International Journal on Science and Technology (IJSAT)
E-ISSN: 2229-7677 ● Website: www.ijsat.org ● Email: editor@ijsat.org

Attitude Towards E-Learning Among D.El. Ed and B. Ed DIET Students in Mizoram in Relation to Their Level of Semesters

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ABSTRACT

The present study is an attempt to find out the attitude of Mizoram DIET students toward e-learning and to compare their level of attitude with respect to their level of semester. A descriptive research method was adopted for the study and the investigators collected 353 samples by simple random sampling method from the eight different DIETs in Mizoram. The major finding showed that DIET students of Mizoram showed an average attitude toward e-learning. The findings also reveal that a significant difference in attitude toward e-learning was found out between first and third Semester D.El. Ed DIET students, the significant is in favour of third semester D.El. Ed students. However, no significant difference was found out between first and third semester B. Ed DIET students.

Keywords: Attitude, E-learning, D.El. Ed DIET students, B. Ed DIET students, Level of Semesters.

1. INTRODUCTION:

The 21st century is the digital age, an era of e-learning and the world of digital native people where information and knowledge in any field can be easily acquired at the tips of fingers through super high-speed internet-enabled smart phones within a second. All the required information and educational resources in any format can be accessed and downloaded for any purpose. Recent innovative e-learning strategies like Virtual classrooms, virtual reality, augmented reality, and game-based learning greatly leveraged the teaching-learning system to a new level. The recent practice of Artificial Intelligence Teachers (AI) to aid and substitute human teachers in various schools in different parts of the world may take over the role of human teachers in schools and higher institutions. In the future, there may be a time when students no longer need human teachers due to rapid advancement in e-learning and artificial intelligence where almost all the human tasks can be performed by artificial robots with ease and precision. So, it is high time to develop a positive attitude to be able to cope with those kinds of changes in technology to remain fit in today's highly competitive and sophisticated world. Policymakers and curriculum designers have to keep in mind the needs and integration of the most recent e-learning in the field of teacher education and school education.

According to Gordon Allport, “An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all

objects and situations with which it is related." Anastasia (1976), defined attitude as a tendency to react favourably or unfavourably towards a designated class of stimuli, such as a national or racial group, custom, or institution. An attitude is a dispositional readiness to respond to certain situations, persons, or objects. Attitude testing is essential to achieve several purposes such as, 'to what extent the necessary attitudes have been developed in the students', 'to enable the students to develop desirable attitudes', 'to help teachers understand students' attitudes predispose the person to action, 'to help the teacher in good teaching' and 'to help the students in their career plans'.

E-learning can be defined as the use of digital technologies and media to deliver, support, and enhance teaching, learning, assessment, and evaluation". (Armitage and O'Leary, 2003). The delivery of instruction, teaching, and learning through the use of electronic media is known as e-learning. It is the result of several components of a system cooperating. E-learning application systems include portals, virtual classrooms, learning management systems, resource management systems, multi-media recording systems, bulletin board systems, and teaching evaluation systems, according to Aixia and Wang (2011). The goal of e-learning is to enable students to complete their coursework and get a credential without having to physically attend classes or universities. In light of the significance of electronic resources, the Indian government has launched various radio and television programs to offer educational content.

2. RATIONALE OF THE STUDY:

The unprecedented COVID-19 pandemic lockdown greatly changed the mode of learning systems in various educational institutions and schools. There was a change from a traditional face-to-face mode to an online mode of teaching-learning processes, now we are already back to a face-to-face mode of learning system again. There is somehow a paradigm shift in the education system from a traditional face-to-face mode to an internet-mediated mode of learning. In the meantime, the various online platforms of education that we experienced during lockdown give us an insight into the field of distance online learning mode of education. It may be said that covid-19 lockdown is a blessing in disguise for the educational domain since it puts the education system into a whole new situation. It also brought out the mass development in the field of Information and Communication Technology (ICT) among students, parents, and teachers. The technology-mediated teaching-learning processes provide a wider knowledge to students and teachers.

We are living in the age of the digital world, where information and communication technology are part and parcel of society. There will be no single house where you cannot find at least one single electronic gadget, like a computer, laptop, smart television, smartphone, etc. The big breaking news, events, and incidents happening on other sides of the world can be seen and learned within a few seconds from our place. That is why it is important to make use of those kinds of electronic resources for teaching and learning purposes. This kind of transition is happening in other enterprises as well. Prospective teachers today need to stay updated in the field of ICT and online learning to be able to cope with the rapid advancement in this field of education. The current Diploma in Elementary Education (D.El.Ed) curriculum in Mizoram is out of date; it needs to be revised and updated according to the latest developments in the field of technology and other disciplines. The NEP 2020 also emphasized the integration of online learning and technology in education. Recent digital innovations in education, like virtual learning, augmented reality, and artificial intelligence need to be merged with the curriculum in

teacher educational institutions. Today's children are very smart in terms of handling electronic gadgets digital online gaming and others. So, the in-service and pre-service teachers today need to be charged and equipped with the latest knowledge of technology to be able to deal with the digital native children.

In the context of Mizoram, a proper detailed, comprehensive study of e-learning among prospective teachers seems to be very rare. Fanai et al. (2022) and Lalsangpuii et al. (2023) conducted a study similar to the present study, but they limited their study to the prospective teachers in Aizawl City only. The investigator feels that a more comprehensive and inclusive study on this topic is needed among District Institute of Education and Training (DIET) students since DIET students are the future teachers and builders of the nation at the elementary and secondary levels. A ground reality and current status of DIET students about their attitude toward e-learning is urgently needed to take further proper action to improve in this field. Realizing its relevance, importance, and need in today's digital education system and perfectly in line with NEP-2020, the study is conducted.

3. REVIEW OF RELATED LITERATURE:

Ali, Khalid and Sharma (2021) conducted a study on Online learning and students' academic performance: The mediating role of student engagement during the COVID-19. The results revealed that students in advanced semesters displayed higher self-regulation, contributing to a more positive e-learning attitude. Early semester students were more dependent on instructor guidance, making them less receptive.

Bhuvaneswari and Padmanaban (2012) conducted a study on the 'Attitude of Senior Secondary students towards e-learning'. The results revealed that attitudes towards e-learning among the students differed significantly according to their variables such as gender, subject specialization, parents' education, parents' monthly income, and school management.

Baber (2021) conducted a study on Social interaction and effectiveness of the online learning – A moderating role of maintaining social distance during the pandemic COVID-19. Found that student satisfaction and positive attitude increased with digital literacy, which was more prevalent in senior semesters.

Dhawan (2020) conducted an Online Learning: A Panacea in the Time of COVID-19 Crisis. Journal of Educational Technology Systems. The study revealed that Higher-semester students showed better engagement in online learning due to familiarity with course content and online platforms. Early-semester students struggled with motivation and time management.

Kumar and Sharma (2021) conducted a study on Attitude of university students towards online learning during COVID-19. The findings showed that Attitude towards e-learning improved with each semester, showing a positive correlation between academic progression and adaptability. First-year students felt isolated and missed the classroom environment more.

Mishra et al (2020) conducted a study on Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. It was found out that Final-year students were more comfortable with e-learning than first-year students. Experience with digital tools and academic independence influenced positive attitudes.

Periasamy (2019) in his research study "Attitude towards E-learning among the B.ED trainees". It was found that there is a significant difference between undergraduate and postgraduate student teachers, rural residents and urban residents of B.Ed trainees, and first-year and second-year B.Ed trainees. There is a significant difference among the groups of subject specialization of B.Ed. trainees. The science students have more mean scores of attitudes towards e-learning than the other groups. The humanity and social science students change their attitude to enhance the technology-based learning situations.

Rajan (2013) presented a paper on the topic 'Secondary Student Teachers' Attitude towards E-learning'. The study in his paper aims to analyze the attitude towards e-learning among secondary student teachers in the Puducherry region and examine the impact of some variables such as gender, literacy level, and basic degree on the attitude towards e-learning. The study shows that the secondary student teachers of Puducherry region have a positive attitude towards e-learning. There is no significant difference with respect to gender, although there is a difference in literacy level and type of basic degree of secondary student teachers.

Singh and Chauhan (2021) conducted a study on E-learning during COVID-19: Students' perception and experience. Students in their final semesters appreciated the flexibility of e-learning for exam preparation and internships. First-year students preferred traditional classrooms for foundational learning.

4. OBJECTIVES OF THE STUDY:

1. To compare the level E-learning attitude among D.El. Ed DIET students in Mizoram in relation to their level of Semesters.

2. To compare the level E-learning attitude among B. Ed DIET students in Mizoram in relation to their level of Semesters.

5. HYPOTHESES OF THE STUDY:

1. There is no significant difference in attitude towards E-learning between first semester and third semester D.EL. Ed DIET students in Mizoram.

2. There is no significant difference in attitude towards E-learning between first semester and third semester B. Ed DIET students in Mizoram.

6. RESEARCH METHODOLOGY:

A descriptive research method was employed for the present study, and a simple random sampling method was used to select the sample to be study.

6.1. Population and Sample:

All students of the eight Mizoram DIETs are the population of the study. A total of 353 sample students were selected by simple random sampling method for the study. The samples were grouped into two categories. Viz, one with D.El.Ed students of first and third semester and, the other with B.Ed students of first and third semester.

Table 1: Sample profile for the present study

Category of DIET students	Level of Semester	No. of students			Percentage
D.El.Ed	First Semester	161	286	353	20.68 %
	Third Semester	61			60.34 %
B.Ed	First Semester	77	353		75.92 %
	Third Semester	54			16.72 %

6.2. Tool used

Attitude Towards e-learning Scale (ATELS-RD) developed by Dimpal Rani was used to collect the data. It is a standardized tool used to measure the Attitude towards e-learning of a population above 14 years of age. The scale has four major areas, viz., 1. E-Learning interest, 2. Usefulness, 3. Ease of e-learning and 4. E-learning confidence.

6.3. Statistical technique used:

Collected data were analyzed by using descriptive statistics like Percentage, Mean, Standard deviation and inferential statistics like t-test

7. ANALYSIS AND INTERPRETATION:

7.1 Attitude towards E-learning between First semester and Third semester B.Ed DIET students.

Table 2: Level of E-learning attitude between First Semester and Third Semester B.Ed DIET students.

Level of E-learning attitude	First Semester		Third Semester	
	No. of Students	Percentage	No. of Students	Percentage
High	0	0 %	0	0 %
Above average	1	1.29 %	4	7.40 %
Average	52	67.54 %	26	48. 14 %
Below average	22	28.58 %	18	33.34 %
Low	2	2.59 %	6	11.12 %
Extremely low	0	0 %	0	0 %
Total	77	100 %	54	100 %

Table 2 shows that out of 77 first-semester B.Ed students of DIET, 67.54% (52) students show an average level of e-learning attitude which forms the majority. Meanwhile, 1.29 % (1) student shows above-average levels, 28.58% (22) students show below average and 2.59% (2) students show a low

level of e-learning attitude. There are no students belonging to high, extremely high, and extremely low levels of e-learning attitude.

Table 2 also shows that out of 54 third-semester B.Ed students of DIET, 48.1% (26) students show an average level of e-learning attitude which forms the majority. However, 7.40% (4) students show above-average levels, 33.34% (18) students show below average and 11.12% (6) students show low levels of e-learning attitude. There are no students belonging to high, extremely high, and extremely low levels of e-learning attitude.

Table 3: Comparison of E-learning attitude between First Semester and Third Semester B.Ed.

Level of Semester	**No. of students**	**Mean**	**SD**	**SED**	**t-value**	**DF**	**Significance level**
First Semester	77	223.74	13.57	2.69	1.35	129	Not significant
Third Semester	54	220.09	17.22				

From Table 3, it is seen that the calculated t-value was found to be 1.35 with a degree of freedom of 129, which is less than the critical values of 1.97 and 2.59 at 0.05 and 0.01 levels of significance. This indicates that there is no significant difference in attitude towards e-learning with respect to the level of semesters. So, the null hypothesis, 'There is no significant difference in attitude towards E-learning between First semester and Third semester B.Ed DIET students' is accepted. Although a significant difference was not observed, first-semester B.Ed DIET students have higher mean score values than third-semester B.Ed DIET students.

7.2. Attitude towards E-learning between First semester and Third semester D.El.Ed DIET students.

Table 4: Level of E-learning attitude between First Semester and Third Semester D.El.Ed .

Level of E-learning attitude	**First Semester D.El.Ed**		**Third Semester D.El.Ed**	
	No. of Students	Percentage	No. of Students	Percentage
High	1	0.62 %	0	0 %
Above average	1	0.62 %	0	0 %
Average	67	41.62 %	42	68.86 %
Below average	80	49.69 %	18	29.50 %
Low	11	6.83 %	1	1.64 %
Extremely low	1	0.62 %	0	0 %
Total	161	100%	61	100%

Table 4 shows that out of 161 B.Ed first semester students, 49.69% (80) students show below average level of e-learning attitude which forms the majority. Meanwhile, 0.62%(1) student shows high level, 0.62%(1) shows above average level, 41.62%(67) students show average level, 6.83%(11)

students show low level and 0.62%(1) student shows extremely low level of e-learning attitude respectively. There are no students belonging to extremely high levels of e-learning attitude.

Table 4 also shows that out of 61 third-semester students, 68.86% (42) students show an average level of e-learning attitude which forms the majority. However, 29.50% (18) students show below average, and 1.6 %(1) student shows a low level of e-learning attitude. There are no students belonging to above average, high, extremely high, and extremely low levels of e-learning attitude.

Table 5: Comparison of E-learning attitude between First and Third Semester D.El.Ed

Level of Semester	No. of students	Mean	SD	SED	t-value	DF	Significance level
First Semester	161	216.67	15.69	1.95	2.91	220	0.01
Third Semester	61	222.36	11.75				

Table 5 shows that the calculated t-value was found to be 2.91 with a degree of freedom of 220, which is higher than the critical value of 2.59 at a 0.01 level of significance. This indicates that there is a significant difference in attitude towards e-learning among D.El.Ed DIET students with regard to their level of the semester. So, the null hypothesis, 'There is no significant difference in attitude towards E-learning between First semester and Third-semester D.El.Ed DIET students' are rejected. A Computer study center was established in various DIETs which offered CCC and Diploma in Computer Application(DCA) courses for D.El.Ed students, where senior students enrolled in the said courses and have more engagement with technology which may be attributed to a higher level of e-learning attitude among third semester D.El.Ed students than first-semester D.El.Ed students.

8. FINDINGS:

1. There is no significant difference in attitude towards E-learning between first semester and third semester B.Ed DIET students in Mizoram**.**

2. There is significant difference in attitude towards E-learning between First semester and Third semester D.El.Ed DIET students in Mizoram. The significant is in favour of third semester D.El.Ed students.

9. CONCLUSION:

Today's world is a digital age, the age of technology, an era of e-learning and Artificial intelligence. Technology is involved in every enterprise in human society. Education is no exception where various hardware and software of computer technology are employed in teaching-learning processes in schools and colleges. There are always new inventions and new innovative ways of teaching and learning due to rapid advancements in technology. So, the prospective teacher of today needs to have a positive attitude toward e-learning and need to equip them with skills, aware of its utility and importance so that they will able to tackle effectively when the issues and challenges arise in the future of educational transformation. The teachers' education system should be revamped with the

integration of the most recent technology like Artificial intelligence and virtual classrooms to bridge the digital gap among prospective teachers.

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