

Student Teachers' ICT Interest

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Abstract

This study examines the student teachers' ICT interest. ICT can be a rich resource for teachers of all kinds to use various education setting. It allows teachers to interact with other professionals and take advantage of resources beyond the limits of their school or community. ICT helps in providing a catalyst for rethinking teaching practice (Flecknoe, 2002). ICT interests increase the interaction and reception of content method of teaching. The investigator has taken 200 student teachers randomly selected from 3 B.Ed. College in Kumbakonam taluk of Thanjavur District, Tamilnadu, India selected by lottery method. For collection of data the investigator has used ICT interest inventory constructed and validated by him and t-test has also used for analysis and interpretation data. The result of the study reveals that the student teachers ICT interest is high. So curriculum frame works have begun to incorporated standards for teaching students with ICT.

Key word

Technology, ICT, Student Teachers.

Introduction

The developments of ICT have revolutionized the world. The use of Information and Communication Technology (ICT) in and for education is rapidly expanding in many countries and is now seen worldwide as both a necessity and an opportunity for improving and enhancing the education offered to citizens across the globe (UNESCO, 2006). The education has undergone change to modern education due to information and communication technology. ICT may serve as a tool to curriculum differentiation, providing opportunities for adapting the learning content and tasks to the needs and capabilities of each individual pupil and by providing tailored feedback (Smeets, 2005). The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counselling, interactive voice response system, audiocassettes and CD ROMs etc have been used in education for different purposes (Bhattacharya and Sharma, 2007). The use of ICT can save time for other activities in class because the instructor can post subject materials blogs and social media so that students can have access to them, and thus time that would have been used going through those materials in class can be used for other activities. Students using ICTs for learning purposes become immersed in the process of learning (Jonassen and Reeves, 1996). The use of ICTs in the classroom that support constructivist learning experiences, better assess the depth of their understanding of content and processes. Giving an extraordinary source of information, with a combination of text, video, audio, graphic, and movie thus the ICT interested students in their learning. Students have to access knowledge via ICT to keep pace with the latest developments (Plomp, et al. 2007).

ICT can be a rich resource for teachers of all kinds to use various education setting. It allows teachers to interact with other professionals and take advantage of resources beyond the limits of their school or community. ICT can be a powerful tool for helping teachers with all the different parts of their job: enhancing instruction, simplifying administrative tasks and fostering professional growth activities and development of critical thinking and problem solving ability. ICT has the potential to enable teachers and students to construct rich, multi-sensory, interactive environments with an almost unlimited teaching and learning potential (Balanskat, et al. 2006). ICT gives many innovation ways to improve the effectiveness of instruction. But ICT have been unreliable and under supported and there has been

a lack of technical confidence among teachers. The use of ICT in education does not eliminate the teacher, it only changes his role as the teacher is required to plan and organise learning and to help individual students. Teachers were encouraged to take advantages of ICT in teaching and learning in order to produce a big impact in education field (Romai, 2003). The role of teacher from a disseminator of information to a learning facilitator, helping student as they actively engage with information and materials to construct their own understanding.

Review of Related Studies

Iwona and Ewa (2010) studied about the interest in ICT studies and careers- perspectives of secondary school female students from low socioeconomic backgrounds. Their investigation focused on girls from schools in the Western suburbs of Melbourne, Australia, home to families with low socio-economic status and students exposed to "educational disadvantage." Their article outlines the demographic background of the participating girls, their experiences with ICT, self-efficacy of ICT skills, and their preferences for future studies and careers in ICT. It also analyzes factors that might have influenced the girls' interest towards ICT studies and careers, including their ethnic background, exposure to ICT at school and home, and perceptions of ICT. They found that, overall, female students had positive perceptions of ICT; however, this interest did not translate into consideration of ICT as a career choice.

Yusuf and Balogun (2011) examine that the student-teachers' competence and interest towards information and communication technology: a case study in a Nigerian university. The paucity of studies on ICT integration in the developing nations needs to be addressed. so as to ensure total integration of ICT in the school curriculum. Their study examined empirically student-teachers' competence and attitude towards information and communication technology. Findings revealed that majority of the student-teachers have high interest of the use of ICT and they are competent in the use of few basic ICT tools. Their findings of the study have paved the way to a number of conclusions. First of all, our teachers seem to be highly eager to apply ICT in and outside their classroom. Such a high interest and fascination in ICT tools within the field of education should be wisely employed by the educators.

Okorieocha and Eronini (2016) investigated that the effect of information and communications technology (ICT) on student's interest in basic electricity. The interest of students' taught with

ICT was compared with that of those taught with the conventional teaching methods (CTM). Three research questions guided the study while three null hypotheses were tested. A quasi-experimental design was used. Population of the study was 123 students. Basic electricity interest inventory (BEII) instrument was developed, validated and used for data collection. Reliability of BEII was 0.94. Mean and standard deviation were used to answer the research questions while ANCOVA was used to test the hypotheses. Findings of the study revealed that ICT has significant effect on students' interest in basic electricity. The effect of ICT and gender combined in students' interest in basic electricity was significant. ICT is a necessary instructional technique to enhance students' interest. It is recommended that government and professional bodies like Nigerian Association of Teachers of Technology (NATT) should organize workshops, conferences and seminars as to train and encourage teachers on the use of this innovative technique.

Importance of The Study

Mundy (2012) agrees and states, "The use of technology in the classroom allows students to engage in an active way of thinking and hands-on learning experiences which they are able to practice executing skills that would be impossible with a traditional book lesson". ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change (Davis and Tearle, 1999). ICT helps in providing a catalyst for rethinking teaching practice (Flecknoe, 2002). ICT interests increase the interaction and reception of content method of teaching. Technology and computers have not been fully integrated in the learning of traditional subject matter, the commonly accepted rhetoric that education systems would need to prepare citizens for lifelong learning in an information society boosted interest in ICTs (Pelgrum and Law 2003). For the above reason the researcher has made an attempt to study on student teachers' interest in ICT.

Objectives of The Study

The following are the objectives formulated by the investigator for the present investigation:

1. To study the student teachers' ICT interest,
2. To study if there is any significant difference between the male and female student teachers in respect of their ICT interest,
3. To study if there is any significant difference between student teachers residing in rural areas and urban areas in respect of their ICT interest,
4. To study if there is any significant difference between student teachers studying in arts subject and science subject in respect of their ICT interest.

Methodology

Research design- The investigator adapted normative survey method to pursue his study.

Sample and sampling technique- The sample comprises 200 randomly selected student teachers from 3 B.Ed. College in Kumbakonam taluk of Thanjavur District, Tamilnadu, India selected by lottery method.

Tool- The tool ICT interest inventory constructed and validated by the investigator used for collecting the data. It consists of 30 items. Each item consists of three statements A, B & C. out of

the three statements; one is concerned with ICT interest where as the other two express activities not related to ICT. If the student teachers select the statements pertaining to ICT interest he/she will be given one mark for that item. If he/she selects any other statement no mark will be given. The score ranges from 0-30. Therefore if one who gets a score 15 and above indicates high level of ICT interest and a score below 15 indicates low level of ICT interest. For the present tool validity was established by taking the opinion of experts and teachers who were active ICT users across various faculty and relevant changes were made hence the tool has got content and constructs validity. Reliability was found by cronbach's alpha (0.86) and tool was found to be reliable.

Data analysis and interpretation: The data was analysed through descriptive as well as inferential statistics. The normality of data is assessed by calculating the values of mean, median, S.D. In order to study the significant difference in ICT interest with regard to gender, residence and optional subject t-test was employed.

Table-1 : Mean and standard deviation of the ICT interest of the student teachers

Variables	N	Mean	SD
Entire sample of student teachers	200	22.22	4.04

It is evident from the table-1 the calculated mean and standard deviation of ICT interest of entire sample of student teachers is found to be 22.22 and 4.04 respectively which shows that the student teachers have high level of ICT interest.

Table-2 : Significance of the difference between the means of the ICT interest scores based on Gender

Variables	N	Mean	SD	't' Value	Significance at 0.05 level
Male student teachers	51	24.12	3.02	4.69	Significant
Female student teachers	149	21.57	4.14		

It is evident from table-2 the calculated 't' value is 4.69, which is significant at 0.05 level. Hence it is inferred that there is a significant difference between male and female student teachers with respect to their ICT interest.

Table-3 : Significance of the difference between the means of the ICT interest scores based on Residence

Variables	N	Mean	SD	't' Value	Significance at 0.05 level
Student teachers residing in rural area	135	22.04	3.95	0.86	Not Significant
Student teachers residing in urban area	65	22.58	4.27		

It is evident from table-3 the calculated 't' value is 0.86, which is not significant at 0.05 level. Hence it is inferred that there is a no significant difference between student teachers residing in rural area and urban area with respect to their ICT interest.

Table-4 : Significance of the difference between the means of the ICT interest scores based on Optional subject

Variables	N	Mean	SD	't' Value	Significance at 0.05 level
Student teachers studying in Arts subject	104	23.39	3.45	4.43	Significant
Student teachers studying in Science subject	96	20.94	4.26		

It is evident from table-4 the calculated 't' value is 4.43, which is significant at 0.05 level. Hence it is inferred that there is a significant difference between student teachers studying in Arts subject and Science subject with respect to their ICT interest.

Important Findings

The following are the important findings obtained from the present investigation:

- I. The entire samples of the student teachers have high level of ICT interest. This trend is seen in respect of the sub-samples, too.
- II. There is a significant difference between the male and female student teachers in respect of their ICT interest.
- III. There is no significant difference between student teachers residing in rural areas and urban areas in respect of their ICT interest.
- IV. There is a significant difference between student teachers studying in arts subject and science subject in respect of their ICT interest.

Conclusion

The interest of information and communication technologies can make revitalize teachers and students. The teachers can make their teaching attractive, engaging and lively by information and communication technology. ICT helps students to their learning by improving the communication between them and the instructors (Valasidou and Bousiou, 2005). This also can help to improve and develop the quality of education. Present study reveals that ICT interest is high. So curriculum frame works have begun to incorporated standards for teaching students with ICT.

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