



B. Ed Students Readiness for Using Technology in Teaching

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ABSTRACT

As we know there are massive transformations in technology which affects our everyday routine and process as well as lifestyle greatly. It also has an impact on teaching learning and educational environment. As a result of this, every individual related to education field must be ready to use and adopt technological skills related to teaching learning and evaluation.

By considering the need of the hour, the researcher has taken this effort to study the readiness of B.Ed. students related to use of technology in their teaching.

This study is based on data collected from randomly selected 140 B.Ed. students through an online questionnaire related to the use of technology in teaching. The collected data is analysed with percentages and content analysis of open-ended questions.

The findings of study concluded that most of the B.Ed. students know about technological aspects and even experienced its presentation but they are not much ready to use it in their teaching. It is also revealed that there is lack of training about innovative technologies for teaching. Thus, this study noted that there is a prior need of training programme based on AI tools for teaching and innovation in education, so as to prepare future teachers expected in NEP-2020.

Keywords: Technology, AI, Readiness, B.Ed. Students, NEP-2020

Introduction:

We are living in the world of technology which is ever growing and dynamic in nature. The technologies affect human life styles in various ways. We use technological devices and tools in Communication, Medical Science, Research, Engineering, Agriculture and Education also. After the technological advancement in mobile and internet networking apps, it is observed that we all are more inclined towards online learning and teaching. Actually, technological advancements are useful for accessing educational facilities anytime, anywhere.



Therefore, it is necessary to train the future teachers that are B.Ed. Students to be ready for online teaching.

NEP 2020 has recommended use of technology in education and for that teachers should be trained through Pre-service and In-service teacher education. As we know, the technologies based on Artificial Intelligence, Block Chain and Machine Learning would affect the future of education. It would change the methods of teaching, learning and assessment. Regarding this, the teacher education is undergoing massive changes in their curriculum, pattern and practical aspects about school experience which is based on NEP 2020.

In NEP 2020, the teaching preparation through Pre-service and In-service teacher education has been focused and should be based on use of technology in education. Identifying this, the researcher has made this attempt to study the education of B.Ed. Students for using technology in education regarding factors like their acceptance of technology, Information and Knowledge about new technology, use of technology in teaching and learning and to prepare teaching material for online education readiness.

By considering the scope and relevance of the study, the researcher has reviewed so many previous studies based on readiness of B.Ed. student for using technology in education. Few of relevant studies are mentioned here.

Review of Related Literature:

After taking this study, the researcher explored various research studies which focused on readiness of teachers or B.Ed. Students for using technology in teaching – learning from various countries.

A study in Ireland by Cowan, P.&et. al. (2021) revealed that readiness of pre-service Students of using ICT in their teaching in digital world depended on their own Confidence, their education background and the support of teacher education institute for innovative tools and mentoring form institute etc.

Linking to this, Shah and et.al. (2021) also reported that there is no clear difference in the motivation of using Information technology whereas experience has an impact over uses of IT in teaching and facing challenges regarding it. Another Study completed by Rahmania& et.al. (2022) revealed that teachers perceived importance and utility of mobile learning and also showed that teacher have good pedagogical and technical readiness. Lausa& et. al (2024)



Conducted Study in Philippine about readiness and exposure to ICT instructional resources among Pre-service teacher which resulted that Pre-service teachers are exposed to ICT in teaching and experience of using it which resulted to gain confidence to integrate ICT in teaching-learning process.

All these studies are related with readiness or preparedness of teachers and pre-services students for ICT integration in teaching which showed positive readiness of student teachers about it. Apart from these studies, the study conducted by Ayanwale& et.al (2022) on teachers readiness and intention to artificial intelligence in schools which revealed that there are so many factors like AI anxiety, perceived usefulness attitude toward AI, social usefulness, relevance, confidence, readiness and behavioural intention etc. are associated with each other.

By reviewing all these studies, the researcher noted that there are many studies focused on readiness of re-service teacher about using ICT in teaching, whereas this study aims to explore readiness of B.Ed. students' readiness of using technology including innovation like flipped classroom, online education, online examination, use of AI in teaching and upcoming changes expected in NEP 2020 regarding it.

Objectives:

This study had following objectives:

1. To explore B.Ed. Students readiness of using technology in education.
2. To understand the B.Ed. students' readiness level for using technology in education.
3. To suggest measures for inculcating practical aspects of using technology in education including new technologies like AI and online education.

Research Questions:

Research questions relating to above objectives here postulated as follows:

1. What did B.Ed. students' know about use of technology in their teaching practices?
2. What did they experience while using technology in their teaching practices?
3. How did they use technology in teaching learning and evaluation?
4. How did they become ready for becoming teachers in Digital world?
5. What were their expectations about changes in teachers education programme regarding practical's based on use of technology in education?



Research Methodology:

As this study was aim to know present conditions of readiness of B.Ed. students about using technology in education, data has been collected from randomly selected 140 B.Ed. students through survey by online questionnaire. The collected data has been analysed with percentages and content analysis of open-ended questions.

Analysis and Interpretation:

The collected data through online questionnaire has been analysed and presented in following tables:

Table No. 01
B.Ed. Students' knowledge about technology & its uses

Sr. No.	Responses of Students	Percentage %
01	Innovative technology tools for Teaching	62.8 %
02	Online educational platforms like SWAYAM & DIKSHA	52.2%
03	Teaching through MOODLE and Google classroom etc.	45.6%
04	Online examination & evaluation tool for formative and summative evaluation	61.5%
05	Online education resources & courses	64.6%

The table 01 showed that around 50% of B.Ed. Students Knows about technologies used in education for teaching learning and assessment as well as they know about open educational resources and courses.

Table No. 02
B.Ed. Students' experience of using technology in teaching

Sr. No.	Responses of Students	Percentage %
01	Use of PPT's in Teaching	62.8%
02	Used online Teaching video's	20.2%
03	Use of mobile apps in teaching	14.6%
04	Apps for assessment & testing	10.8%
05	Used open educational resources	10.2%



It is interpreted from table 2, that most of B.Ed. Students used PPT's for their teaching practices and very few of them attempt to used other technologies related with online education and assessment.

Table No. 03

Readiness of B.Ed. Students for using technology in education

Sr. No.	Responses of Students	Percentage %
01	Ready to use computer-based practices like PPT	62.2%
02	Can use online teaching methods & tools	18.8%
03	Can adopted innovative technology in teaching	12.4%
04	Adopted all technology for education based on AI & online education	4.2%

From the above table, we interpret that most of B.Ed. Students' ready for computer based technologies only but they are not much ready for teaching in Digital world of tomorrow which is based on AI & Online education.

Table No. 04

Expectations of B.Ed. Students form TEI for using technology

Sr. No.	Responses of Students	Percentage %
01	Practical activities (on AI & Online education) should be part of B.Ed.	84.02%
02	Workshop on online education and examination	76.6%
03	Different innovative technologies should be demonstrated in B.Ed. itself	70.2%
04	Teacher educators should be mentors in educational technology	69.8%

It is observed that most of the B.Ed. Students expected that B.Ed. curriculum, teaching and practical activities should be related to use of AI and new technology in education practices like teaching learning & evaluation.

Findings and Discussion:

The interpretation and findings of this study showed that most of B.Ed. Students has Knowledge about use of technology in education theoretically but they are not prepared fully



to adopt it in their teaching practices. They need practical knowledge of using technological based on AI as well as need facilities for using it and mentoring from their teacher educations.

It is also found that some of them experienced online educational resources and courses available through platforms like SWAYAM & DIKSHA but they don't have applicability of it in their own teaching practices.

Conclusion:

NEP 2020 has been implemented in India with a wide vision of accessibility and inclusion of every person in education system. For achieving this goal of NEP 2020, the 'Digitalization of Education' would play an important role and teachers' readiness for the Digital Education is key requirement. In this regard, the restructuring of teacher education programme has been suggested by NCTE also.

Therefore, by considering the need of the future education system, we have to inclined towards inclusion of technology in teaching, learning and evaluation and for this we have to undertake pre-service and in-service teacher training programmes so as to prepare future teachers equipped with Digital Skills for online education based on AI and other innovative technologies.

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