A study on the perceptions of student teachers towards digital tools

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Abstract

Digital learning is revolutionizing the field of education. It is emerging as the most promising learning method replacing traditional learning. But the fact remains that teachers find it difficult to switch to digital learning mode or apply digital learning tools effectively in the classroom teaching learning process The primary focus of this study is to understand the perception of the student teachers at various levels about the digital tools and their competencies to use them in the classroom. In the present study a descriptive method is used to study the perceptions of student teachers towards digital tools. The sample consisted of 128 student teachers from different teaching training programs like Diploma in Elementary Education(D.El.Ed.),Bachelor of Education (B.Ed.) etc.

Keywords: Digital tools, awareness, attitude level, student teachers.

Introduction

"Technology will never replace great teachers, but in the hands of great teachers, it's transformational." – George Couros.

Teachers generally like to rely on traditional methods of teaching. The chalk and duster system is followed not just in this nation but also across the globe. But this pandemic of COVID 19 has brought about the previously known, tried and tested method to an abrupt halt. And it can be taken as an opportunity to open the doors of technology into the classroom. Earlier studies have indicated that even though many schools have digital infrastructure like computer labs, many teachers use it more frequently for administrative purposes rather than for teaching learning transactions.

One of the reasons behind this may be that teachers lack proficiency in the use of digital learning tools leading to the fact that these tools remain unused to their full potential. The usage of digital tools in teaching by a teacher educator for enhancement of learning process, gives an example to the students on how ICT can be used in imparting education.

This study is focused on to perception of student teachers at diploma and undergraduate level about various digital tools and their competencies to use them in the classroom.

The studies by Udhaya Mohan Babu on the awareness of e-learning among B.Ed. students has revealed that that more than 50% of the student-teachers have average level of awareness towards the internet[1]. The studies on the attitude of B.Ed. Student-Teachers in Purulia District of West Bengal by Behera *et al* concluded that their attitude are neither more favorable or unfavorable towards E-learning[2].

Grove has conducted a study on preparing students to use ICT and commented that use of ICT in teaching is clearly a complex process, and its outcome is controlled by a variety of factors[3]. Seda while studying the E-learning approach in teacher training, has developed a model on simulation that were appropriate to teacher training programs and could successfully be administered to large groups[4]. A study by Nithya on the awareness on e resources among B.Ed. student teacher pointed out that there exists no significant difference among B.Ed. student teachers with respect to the awareness about e-resources and E-resource technology[5]. The study by Olaniran *et al* on assessment of the utilization level of E-Learning Resources among ODL based Pre-Service teacher trainees has concluded that pre service teachers' level of utilisation of these tools to learn is high whereas the level of utilisation of these tools to teach is remarkably low[6].

Objectives of the study: i. To identify the level of awareness of student teachers about digital tools in teaching learning process, ii. To identify the level of awareness of student teachers about digital tools in teaching learning process with respect to (a) Type of course (D.El.Ed./B.Ed.), iii. To check the attitude of student teachers about usage of digital tools in teaching learning process, iv. To check the attitude of student teachers about usage of digital tools in teaching learning process with respect to (a) Type of course (D.El.Ed./B.Ed.).

Methodology

The researchers have adopted a descriptive method to study the perceptions of student teachers towards digital tools. The sample consisted of 128 student teachers from different teaching training program like diploma level (D.El.Ed.) and at undergraduate (B.Ed.) level. A researcher made questionnaire was used in the study.

The tool consisted of two parts: the first part contained statements intended to check the awareness level of student teachers about digital tools. The second part contained statements to check their attitude towards its use. The scoring of the second part was done using a five point Likert Scale. In addition to this personal details about the student teachers like type of course (D.El.Ed,B.Ed.) was also collected.

Results and discussion

The collected data have been analysed and is represented in graphical form.

To find out the level of awareness of student teachers about digital tools in teaching learning process: As shown in the Figure-1, 52.3% of student teachers had low awareness of digital tools while 47.7% of student teachers had high awareness of digital tools. The share of student teachers showing higher awareness towards digital tools are less. Even though the student teachers use digital tools they lack specific knowledge pertaining to the varied use of the digital tools. In the present scenario where the online classroom transaction has become the only mode, attention should be given to improve awareness of student teachers about digital tools.
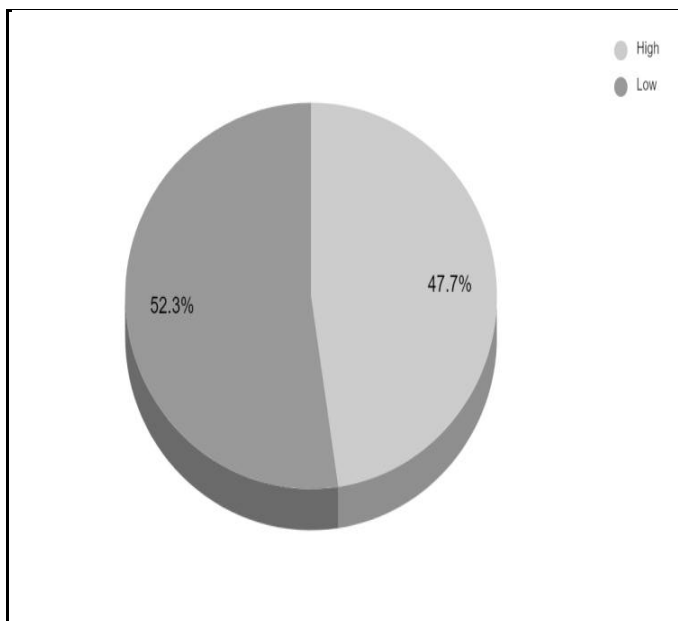

Figure-1: Awareness level of student teachers about digital tools.

To identify the level of awareness of student teachers about digital tools in teaching learning process with respect to: Type of course (B.Ed.): As shown in the Figure-2, 64.4% of B.Ed. students showed high awareness about digital tools, while 35.6% showed low awareness about digital tools. It can be inferred that majority of B.Ed. students had high awareness about digital tools. This can be due to the fact that B.Ed. students have been using digital tools more frequently as part of their studies at graduation level or at B.Ed. level.
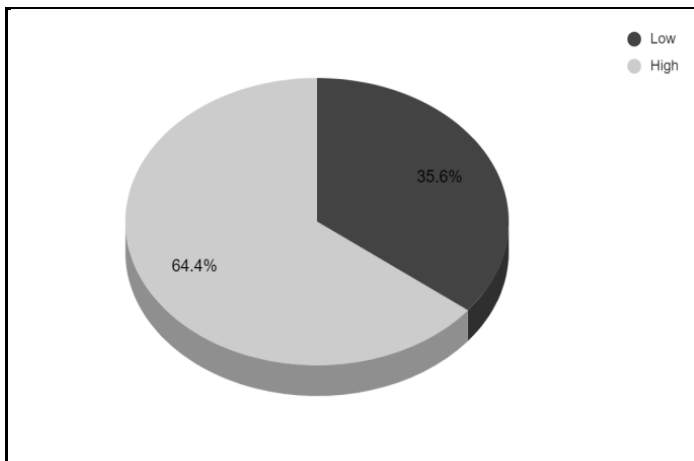

Figure-2: Awareness level of B.Ed. students towards digital tools.

Type of course D.El.Ed.: As shown in the Figure-3, 65.2% of D.El.Ed. students showed low awareness about digital tools, while 34.8% showed high awareness about digital tools. It can be inferred that majority of D.El.Ed. students had low awareness about digital tools. D.El.Ed. students join the course after their higher secondary course, where in use of ICT tools are not much prevalent. However it is very important for the student teachers at elementary teacher education level to be well versed in the use of digital tools. During online classroom instruction mode, teachers have to use a variety of media to sustain the attention of their students.
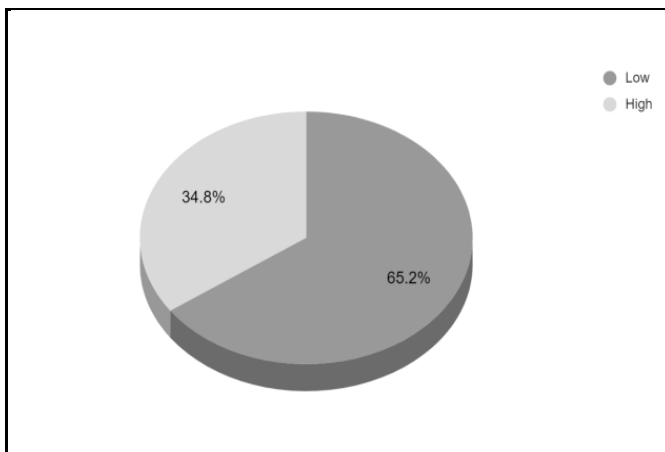

Figure-3: Awareness of D.El.Ed. students towards digital tools.

To check the attitude of student teachers about usage of digital tools in teaching learning process: As shown in the Figure-4, 10.2% of student teachers showed low attitude level towards digital tools, 79.7% showed moderate attitude level while 10.2% showed very high attitude level towards digital tools. It can be inferred that majority of student teachers showed moderate level of attitude towards digital tools.
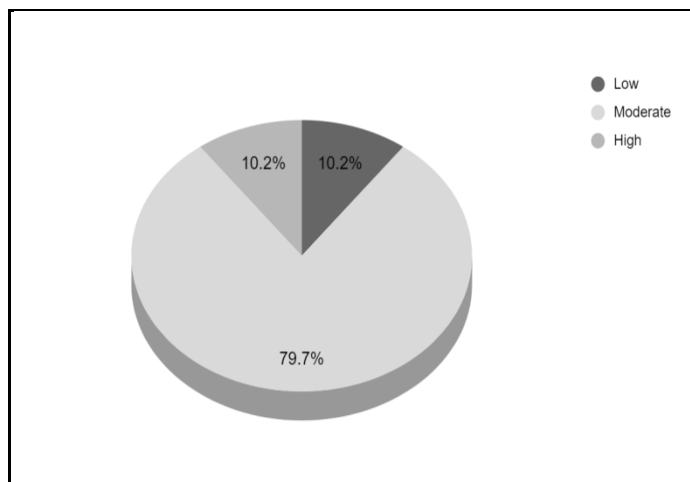
Figure-4: Attitude of student teachers towards digital tools.

To check the attitude of student teachers about usage of digital tools in teaching learning process with respect to: Type of course (B.Ed.): As shown in the Figure-5, only a meager 5.1% of B.Ed. students showed low attitude level towards digital tools, 84.7% showed moderate attitude level while 10.2% showed very high attitude level towards digital tools. It is seen that majority of B.Ed. student showed moderate level of attitude towards digital tools. The very low percentage of lower level of attitude towards digital tools can be due to high level of awareness possessed by majority of B.Ed. students.
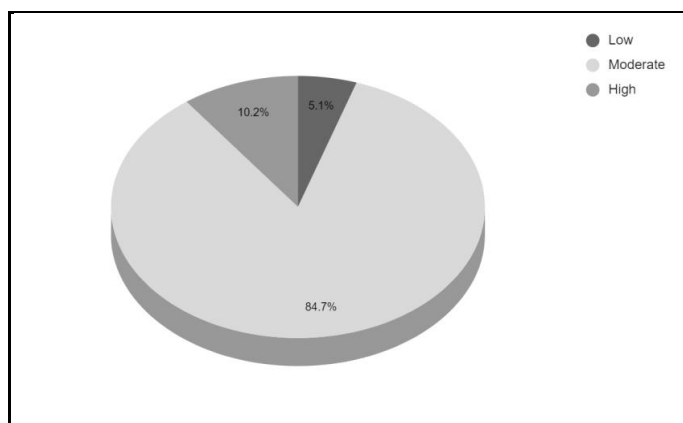

Figure-5: Attitude of B.Ed. student teachers towards usage of digital tools.

Type of Course (D.El.Ed.): As shown in the Figure-6, 14.5% of student teachers showed low attitude level towards digital tools, 75.4% showed moderate attitude level while 10.1% showed very high attitude level towards digital tools. It can be seen that the percentage of students having low attitude is greater than the percentage of students showing high attitude towards digital tools. This can be attributed to low level of awareness about digital tools possessed by majority of D.El.Ed. students.
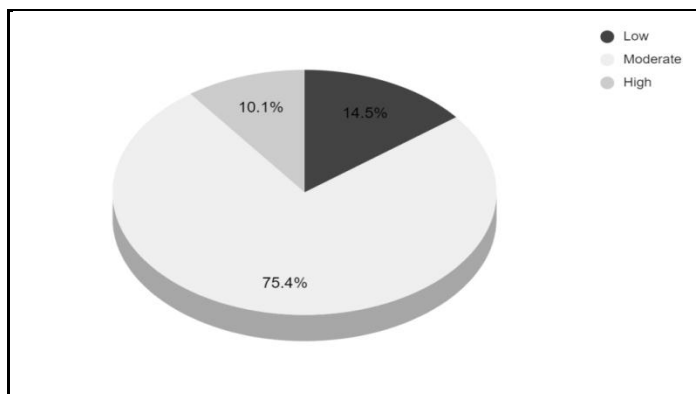

Figure-6: Attitude of D.El.Ed. student teachers towards usage of digital tools.

Conclusion

This study can form a part of any line of investigation in education, with respect to digital literacy and competency of the student teachers. Furthermore it also brings to light the difference in the aptitude and attitude at the two levels of teacher education system. The analysis shows that the use of digital tools correlates with the student teachers level of digital competence. Attitudes have a stronger impact than digital competence regarding to what extent digital tools are being used. The most important thing is that student teachers need to be prepared to use these technologies effectively and to narrow down the gap between the two levels of teacher education.

Thus digital literacy should be highlighted in the teacher education curriculum, as we are moving towards becoming a world of digitally rich environments.

Acknowledgement

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