

ATTITUDE TOWARDS DIGITAL LEARNING AND CLASSROOM BEHAVIOUR OF B.ED. TRAINEES IN SELECTED NORTHERN DISTRICTS OF TAMIL NADU

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ABSTRACT

The digital learning is having exclusive features that are highly useful for continuous and long term development of students and their learning behaviour in digital platforms. In recent times, digital learning is highly useful for all kind of educational institutions and it is enhancing learning activities of students and self efficacy and interaction are determining motivation and satisfaction of students in digital platforms and it is also influencing class room behaviour of students including B.Ed. trainees and in turn it is affecting their conduct, interaction, behaviour and learning activities in class room atmosphere. The findings explicate that significant difference is found amongst profile of B.Ed. trainees and their attitude towards digital learning. The attitude towards digital learning is having significant, positive and substantial relation with classroom behaviour of B.Ed. trainees. Hence, B.Ed. trainees should improve their personal interest and have positive attitude toward digital learning and their attitude must be enhanced through better interactive digital tools and personal services of their faculty members and parents. In addition, B,Ed, colleges and family should provide adequate digital infrastructure for improving their attitude towards digital learning and these measures will improve their classroom behaviour considerably and also their learning behaviour.

Key Words: Attitude, B.Ed. Trainees, Classroom Behaviour, Digital Learning

1. INTRODUCTION.

Digital learning is the most recent paradigm that uses information and telecommunication technologies for the activities related to teaching and learning and it is making them very easier through digital platforms (Al- Adwan et al 2013). Digital learning is user friendly, provides better communication among students and teachers to access information and learning materials(Hebert, 2016) and it also creates a lot of opportunities to students with powerful, effective and rich learning experiences and it is one of the modern learning technology that is significantly contributing to efficient learning among students(Khirwadkar et al 2013).

Digital leaning is highly convenient, time independence and it is useful for repetitive learning to students (Neelam, 2016). The approach of students towards digital learning is largely affected by characteristics of students, ease of use and excellence of learning through digital platforms, usability, skills and knowledge of students (Bhuasiri et al 2012). The digital learning is supported by digital learning tools and techniques and it is directly influencing involvement,

motivation, personal interest, and development of knowledge (Makani et al. 2016) and performance of students (Sapkota, 2015). The digital learning exhibits a higher probability that students will accept the new learning formant of digital learning (Amal and Miliszewska, 2014).

The digital learning is having exclusive features that are highly useful for continuous and long term development of students and their learning behaviour in digital platforms. In recent times, digital learning is highly useful for all kind of educational institutions and it is enhancing learning activities of students (Shieh and Hsieh, 2021) and self efficacy and interaction (Sandybayev, 2020) are determining motivation (Hongsuchon et al 2022) and satisfaction (Littlejohn et al 2016) amongst students in digital platforms and it is also influencing class room behaviour of students including B.Ed. trainees and in turn it is affecting their conduct, interaction, behaviour and learning activities in class room atmosphere. Thus, it is important to study attitude towards digital learning and classroom behavior of B.Ed. trainees.

2. LITERATURE REVIEW

Srivastava (2023) seen that B.Ed. students had good degree of attitude for e-learning and significant difference existed in attitude for e-learning among locality of B.Ed. students and difference was not significant among gender and type of college in their attitude for e-learning.

Sahu et al (2022) conceded that major proportion of undergraduate students were having below average degree of positive attitude for e-learning and disparity in attitude for e-learning among gender and streams of students was significant.

Masry-Herzallah and Stavisky (2021) revealed that students and teachers were having moderate and positive attitude towards online learning and their attitude on online learning had significant and positive relation with their use and abilities.

Nachimuthu (2020) indicated that student teachers had low degree of attitude for online learning and disparity in online learning amongst type of institution and subject group of student teachers was significant.

Faderogaya and Chantagul (2019) showed that university undergraduate students had moderate degree of attitude for e-learning and significant relation was prevailed among learning styles and attitude of undergraduate students for e-learning.

Bishnu (2018) found that higher secondary students were having positive attitude for use of e-learning materials and it had improved their learning and disparity was found significant in attitude for e-learning among gender and residential area of higher secondary students.

Dhas (2017) concluded that major portion of college students had moderate degree attitude for e-learning and significant disparity was not found among attitude for e-learning and gender, subject group and locality of college students.

Behera et al (2016) revealed that most of student teachers were having moderate level of attitude towards e-learning and no significant difference was prevailed in attitude towards e-learning with regarding to their profile.

Sebnmen (2015) indicated that high school students were having moderate degree of attitude towards e-learning and no significant disparity was found in attitude for e-learning

amongst their gender and experience in use of internet and motivation had increased their attitude toward e-learning.

Rhema and Miliszewska (2014) showed that engineering students had moderate and positive attitude towards e-learning and significant difference existed in attitude towards e-learning with respect to their gender.

3. OBJECTIVES OF THE STUDY

1. To find difference in attitude towards digital learning amongst gender, subject group and type of college of B.Ed. trainees.
2. To examine difference in attitude towards digital learning amongst location of college, medium of instruction and residential area of B.Ed. trainees.
3. To analyze relation amongst attitude towards digital learning and classroom behaviour of B.Ed. trainees.

4. HYPOTHESES OF THE STUDY

1. There is no significant difference in attitude towards digital learning amongst gender, subject group and type of college of B.Ed. trainees.
2. There is no significant difference in attitude towards digital learning amongst location of college, medium of instruction and residential area of B.Ed. trainees.
3. There is no significant relation amongst attitude towards digital learning and classroom behaviour of B.Ed. trainees.

5. METHODOLOGY

The Chennai, *Chengalpattu* and *Tiruvallur* districts in Tamil Nadu state are selected for conducting this study. B.Ed. trainees are chosen by adopting random sampling method and data are received from 945 B.Ed. trainees by using structured questionnaire. Percentage analysis is used to examine profile of B.Ed. trainees. t-test and ANOVA tests are employed to study difference in digital learning amongst profile of B.Ed. trainees. Correlation analysis is employed to study relation amongst attitude towards digital learning and classroom behaviour of B.Ed. trainees.

6. RESULTS

6.1. PROFILE OF B.ED. TRAINEES

The profile of B.Ed. trainees is shown in Table-1.

Table-1. Profile of B.Ed. Trainees

Profile	Frequency	%
Gender		
Male	434	45.93
Female	511	54.07
Subject Group		
Arts	361	38.20
Science	584	61.80
Type of College		
Government	94	10.05
Government Aided	241	25.50

Private	610	64.55
Location of College		
Urban	544	57.57
Rural	401	42.43
Medium of Instruction		
Tamil	348	36.83
English	597	63.17
Residential Area		
Urban	371	39.26
Semi – Urban	337	35.66
Rural	237	25.08

The results reveal that 54.07% of B.Ed. trainees are females, whilst, 45.93% of them are males, 61.80% of them are belonging to science group, whilst, 38.20% of them are belonging to arts group and 64.55% of them are studying in private colleges, whilst, 10.05% of them are studying in Government colleges. The results also imply that 57.57% of them are studying in colleges located in urban area, whilst, 42.43% of them are studying in colleges located in rural area, 63.17% of them are studying in English medium, whilst, 36.83% of them are studying in Tamil medium and 39.26% of them are residing in urban area, whilst, 25.08% of them are residing in rural area.

6.2. PROFILE OF B.ED. TRAINEES AND ATTITUDE TOWARDS DIGITAL LEARNING

The difference amongst profile of B.Ed. trainees and their attitude towards digital learning is shown as below.

6.2.1. Gender and Attitude towards Digital Learning

The difference amongst gender of B.Ed. trainees and their attitude towards digital learning is shown in Table-2.

Table-2. Gender and Attitude towards Digital Learning

Gender	N	Mean	SD	t-value	Level of Significance
Male	434	142.06	13.83	10.217	0.01
Female	511	156.44	26.39		

Female B.Ed. trainees (Mean=156.44) are having higher degree of attitude towards digital learning than male B.Ed. trainees (Mean=142.06). The t-value of 10.217 explains that significant difference is seen amongst gender of B.Ed. trainees and their attitude towards digital learning.

6.2.2. Subject Group and Attitude towards Digital Learning

The difference amongst subject group of B.Ed. trainees and their attitude towards digital learning is shown in Table-3.

Table-3. Subject Group and Attitude towards Digital Learning

Subject Group	N	Mean	SD	t-value	Level of Significance
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Arts	361	155.44	24.86	6.081	0.01
Science	584	146.37	20.53		

B.Ed. trainees in arts group (Mean=155.44) are having higher degree of attitude towards digital learning than science group (Mean=146.37). The t-value of 6.081 explains that significant difference is seen amongst subject group of B.Ed. trainees and their attitude towards digital learning.

6.2.3. Type of College and Attitude towards Digital Learning

The difference amongst type of college of B.Ed. trainees and their attitude towards digital learning is shown in Table-4.

Table-4. Type of College and Attitude towards Digital Learning

Type of College	N	Mean	SD	F-value	Level of Significance
Government	94	160.66	22.58	29.715	0.01
Government Aided	241	141.61	16.60		
Private	610	151.42	23.77		

B.Ed. trainees studying in Government colleges (Mean=160.66) are having higher degree of Attitude towards digital learning than private (Mean=151.42) and Government aided colleges (Mean=141.61). The F-value of 29.715 explains that significant difference is seen amongst type of college of B.Ed. trainees and their attitude towards digital learning.

6.2.4. Location of College and Attitude towards Digital Learning

The difference amongst location of college of B.Ed. trainees and their attitude towards digital learning is shown in Table-5.

Table-5. Location of College and Attitude towards Digital Learning

Location of College	N	Mean	SD	t-value	Level of Significance
Urban	544	153.08	23.44	5.186	0.01
Rural	401	145.44	20.90		

B.Ed. trainees studying in urban colleges (Mean=153.08) are having higher degree of attitude towards digital learning than B.Ed. trainees studying in rural colleges (Mean=145.44). The t-value of 5.186 explains that significant difference is seen amongst location of college of B.Ed. trainees and their attitude towards digital learning.

6.2.5. Medium of Instruction and Attitude towards Digital Learning

The difference amongst medium of instruction of B.Ed. trainees and their attitude towards digital learning is shown in Table-6.

Table-6. Medium of Instruction and Attitude towards Digital Learning

Medium of Instruction	N	Mean	SD	t-value	Level of Significance
Tamil	348	145.95	21.29	4.056	0.01
English	597	152.11	23.21		

B.Ed. trainees studying in English medium (Mean=152.11) are having higher degree of attitude towards digital learning than B.Ed. trainees studying in Tamil medium (Mean=145.95). The t-value of 4.056 explains that significant difference is seen amongst medium of instruction of B.Ed. trainees and their attitude towards digital learning.

6.2.6. Residential Area and Attitude towards Digital Learning

The difference amongst residential area of B.Ed. trainees and their attitude towards digital learning is shown in Table-7.

Table-7. Residential Area and Attitude towards Digital Learning

Residential Area	N	Mean	SD	F-value	Level of Significance
Urban	371	145.56	19.49	19.773	0.01
Semi – Urban	337	149.38	24.35		
Rural	237	157.17	23.21		

B.Ed. trainees residing in rural (Mean=157.17) are having higher degree of attitude towards digital learning than semi – urban (Mean=149.38) and urban areas (Mean=145.56). The F-value of 19.773 explains that significant difference is seen amongst residential area of B.Ed. trainees and their attitude towards digital learning.

6.3. RELATION AMONGST ATTITUDE TOWARDS DIGITAL LEARNING AND CLASSROOM BEHAVIOUR OF B.ED. TRAINEES

The relation amongst attitude towards digital learning and classroom behaviour of B.Ed. trainees was examined by applying correlation analysis and the result is shown in Table-8.

Table-8. Attitude towards Digital Learning and Classroom Behaviour of B.Ed. Trainees

Particulars	Correlation Coefficient
Attitude towards Digital Learning and Classroom Behaviour of B.Ed. Trainees	0. 0.428**

** Significance in 1% level

The coefficient of correlation amongst attitude towards digital learning and classroom behaviour of B.Ed. trainees is 0.428 and it shows that they have significant, positive and substantial relation among them.

7. CONCLUSION

The above findings elucidate that significant difference is found amongst profile of B.Ed. trainees and their attitude towards digital learning. The attitude towards digital learning is having significant, positive and substantial relation with classroom behaviour of B.Ed. trainees. Hence, B.Ed. trainees should improve their personal interest and have positive attitude toward digital learning and their attitude must be enhanced through better interactive digital tools and personal services of their faculty members and parents. In addition, B,Ed, colleges and family should provide adequate digital infrastructure for improving their attitude towards digital learning and these measures will improve their classroom behaviour considerably and also their learning behaviour.

REFERENCES:

- Al-Adwan, A., Al-Adwan, A., & Smedley, J. (2013). Exploring students acceptance of e-learning using technology acceptance model in Jordanian universities. *International Journal of Education and Development using Information and Communication Technology*, 9(2), 4-18.
- Amal Rhema, & Iwona Miliszewska. (2014). Analysis of student attitudes towards e-learning: the case of engineering students in Libya. *Issues in Informing Science and Information Technology*, 11, 169-190.
- Asmahan Masry-Herzallah, & Yuliya Stavisky. (2021). Thw attitudes of elementary and middle school students and teachers towards online learning during the corona pandemic outbreak. *SN Social Science*, 1(71), 1- 23.
- Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J.J. & Ciganek, A.P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. *Computers & Education*, 58(2), 843-855.
- Bishnu, G.C. (2018). Higher secondary level students' attitude toward use of e-learning materials in health and population education. *Journal of Health Promotion*, 6, 11-17.
- Dhamija Neelam.(2016).Attitude of undergraduate students towards the use of e-Learning. *MIER Journal of Educational Studies, Trends and Practices*, 4(1), 123-125.
- Hongsuchon, T., Emary, I. M. M. E., Hariguna, T., & Qhal, E. M. (2022). Assessing the impact of online-learning effectiveness and benefits in knowledge management, the antecedent of online-learning strategies and motivations: An empirical study. *Sustainability*, 14(1), 1-21.
- Jaya Singh Dhas. (2017). Attitude of college students towards e-learning. *International Journal for Research in Emerging Science and Technology*, 4(9), 13-23.
- Khirwadkar, A., Hewit, J., & Chaudhari, P. (2013). Exploring pepper to introduce e-learning for pre-service teacher education programme at the M. S. University of Baroda. *Indian Streams Research Journal*, 3(2), 1-15.
- Kisanga Dalton Hebert.(2016). Determinants of teachers' attitudes towards e-learning in Tanzanian higher learning institutions. *The International Review of Research in Open and Distributed Learning*, 17(5), 91-197.
- Littlejohn, A., Hood, N., Milligan, C., & Mustain, P. (2016). Learning in MOOCs: motivations and self-regulated learning in MOOCs. *Internet Higher Education*, 29(1), 40-48.
- Makani, J., Durier-Copp, M., Kiceniuk, D., & Blandford, A. (2016). Strengthening deeper learning through virtual teams in e-learning: A synthesis of determinants and best practices. *International Journal of E-Learning and Distance Education*, 31(1), 1-16.
- Nachimuthu, K. (2020). Student teacher's attitude towards online learning during covid-19. *International Journal of Advanced Science and Technology*, 29(6), 8745-8749.
- Namita Sahu, Venkateswar Meher, Sanjay Sahu, & Neena Dash.(2022). Undergraduate students' attitude toward e-learning: gender and stream of education perspectives. *The Online Journal of Distance Education and e-Learning*, 10(3), 425-434.

- Naga Subramani P.C., (2018). "Innovative Methods of Teaching and Learning", *Journal of Applied and Advanced Research*, V.3, n1, P. 20-22.
- Poonam Srivastava.(2023). A study on attitude of B.Ed. pupil teachers towards e- learning. *International Journal of Creative Research Thoughts*, 11(6), 18-24.
- Rhema, Amal, & Iwona Miliszewska.(2016). Analysis of student attitudes towards e-learning: The case of engineering students in Libya. *Issues in informing science and information Technology*, 11,169-190.
- Sandybayev, A. (2020). The impact of e-learning technologies on student's motivation: Student centered interaction in business education. *International Journal of Research on Tourism and Hospitality*, 6(1), 16-24.
- Santosh Kumar Behera, Sumit Sao, & Shili Mohamed.(2016). Attitude of B.Ed. student-teachers towards e-learning. *International Journal of Computer Science Engineering*, 5(6), 305-311.
- Sapkota, B.K. (2015). Effectiveness of information communication technology integrated pedagogy at secondary level. *Himalayan Journal*, 5(1), 68-76.
- Sebnmen, K. I. (2015). Investigation of students' attitudes towards e-learning interms of different variables. *Journal of Educational Research and Reviews*, 10(1), 81-91.
- Sharmila.V (2022) Impact of Mobile phone usage on the Academic Achievement of Higher Secondary students. *Akinik Publications*, New delhi ISBN 9783-93-5570-187-9
- Shannel Lee Faderogaya, & Natalie Chantagul.(2019). Learning styles and attitude towards e-learning among university undergraduate students in international program in Bangkok Thailand. *Scholar: Human Science*, 11(1), 118-122.
- Shieh, M.-D., and Hsieh, H.-Y. (2021). Study of influence of different models of e-learning content product design on students' learning motivation and effectiveness. *Frontiers in Psychology*, 12(1), 1-17.