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RESEARCH ARTICLE

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DIGITAL LITERACY OF TEACHER TRAINEES: ISSUE PERSPECTIVES

*¹Dr. R. Balamurugan and ²Dr. S. Ravivarman

¹Post-Doctoral Fellow of ICSSR, Department of Education, Tamil University, Thanjavur

²Associate Professor, Department of Education, Tamil University, Thanjavur

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*Corresponding author:

Dr. R. Balamurugan

ABSTRACT

Digital devices and applications are widely used by Institutions. Various committees and commissions have also emphasized digital technologies in the educational field. NEP 2020, NCTE regulation 2014 has also emphasized Digital literacy and its applications of ICT in the teaching-learning process. The government of India has launched various programmes like the Digital India campaign, e-pathshala, NROER, Swayam, Swayamprava, NDL India, etc. for facilitating the use of ICT in Education. The present study is intended to find out the aspects and issues of digital literacy of teacher trainees in Tamil Nadu. Based on the descriptive survey method 40 B.Ed. teacher trainees in Tamil Nadu were selected through the Random sampling technique. Data was collected through a self-developed questionnaire with the help of Google Forms. The study found that the majority of teacher trainees can change screen brightness and contrast, minimize, maximize, and move window screens, use search commands to locate a file and download and install applications on their devices. Most of them are aware of computer hardware devices and are able to operate those. Also, they used digital technologies for searching, sharing, and collecting data for Educational practices. Google Meet is popularly used as an Online teaching application. As per the study's conclusion, suggestions were provided for the teacher trainees viz., Workshops, Symposium, and seminar programs, appointing sufficient computer instructors, and providing adequate infrastructure for digital learning for enhancing digital literacy.

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INTRODUCTION

"If a student is not fluent in multiple forms of media, I would venture to say that they won't necessarily be considered literate"

-Nichole Pinkard, Founder, Digital Youth Network (2016)

The meaning of literate is not merely mean the ability to read and write rather it includes the ability to use ICT tools, applications, use of modern technologies, solve mathematical problems by using smart applications etc. According to Gilster (1997), digital literacy refers to the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers. In this context, digital literacy has become more than the ability to use computers, and smartphones and do the numerical calculation with the help of calculators. It consists of the creation, consumption, location, and communication of digital content through the help of social networks and various professional skills, and a wide range of services.

Review of related literature: Recently many researchers have conducted various studies in the field of digital literacy at different levels of education. Digital literacy is not a reality that has favored the teaching-learning process and a training program is urgently required for teachers to reach optimal levels of digital skills, so as to undergo a true paradigm shift, ultimately coordinating methodology and educational strategies (Cristina et al. 2021). Educational institutions should conduct plenty of research when bringing the right technology for different educational initiatives (Dhawan 2020). Higher secondary school teachers from English medium, teachers from urban areas, and matriculation higher secondary school teachers are better in their ICT awareness than their counterparts (Sivasankar and Dutta 2019) found that young users of digital media are more efficient and comfortable than adult users as adult users show fear and uncomfortable to use digital technologies Jayavel, 2019) in his study teaching competency of English teachers in relation to digital literacy, work values, and personality traits found that English language teachers are having a high level of teaching competence, digital literacy is average, positive work values and desirable personality. There is a positive and significant relationship between teaching competence and digital

literacy, work values, and personality traits of English language teachers.

Statement of the problem: Digital literacy is the ability to prepare, transact, and evaluate different works with the help of digital technologies which is the need of the hour. Hence the study is entitled "Digital Literacy of Teacher Trainees: Issue Perspectives".

Objectives of the study

The present study has the following objectives:

1. To study the status of digital literacy of B.Ed. Teacher Trainees.
2. To find out the challenges faced by the teacher trainees while using digital technologies.
3. To study the purpose of using digital devices by the teacher trainees in the teaching-learning process.

METHODOLOGY

For conducting the present study descriptive survey method was used to examine the Issues and Aspects of digital literacy of B.Ed. Teacher Trainees. For selecting the sample, the present study used a Random sampling technique. The sample was selected from different Teacher Education Institutions (TEIs) from different districts in Tamil Nadu. 40 numbers of teacher trainees (18 male and 22 female) were selected.

Tools Used: A self-developed questionnaire consisting of 34 objective types and 2 open-ended questions based on different aspects of digital literacy, its use, competency of teacher trainees of using digital technologies, general awareness, problems in TEIs, and strategies to improve the condition formulated by the researcher. The validity of the tool was ensured by taking the comments of experts.

Data Analysis and Interpretation: As per the objectives of the study, the collected data are analyzed by using frequency and percentage and qualitative descriptions. The detailed analysis and interpretation are given below:

Indicates that the typing skill, computer literacy, internet literacy, digital literacy, and web search skills of B.Ed. Teacher Trainees are good i.e. around 50%. Very few teacher trainees have very poor digital literacy skills.

- 1) Indicates the digital device using skills. 65% of teacher trainees said that they can change screen brightness and contrast whereas 87.5% said that they can minimize, maximize and move the windows. Scan disks/pen drives for viruses and writing files onto USB drive activity is not satisfactory in them as only 32.5 % of teacher trainees said that they can do these. Creating and uploading web pages can't be done by most of the teacher trainees. But downloading and installing applications as well as social media use can be done by most of them i.e. 82.5% and 95% respectively.
- 2) Indicates general awareness of teacher trainees on digital devices. Most of the teacher trainees (82.5%) said that they understand the basic functions of computer hardware components but only 2.5% of the teacher trainees has a personal home page and portfolio. Most of them are using a computer for the teaching-learning process. 67.5% of teacher trainees agreed that working something on a computer screen is comfortable.
- 3) Indicates the purpose of using digital technologies in the teaching-learning process by the teacher trainees. Most of them are using digital technologies for sharing notes with students in online mode (67.5%) and collecting resources for teaching (63.5%). Only 25% of teacher trainees agreed that they are preparing online exercises, tasks, and digital materials for the students. Only a few of them (20%) know how to provide feedback in online mode.

- 4) Reflect upon the factors that affect the digital literacy of the teacher trainees. Most of them (85%) state that training is not sufficient.

Major Findings of the Study

The following are the major findings of the study:

- 1) Typing skills, computer literacy, internet literacy, digital literacy, and web search skills of B.Ed. Teacher Trainees are good i.e. around 50%. Very few trainees have very poor digital literacy skills.
- 2) 65% of teacher trainees said that they can change screen brightness and contrast whereas 87.5% said that they can minimize, maximize and move the windows. Scan disks/pen drives for viruses and writing files onto USB drive activity is not satisfactory in them as only 32.5 % of teacher trainees said that they can do these. Creating and uploading web pages can't be done by most of the teacher trainees. But downloading and installing applications as well as social media use can be done by most of them i.e. 82.5% and 95% respectively.
- 3) Most of the teacher trainees (82.5. %) said that they understand the basic functions of computer hardware components but only 2.5% of the teacher trainees has a personal home page and portfolio. Some teacher trainees (57.5%) said they can do computer shortcut key functions. Most of them are using a computer for the teaching-learning process. 67.5% of teacher trainees agreed that working something on a computer screen is comfortable.
- 4) Most of the teacher trainees are using digital technologies for sharing notes with students in online mode (67.5%) and collecting resources for teaching (63.5%). Only 25% of teacher trainees agreed that they are preparing online exercises, tasks, and digital materials for the students. Few of them (20%) know how to provide feedback in online mode.
- 5) Most of them (85%) state that training is not sufficient. Though there are satisfactory supporting resources around half of the teacher trainees agreed that due to lack of time, knowledge on digital literacy, essential skills, and facilities the process of digital literacy is hampering.
- 6) Most of the teacher trainees use Google Meet and Zoom apps to teach the students in Online mode.
- 7) Due to insufficient training digital literacy level is low in Tamil Nadu, therefore, each and every TEIs should have adequate computer facilities and computer teacher trainees. In-service training programs should be done frequently in order to shutout the problems.
- 8) Teacher trainees below the age group of 35-40 are more efficient in using digital technologies than adults.

Educational Implications of the Study

- 1) The study will be helpful for teacher trainees to adopt innovative approaches to improve classroom transactions.
- 2) The study will be helpful for the all-around development of the TEIs process.
- 3) The study will be helpful for organizing the in-service training programme for digital literacy.
- 4) The study will be helpful for administrative bodies in organizing in-service training for teachers to equip them with new knowledge and skills for making classrooms effective.
- 5) This will be very helpful for distance learners.
- 6) Online learning programs are especially to meet the educational challenges in the pandemic situations.
- 7) It will also be helpful for the administrative bodies as well as the government for creating innovative strategies to improve the TEIs conditions in Tamil Nadu with reference to digital literacy.

Suggestions for further Research: The present study is confined to checking the issues as well as the aspects of digital literacy of B.Ed. Teacher Trainees in Tamil Nadu. It can be suggested that comparative studies between Govt. and private TEIs can be undertaken. The status

of digital literacy of Government, Government Aided and Private TEIs teacher trainees can also be studied. Comparative studies can be undertaken between various levels of education.

CONCLUSION

It is concluded that digital devices and applications are widely used by TEIs. Various committees and commissions have also emphasized to use of digital technologies in the educational field. NEP 2020, and NCTE regulation 2014 have also emphasized digital literacy and applications of ICT in the teaching-learning process. The government of India has launched various programmes like the Digital India campaign, e-pathshala, NROER, SWAYAM, SWAYAMPRAVA, NDL India, etc. for facilitating the use of ICT in an educational context. In the present study, it is clear that most of the teachers are competent in using smartphones but due to lack of training and guidance programs they are unable to use the resources properly. Therefore, the Government should take the initiative for shutting out the problem by undertaking frequent in-service training programs as well as providing sufficient infrastructure to the TEIs.

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