the ‘Understanding Disciplines and School Subjects’ course in the Cuddalore district of Tamil Nadu. The study's significance and impact stem from its potential to enhance education, faculty training, policy-making, and the broader field of educational research.

## **6. Research Topic and Objectives:**

Opinions of B.Ed Faculty members in the Cuddalore district of Tamil Nadu about e-learning Materials for the Subject of Understanding Disciplines and School Subjects

### **Research Questions:**

- What is the knowledge of B.Ed faculty members regarding e-learning materials for the course ‘Understanding Disciplines and School Subjects’?
- What is the perception of B.Ed faculty members regarding the accessibility of e-learning materials for teaching the course ‘Understanding Disciplines and School Subjects’?
- What is the perception of B.Ed faculty members regarding the usability of e-learning materials for teaching the course ‘Understanding Disciplines and School Subjects’?

### **Research objectives:**

- To understand B.Ed faculty members knowledge of e-learning materials for the course ‘Understanding Disciplines and School Subjects’.
- To understand B.Ed faculty members perception regarding the accessibility of e-learning materials for teaching the course ‘Understanding Disciplines and School Subjects’.
- To understand B.Ed faculty members perception regarding the usability of e-learning materials for teaching the course ‘Understanding Disciplines and School Subjects’.

## **7. Operationalization of Terms**

**e-learning materials:**E-learning materials encompass digital resources, content, and tools specifically created for educational use and delivered electronically, often through the Internet or computer-based platforms. The learning materials can take various forms, such as text-based content (e-books, articles, PDFs), multimedia content (video lectures, audio lectures, interactive simulations, animations), interactive learning modules, online courses, learning management systems (LMS), online quizzes and assessments, synchronous and asynchronous content, learning apps, and mobile content.

**Understanding Disciplines and School Subjects:**The B.Ed. degree programme at Tamil Nadu Teachers Education University offers the course 'Understanding Disciplines and School Subjects' in the second semester.

**Opinions:**This study examines opinions of faculty members regarding e-learning materials, content quality, accessibility, usability, and overall satisfaction with the e-learning experience.

## **8. Methodology of the Study**

### **i. Population of the Study**

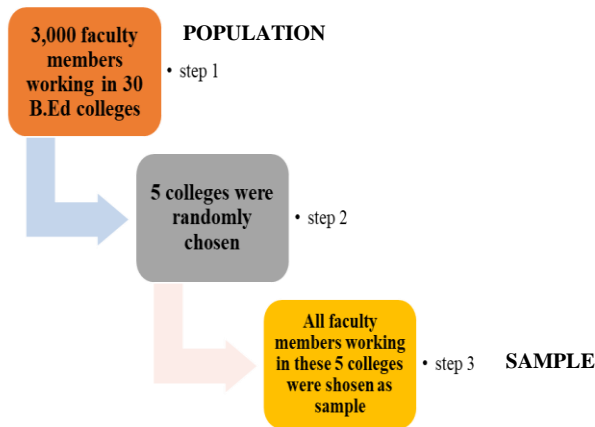
The study population consisted of faculty members from Tamil Nadu Teachers Education University (TNTEU) in the Cuddalore district of Tamil Nadu in 2023. In the Cuddalore district of Tamilnadu, 30 colleges offer B.Ed programmes, employing approximately 3,000 faculty members.

### **ii. Sample of the Study**

The study sample consisted of forty-two randomly selected faculty members from Tamil Nadu Teachers Education University teaching in the Cuddalore district of Tamil Nadu in 2023.

### **iii. Sampling technique**

This study employed a cluster sampling technique. Five out of thirty colleges (16%) were randomly chosen for the investigation, with all faculty members from these colleges included in the sample.



*Figure 1: Sampling Procedure*

#### iv. Hypothesis of the Study

Null Hypothesis  $H_0$ : There is no significant variation in the preferences for e-learning materials among B.Ed faculty members who are teaching the course ‘Understanding Disciplines and School Subjects’.

#### v. Research Design

This study employs a quantitative approach and utilizes surveys as the primary data collection method.

#### vi. Tools for Data Collection

The study employed a closed ended questionnaire for data collection.

#### vii. Procedure for Data Collection

The questionnaire for assessing the quality, accessibility, and usability of e-learning in the 'Understanding Disciplines and School Subjects' course was developed by the investigators. The reliability and validity of the questionnaire were assessed. The four experts were given the task of assessing validity. A pilot study was conducted to inform modifications made to the questionnaire. The revised questionnaire was utilized to gather data.

### 9. Data Analysis

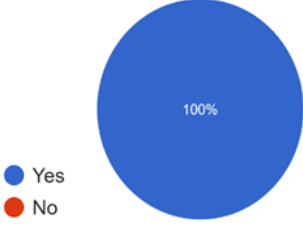
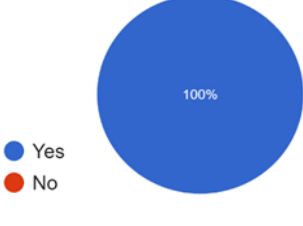
The data collected were quantitatively analysed using percentages and chi-square.

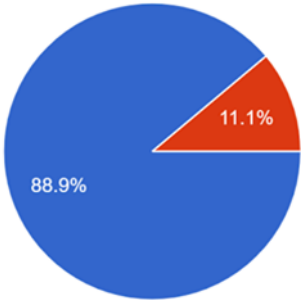
#### Section 1: Demographic Information

Approximately 11.1% of faculty members possessed a decade of experience in teaching the B.Ed. programme. 11.1% of faculty members possessed a two-year teaching experience in

the B.Ed. programme. 11.1% of faculty members possessed three years of teaching experience in the B.Ed. programme. Approximately 22.2% of faculty members possessed a teaching experience of five years in the B.Ed. programme. Approximately 11.1% of faculty members possessed a five-year tenure in teaching the B.Ed. programme. Approximately 11.1% of faculty members possessed a six-year tenure in teaching the B.Ed. programme. Approximately 11.1% of faculty members possessed eight years of teaching experience in the B.Ed. programme. Approximately 11.1% of faculty members possessed a teaching experience of nine years in the B.Ed. programme. The female faculty members constituted 66.7% of the total, while the male faculty members accounted for 33.3%.

### Section 2: Questions Related to the E-Learning Preferences

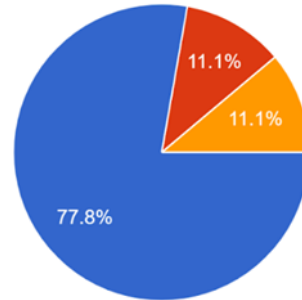
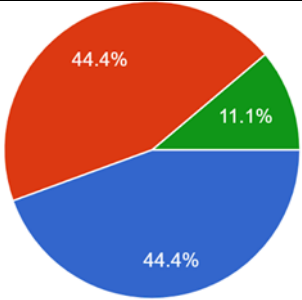
<b>Objective 1:</b> To understand B.Ed faculty members knowledge of e-learning materials for the course 'Understanding Disciplines and School Subjects'.					
S.No	Question	Figure	Percentage	Chi-Square Analysis	Statistically Significant
1	Do you have prior experience with e-learning?	 <p>A pie chart with a legend. The legend shows a blue circle for 'Yes' and a red circle for 'No'. The pie chart is entirely blue, with '100%' written in the center.</p>	100% faculty members said 'yes'	$\chi^2(1, N=42) = 100, p = 0.0001$	Yes
2	Have you used e-learning resources in your B.Ed program teaching the course 'Understanding Disciplines and School Subjects' before?	 <p>A pie chart with a legend. The legend shows a blue circle for 'Yes' and a red circle for 'No'. The pie chart is entirely blue, with '100%' written in the center.</p>	100% faculty members said 'yes'	$\chi^2(1, N=42) = 100, p = 0.0001$	Yes

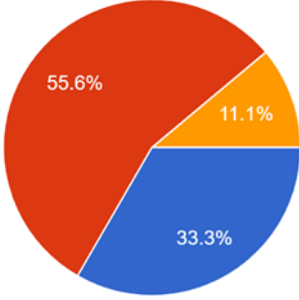
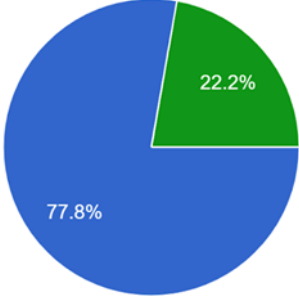
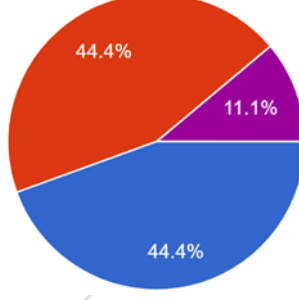
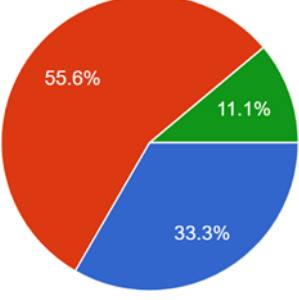
3	Have you developed e-learning resources in your teaching B.Ed program for the course 'Understanding Disciplines and School Subjects' before?	<ul style="list-style-type: none"> <li>● Yes</li> <li>● No</li> </ul> 	88.9% 'yes' 11.1% 'No'	$\chi^2(1, N=42) = 60.840, p = 0.0001$	Yes
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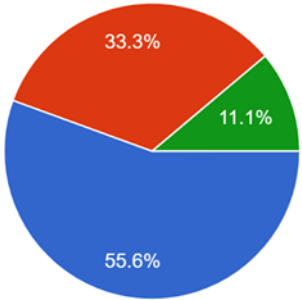
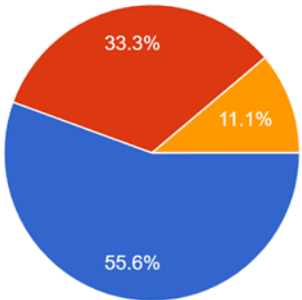
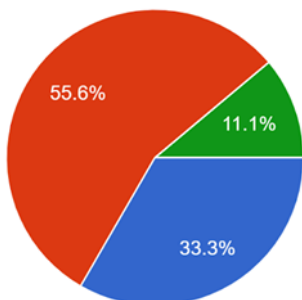
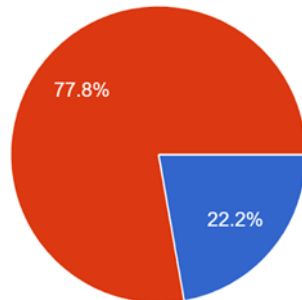
**Note:** The acronym and colour mentioned below are utilised.

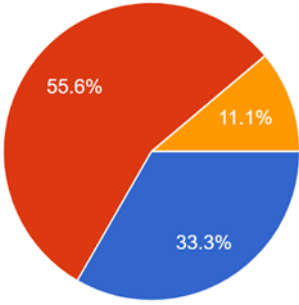
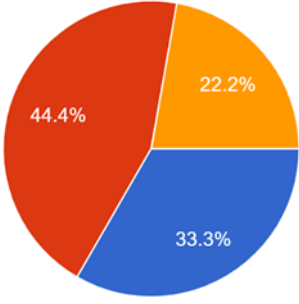
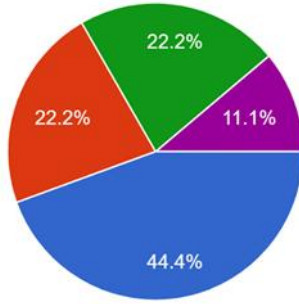
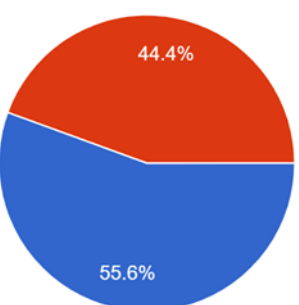
		<ul style="list-style-type: none"> <li>● Strongly Agree</li> <li>● Agree</li> <li>● Neither Agree nor Disagree</li> <li>● Disagree</li> <li>● Strongly Disagree</li> </ul>	SA: Strongly Agree A: Agree ND: Neither Agree nor Disagree D: Disagree SD: Strongly Disagree
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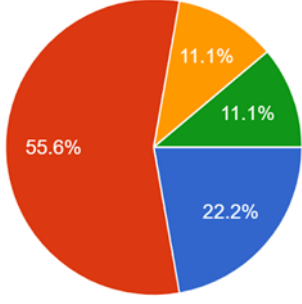
**Objective 2:** To understand B.Ed faculty members perception regarding the accessibility of e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.

4	I am comfortable with using technology for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 77.8% A: 11.1% ND: 11.1% D: 0% SD: 0%	$\chi^2(4, N=42) = 216.300, p = 0.0001$	Yes
5	I prefer 'Video lectures' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 44.4% A: 44.4% ND: 0% D: 11.1% SD: 0%	$\chi^2(4, N=42) = 100.800, p = 0.0001$	Yes

6	I prefer 'Interactive simulations' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 33.3% A: 55.6% ND: 11.1% D: 0% SD: 0%	$\chi^2(4,N=42)=117.300, p = 0.0001$	Yes
7	I prefer 'Online discussion forums' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 77.8% A: 0% ND: 0% D: 22.2% SD: 0%	$\chi^2(4,N=42)=228.400, p = 0.0001$	Yes
8	I prefer 'Quizzes and assessments' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 44.4% A: 44.4% ND: 0% D: 0% SD: 11.1%	$\chi^2(4,N=42)=100.800, p = 0.0001$	Yes
9	I prefer 'E-books or digital textbooks' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 33.3% A: 55.6% ND: 0% D: 11.1% SD: 0%	$\chi^2(4,N=42)=117.300, p = 0.0001$	Yes

10	I prefer 'Live virtual classes' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 55.6% A: 33.3% ND: 0% D: 11.1% SD: 0%	$\chi^2(4,N=42)=117.300, p = 0.0001$	Yes
11	I prefer 'Case studies and real-life examples' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 55.6% A: 33.3% ND: 11.1% D: 0% SD: 0%	$\chi^2(4,N=42)=117.300, p = 0.0001$	Yes
12	I prefer 'Live virtual classes with guest speakers' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.		SA: 33.3% A: 55.6% ND: 0% D: 11.1% SD: 0%	$\chi^2(4,N=42)=117.300, p = 0.0001$	Yes
<b>Objective 3:</b> To understand B.Ed faculty members perception regarding the usability of e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.					
13	I prefer a 'Desktop' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 22.2% A: 77.8% ND: 0% D: 0% SD: 0%	$\chi^2(4,N=42)=228.400, p = 0.0001$	Yes

14	I prefer a 'Laptop' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 33.3% A: 55.6% ND: 11.1% D: 0% SD: 0%	$\chi^2(4,N=42)=117.300, p = 0.0001$	Yes
15	I prefer a 'Tablet' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 33.3% A: 44.4% ND: 22.2% D: 0% SD: 0%	$\chi^2(4,N=42)=79.9, p = 0.0001$	Yes
16	I prefer a 'Mobile phone' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 44.4% A: 22.2% ND: 0% D: 22.2% SD: 11.1%	$\chi^2(4,N=42)=55.700, p = 0.0001$	Yes
17	I prefer the university's learning management system (LMS) using the Mobile apps for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 55.6% A: 44.4% ND: 0% D: 0% SD: 0%	$\chi^2(4,N=42)=153.600, p = 0.0001$	Yes

18	I prefer the university's learning management system (LMS) using the Websites for teaching the course 'Understanding Disciplines and School Subjects'.		SA: 22.2% A: 55.6% ND: 11.1% D: 11.1% SD: 0%	$\chi^2(4, N=42) = 93.100, p = 0.0001$	Yes
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### 10. Findings of the Study

The value of 'yes' is at its highest possible level. Hence, a significant proportion of faculty members responded affirmatively to the inquiry regarding their prior experience with e-learning.

The value of 'yes' is at its highest possible level. Hence, many faculty members responded affirmatively to the inquiry regarding their prior utilisation of e-learning resources in teaching the course 'Understanding Disciplines and School Subjects'.

The value of 'yes' is at its highest possible level. Hence, many faculty members responded affirmatively to the inquiry regarding development of e-learning resources in their teaching B.Ed programme for the course 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Strongly Agree' category. Hence, most faculty members strongly agreed with the statement, 'I am comfortable with using technology for teaching the course 'Understanding Disciplines and School Subjects'.'

The 'Strongly Agree' and 'Agree' categories each have an equal amount of weight in this calculation. Hence, most faculty members preferred 'Video lectures' as e-learning resources for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred 'Interactive simulations' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Strongly Agree' category. Most faculty members preferred using online discussion forums as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The 'Strongly Agree' and 'Agree' categories each have an equal amount of weight in this calculation. Hence, most faculty members preferred 'Quizzes and assessments as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred using e-books or digital textbooks as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Strongly Agree' category. Most faculty members preferred 'Live virtual classes' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Strongly Agree' category. Most faculty members preferred using case studies and real-life examples as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred 'Live virtual classes with guest speakers' as e-learning resources or tools for teaching the course of 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred 'Desktop' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred 'Laptop' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred 'Tablet' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Strongly Agree' category. Most faculty members preferred 'Mobile phone' to access e-learning materials for teaching the course 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Strongly Agree' category. Most faculty members preferred university's learning management system (LMS) using the Mobile apps for teaching the course 'Understanding Disciplines and School Subjects'.

The result that was recorded as being the highest was for the 'Agree' category. Most faculty members preferred the university's learning management system (LMS) using the Websites for teaching the course 'Understanding Disciplines and School Subjects'.

## **11. Discussion**

In the study, perceptions of e-learning resources, such as content quality, accessibility, and usability, as well as overall satisfaction with the e-learning teaching experience, were investigated. The findings of this study provide valuable insights into the views and experiences of e-learners, which can inform the development and enhancement of programmes for e-learning. The participants in the survey held a variety of opinions regarding the standard of the e-learning resources and content. Accessibility is a crucial factor in determining overall satisfaction among e-learners, which is the objective of this teaching. Several of the attendees underlined how important it is to make sure that the contents can be easily accessed across a variety of devices and operating systems. The ease of use had a substantial impact on the level of contentment experienced by online students when it came to the educational experience. A large number of participants said that they were pleased with their experience of using e-learning in the classroom, even though there are many different perspectives on the many different facets of using e-learning for educational purposes and the obstacles that come along with them.

## **12. Conclusion**

In a nutshell, the findings of this study have shed light on the myriad of viewpoints and experiences associated with e-learning. There is a considerable connection between the materials used for online education and the quality of the information, as well as accessibility, usability, and general satisfaction. E-learning service providers need to dedicate resources to improving the quality of the information they offer, giving accessibility a top priority, and continually working to make their platforms more straightforward to use to maximise the effectiveness of their courses.

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