

Attitude of Pre-Service Teachers of B.Ed.: Regarding Digital Literacy in The Teacher Education Programme in Nep2020

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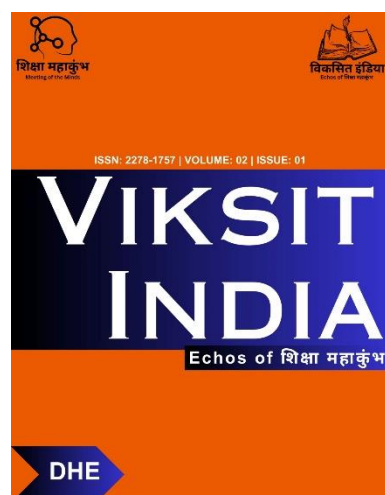
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Abstract

This research paper explores the perspectives of student teachers on the implementation of digital learning in the Indian education system, with a focus on the National Education Policy (NEP) 2020 recommendations. The study analyzes the advantages and challenges associated with online classes, digital literacy, infrastructure, and the role of teachers in fostering a digitally equipped society. The findings highlight the need for adequate training, improved internet accessibility, and the integration of technology in pedagogy to ensure the effectiveness of digital learning. The conclusion emphasizes the importance of a bi-directional relationship between technology and education in transforming the future of the nation's learners.

Keywords: NEP2020, Digital Literacy, Pre-Service Teachers

Introduction

The National Education Policy (NEP) 2020 in India has recommended the adoption of blended learning, integrating traditional and digital methods, to enhance the quality of education and prepare learners for the future. This study focuses on student teachers' perceptions and experiences with digital learning, aiming to shed light on the challenges and opportunities in implementing online classes, promoting digital literacy, and utilizing technology in pedagogy. COVID-19 impacted human life very badly in all areas. Schools were closed and children missed their peer group interaction through playing /sharing with each other during lockdown at the Primary, Elementary, and Secondary levels. Corona Virus impacted every sphere of life worldwide.

In 2020, the COVID-19 pandemic swept across the world, prompting the majority of nations to implement temporary school closures, affecting over 91 percent of students worldwide. As of April 2020, nearly 1.6 billion children and youth found themselves unable to attend school. Furthermore, approximately 369 million children who depended on school meals had to seek alternative sources for their daily nutrition. According to UNICEF schools for more than 168 million children globally had been completely closed for almost an entire year due to COVID-19 lockdowns.

Additionally, approximately 214 million children worldwide, constituting about 1 in 7 students, have experienced a disruption to their in-person learning, missing more than 75% of their regular school attendance. In India, the closure of 1.5 million schools during the 2020 pandemic and lockdowns profoundly impacted the education of 247 million children enrolled in elementary and secondary schools. Moreover, even prior to the onset of the COVID-19 crisis, over six million girls and boys were already out of school, highlighting pre-existing challenges in ensuring equitable access to education.

The non-profit organization Pratham's Annual Status of Education Report (ASER)¹ for 2021, which was based on a household telephonic survey conducted in rural areas of 581 districts across 25 states and three Union territories between September and October 2021, highlighted several effects of the Covid-19 pandemic on the Indian education system. The pandemic-induced financial constraints led to a significant migration of rural children away from private schools, while the prolonged closure of educational institutions further emphasized the reliance on paid tuition.

New Education Policy was launched in July 2020 with the mission to digitalize the Education System of India to enhance learning, and efficacy in evaluation, planning, and management at school and higher education level. Relationships in technology and education will help to bring progress in the teaching-learning process and outcomes. Digital knowledge of teachers can change the whole nation into digitally empowered people with the belief 'to modify the mode we live and alter the approach we teach students. NEP2020 emphasized digital literacy to equip society digitally. **In this research, researchers will study the attitude of Pre-service teachers of B.Ed. from Lingaya's Vidyapeeth, Faridabad towards digital literacy in the teacher education programme in NEP 2020.**

Objectives of the Study

- To get a better understanding of the concept of digital literacy.
- To assess the attitude of Pre-service teachers of B.Ed. from Lingaya's Vidyapeeth towards digital literacy.
- To suggest valuable points regarding digital literacy in teacher education programme as per NEP2020.

¹<https://www.pratham.org/2021/11/17/the-sixteenth-annual-status-of-education-report-rural-2021-released/>

Definitions

NEP2020- The National Education Policy of India 2020 (NEP 2020), which was started by the Union Cabinet of India on 29 July 2020, outlines the vision of the new education system of India.

Digital literacy - Digital literacy, is one of the challenges of integration of technology in academic courses (Blau, Shamir-Inbal & Avdiel, 2020)². Digital literacy refers to the set of competencies and skills needed to navigate a complex and fragmented information ecosystem, as defined by Eshet in 2004.

Pre-service Teacher Trainees- The term "Pre-service Teacher Trainees" refers to student teachers who are currently enrolled in a teacher education program and are actively working towards obtaining their teacher certification or degree.

Literature Review/Previous Studies/ Research

Nguyen, T. (2015)³ examined the evidence of the effectiveness of online learning by organizing and summarizing the findings and challenges of online learning into positive, negative, mixed, and null findings. The results indicated that there is robust evidence to suggest online learning is generally at least as effective as the traditional format.

Almendingen, K. et al (2021)⁴ conducted a study on the students in Public Health Nutrition in Norway to know their experiences with online teaching following COVID-19 lockdown. The results revealed that the students faced lack of social interaction, housing situations that were unfit for home office purposes, including insufficient data bandwidth, and an overall sense of reduced

³Nguyen, T. (2015) *The effectiveness of online learning: Beyond no significant difference and future horizons. MERLOT Journal of Online Learning and Teaching* Vol. 11, No. 2, June 2015. https://jolt.merlot.org/Vol11No2/Nguyen_0615.pdf

⁴Almendingen, K., Morseth, M.S., Gjølstad, E., Brevik, A. and Tørris, C. (2021). *Student's experiences with online teaching following COVID-19 lockdown: A mixed methods explorative study*: August 31, 2021 <https://doi.org/10.1371/journal.pone.0250378>

motivation and effort. The majority of students expressed their belief that pre-recorded and streamed lectures, frequent virtual meetings, and student response systems could enhance learning outcomes in future digital courses.

In a study conducted by Almahasees, Z., Mohsen, K., and Amin, M.A. (2021), involved 50 faculty members and 280 students, who shared their perceptions of online learning

during the COVID-19 pandemic. Both faculty and students acknowledged the challenges associated with online education, including difficulties faced by deaf and hard of hearing students, limited interaction and motivation, technical and Internet issues, and concerns about data privacy and security. Despite these challenges, they also concurred on the advantages of online learning, citing benefits such as self-paced learning, cost-effectiveness, convenience, and flexibility.

A study conducted by Gopal, R., Singh, V., and Aggarwal, V. (2021)⁵ aimed to explore the factors influencing student satisfaction and performance in online classes during the COVID-19 pandemic. The research involved 544 students enrolled in business management (B.B.A. or M.B.A.) or hotel management courses at various Indian universities. The findings revealed that factors such as the quality of the instructor, course design, prompt feedback, and students' expectations had a positive correlation with students' satisfaction. Furthermore, the study found that higher levels of student satisfaction had a positive impact on students' overall academic performance.

Sadiku, M. N. O., Adebo, P. O. and Musa. S. M. (2018)⁶ provided a brief introduction to online teaching and learning and concluded that Online courses are best taught when they are engineered to take advantage of the learning opportunities afforded by online technologies.

Statement of the problem- To study Attitude of Pre-Service Teachers of B.Ed.: Regarding Digital Literacy in Teacher Education Programme in NEP2020.

Delimitation of the study- Research is limited to B.Ed. trainees of Lingaya's Vidyapeeth only.

⁵ Gopal, R., Singh, V. and Aggarwal, V. (2021) *Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID-19. Education and Information Technologies* (2021) 26:6923–6947

⁶Sadiku, M. N. O., Adebo, P. O. and Musa. S. M. (2018). *Online Teaching and Learning: International Journals of Advanced Research in Computer Science and Software Engineering* ISSN: 2277-128X (Volume-8, Issue-2)

Design/Methodology-

This research study is qualitative and quantitative in nature. Opinionnaire with YES and NO options were developed with experts for B.Ed. first- and second-year trainees. Different dimensions of digital literacy were included. Percentage technique was adopted to analyze and interpretation of data with Purposive sampling of 25 trainees.

Results and Analysis: The following table presents the data collected from student teachers regarding their perspectives on digital learning in the present-day Indian education system. The data represents student teachers' responses, highlighting their views on various aspects of digital learning.

Table- 1 Opinionnaire with YES and NO options

S.NO.	CONTENT	YES %	NO%
1	On line classes are need of present-day society.	96	4
2	Computer/mobile skills are necessary for doing on line work.	100	-
3	Accessibility to internet connectivity at home for the on-line work is a big challenge in Indian context.	84	16
4	Face to face mode is better for effective learning.	100	-
5	On line learning is time saving process.	96	4
6	On line classes are motivating than face to face mode.	68	32
7	On line classes are helpful to ask questions from the teacher.	84	16
8	Quick answer can be received during on line classes.	80	20
9	Training of teachers are required for digital education.	96	4
10	Internet accessibility is necessary for digital learning.	96	4
11	Infrastructure improvement is biggest issue in digital education.	80	20
12	Bi-directional relationship between technology and education is an important base for digital learning.	100	-
13	Teacher can use digital literacy to make the assignments, evaluation purpose, and attendance of students, sharing of notes and on-line classes.	100	-
14	Teachers must use tech-based pedagogy from school to higher education.	100	-
15	Digital skills can convert the whole nation into a digitally equipped society.	96	4

Based on the data collected result and analysis are mentioned below:

- Online classes are a necessity in the present education system, offering time-saving benefits and facilitating access to education from remote locations.
- Digital literacy is crucial for effective online work, requiring computer/mobile skills to navigate and participate in digital learning environments.
- Despite the potential benefits of online classes, 84% of student teachers faced challenges in accessing internet connectivity at home, indicating a digital divide in the Indian context.
- The majority of student teachers (96%) acknowledged the need for teacher training to effectively utilize digital tools and platforms for education.
- While online learning was deemed time-saving and helpful for asking questions (96% and 84%, respectively), only 68% of student teachers found it more motivating than face-to-face learning.
- Rapid feedback and quick answers during online classes were appreciated by 80% of student teachers.
- Infrastructure improvement emerged as a significant concern for 80% of student teachers in ensuring successful digital education implementation.
- All student teachers recognized the bi-directional relationship between technology and education as a foundation for digital learning.
- Teachers' role in leveraging digital literacy for assignments, evaluations, attendance, and online classes was widely acknowledged by all student teachers.
- The vast majority (96%) believed that digital skills could transform the entire nation into a digitally equipped society.

Conclusion

The research findings reveal that digital learning holds immense potential in transforming the education landscape in India. The NEP 2020's recommendation of a blended mode of learning, combining traditional and digital approaches, aligns with the positive perceptions of student teachers towards online classes. The convenience and time-saving benefits of digital learning are evident, but challenges such as limited internet connectivity and the digital divide need urgent attention.

For digital learning to be effective, student teachers stress the significance of teachers' training to confidently integrate technology into pedagogy. This highlights the need for continuous professional development programs to empower educators with the skills and knowledge required for successful digital implementation.

Addressing the infrastructure issue is crucial for ensuring equitable access to digital education. Government and educational institutions must collaborate to improve internet connectivity and provide necessary resources to bridge the digital divide.

Despite the advantages of online classes, it is essential to strike a balance between face-to-face and online modes, as not all students find digital learning equally motivating. Teachers should employ a variety of engaging strategies to maintain student interest and participation.

The study emphasizes the bi-directional relationship between technology and education, where technology empowers teachers and learners, while educators harness technology to enhance teaching methodologies and improve learning outcomes.

In conclusion, this research advocates for a holistic approach to digital learning, recognizing that successful implementation requires addressing challenges such as internet accessibility, infrastructure improvement, and teacher training. By embracing digital literacy and integrating technology in pedagogy, India can pave the way towards becoming a digitally equipped society and prepare its learners for a future driven by technology.

Scope for future studies- The same study can be done in other colleges also of different states. It can also be undertaken on the students who are pursuing programs other than B.Ed.

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