Challenges in Using ICT Tools Among Student Teachers

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***Abstract*—The present study has investigated the challenges in using ICT tools among student teachers. The main aim of the study is to find the significant difference between Male and Female Student teachers on challenges in using ICT tools, and also the significant difference between the Student teachers with UG and PG as their basic qualification. Random sampling technique was used in the selection of 200 student teachers as sample for the study. Usage of ICT Tools in Teaching (2023) scale was constructed and validated by the investigator was used for the study. The results indicated that, there is no significant difference between Male and Female Student teacher's on challenges in using ICT tools. And, there is no significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools.**

***Index Terms*—ICT tools, Student Teachers, ICT usage.**

I. INTRODUCTION

Information and communications technology (ICT) is an important part of most organizations these days (Zhang & Aikman, 2007). Computers began to be used in schools in the early 1980s, and several scholars suggest that ICT will be an important part of education for the next generation (Bransford, Brown & Cocking, 2000). Dawes (2001) stated that new technologies have the potential to upkeep education across the curriculum and deliver opportunities for efficient student-teacher communication in ways not possible before. ICT in education has the potential to transform teaching. Besides, the schools began to use standardized evaluation and automatic scoring technology at the same time, which helped to make large-scale testing convenient and cost-effective (Alruwais, Wills &Wald, 2018). ICT provides distance learners the ability to use online instructional materials, access them easily, and provide additional tools for resource-based learning to the learner (Laronde, 2017).

II. SIGNIFICANCE OF THE STUDY

Technology should be used as a tool to support educational objectives such as skills for searching and assessing information, cooperation, communication and problem solving which are important for preparation of students for the knowledge society (Drent & Meelissen,2007). The aim of this research was to find the challenges faced the student teachers in using ICT in their teaching-learning process. Although ICT may facilitate independent self-paced learning, the potential of ICT may not be optimized if there is no shift in the learning and teaching paradigm(Bangkok,2004). Also, many teachers lack the knowledge of how to properly incorporate technology in the classroom (Doering, Huffman & Hughes, 2003).The present study investigates the significant difference between male and female, student teachers with undergraduate and post graduate as their basic qualification.

III. OBJECTIVES

1. To find the significant difference between Male and Female Student teacher's on challenges in using ICT tools.
2. To find the significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools.

HYPOTHESES

1. There is no significant difference between Male and Female Student teacher's on challenges in using ICT tools.
2. There is no significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools.

IV. REVIEW OF RELATED LITERATURE

Nicholas Zaranis, (2016) studied the usage of Information Communication and Technology (ICT) in kindergarten for teaching Mathematics through Realistic Mathematics Education (RME). The main objective of the study was to find the effect of Information Communication and Technology (ICT) on Mathematics of Kindergarten students. Kindergarten students were divided into two groups. The experimental group consisted of one hundred and sixty five students, whereas the control group had one hundred and seventy students. Experimental group students received Information Communication and Technology (ICT) based education, whereas the control group students were not exposed to Information Communication and Technology (ICT) based education. Both the groups were pre- tested and post - tested. It was found that teaching through Information Communication and Technology (ICT) had a positive effect in learning 'addition' among the kindergarten students.

Muthulakshmi, (2016) investigated the effectiveness of Multimedia Packages to develop attitude towards Mathematics. The main objective of the study was to examine the effectiveness of Multimedia in Mathematics. According to homogeneity in the quarterly marks in Mathematics and the Intelligence test score, the students were divided in control and experimental group. Each group consists of twenty one students. A topic was chosen from IX standard Mathematics book. Content was taught through Traditional method for control group and through Multimedia Based Teaching for experimental group. Pre-test and post-test design was adopted. Significant difference was observed between scores of control group and experimental group towards Mathematical Attitude.

STATEMENT OF THE PROBLEM

The present study is entitled as "Challenges in using ICT tools among student teachers"

SAMPLE OF THE STUDY

Random sampling technique was used in the selection of 200 student teachers as sample for the study.

RESEARCH INSTRUMENT

Usage of ICT Tools in Teaching (2023) scale was constructed and validated by the investigator.

HYPOTHESES TESTING

Hypothesis-1

There is no significant difference between Male and Female Student teacher's on challenges in using ICT tools.

Table 1 't' value showing the significant difference between Male and Female Student teacher's on challenges in using ICT tools.

Category	Gender	N	Mean	SD	't'-value	significant
Gender	Male	74	114.62	8.22	0.58	Not Significant
	Female	126	113.74	11.19		

It is observed from the table 1, the calculated t-value (0.58) is lesser than the table value (1.96) at 0.05 level. Thus it is inferred that there is no significant difference between Male and Female Student teacher's on challenges in using ICT tools. And hence the null hypothesis is accepted.

Hypothesis-2

There is no significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools.

Table 2 't' value showing the significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools.

Category	Basic Qualification	N	Mean	SD	't'-value	Significant
Basic Qualification	UG with B.Ed	85	114.58	9.28	0.61	Not significant
	PG with B.Ed	115	113.68	10.82		

It is observed from the table 2, the calculated t-value (0.61) is lesser than the table value (1.96) at 0.05 level. Thus it is inferred that there is no significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools. And hence the null hypothesis accepted.

V. FINDINGS OF THE STUDY

1. There is no significant difference between Male and Female Student teacher's on challenges in using ICT tools.
2. There is no significant difference between Student teachers with UG and PG as their basic qualification on challenges in using ICT tools.

VI. CONCLUSION

This study identified the challenges in using ICT tools in teaching and learning in the classroom among student teachers. Based on the study, the findings indicate that there is no significant difference on the challenges in using ICT tools in teaching and learning among student teachers with respect to gender. Also, findings show that, that there is no significant difference on the challenges in using ICT tools in teaching and learning in the student teachers with respect to student teachers those who possess Undergraduate degree and post graduate degree. Student teachers need to find ways to solve problems that they face in the usage of ICT tools.

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