Awareness on Technology Based Education by the Student Teachers

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Abstract- Present education system aims at providing the teacher and the learner to be a literate of Technology and hence technology based education is the need of the hour. Exposure to the use of technology in the teaching and learning process makes the teacher and the student to learn things effectively. In this paper an attempt is made by the researcher to explore the awareness of technology based education by the student teachers. Survey method was adopted in this study. 91 student teachers in the B.Ed College have been selected as sample by simple random sampling technique. Among 91 respondents 68 are female and the remaining 23 are male more exposed to the use of technology. The study found that there is no significant difference in intellectual domain of student teachers based on gender. There is significant difference in emotional domain of student teachers based on gender. With regard to the educational qualification (UG and PG) there is no significant difference among student teachers based on intellectual and emotional domains. As far as the type of family (Nuclear and Joint) there is no significant difference among student teachers based on intellectual and emotional domains.

Index Terms- Domains, Internet, Technology, Teacher Education, Professional practice

I. Introduction

Education is the core concept that creates an interface between the teacher and the taught. In the process of learning the teacher aims at providing knowledge to the taught through various means and methods. The system is called traditional method of learning but the present education system aims at providing the teacher and the learner to be a literate of technology. Technology improves the quality of education by facilitating learning by doing, real time conversation, delayed time conversation, directed instruction, self-learning, problem solving, information seeking and analysis, and critical thinking, as well as the ability to communicate, collaborate and learn [19]. Possessing the knowledge of technology is really the need of the hour. The need of technology knowledge is very much required for teachers in order to carry out the process of teaching and learning smoothly [16]. Teachers demand special attention because they have special needs and interest that must be addressed with respect and ingenuity in order to make them embrace the new technologies placed in the classroom [9]. In order to improve the pedagogy, teachers need training on technology which motivates the students as well as the teachers [15] .Technology has enhanced teachers' professional knowledge, skill and capabilities by extending their subject knowledge, enabling planning and preparation for teaching to be more efficient[8]. A change in teachers permeates to all aspect of growth and advances needed in teaching-learning processes and scientific developments. Teachers' knowledge of technology for teaching and learning, problem solving skills, capacity building and other germane issues relating to education cannot be undervalued. For teachers to be able to cope with these functions of electronic technologies there is the need for the right attitude to be cultivated towards technology as a tool for teaching and learning.

II. Objectives

- To study the awareness of student teachers on technology based education
- To study the influence of technology on the intellectual aspect of student teachers.
- To study the influence of technology on the emotional domain of student teachers.

III. Hypothesis

1. There is no significant difference between Male and Female student teachers' in the awareness of technology.
2. There is no significant difference in the intellectual domain of student teachers based on gender
3. There is no significant difference in the emotional domain of student teachers based on gender
4. There is no significant difference between Under Graduates and Post Graduates student teachers' towards the awareness of technology.
5. There is no significant difference in the intellectual domain of student teachers based on Educational qualification
6. There is no significant difference in the emotional domain of student teachers based on Educational qualification
7. There is no significant difference the between the Nuclear and Joint family student teachers' towards the awareness of technology.
8. There is no significant difference in the intellectual domain of student teachers based on the type of family
9. There is no significant difference in the emotional domain of student teachers based on the type of family

IV. Materials and Methods

Survey method is adopted by the researcher to examine the level of awareness of the technology based education by student teachers. Data was collected through questionnaire distributed among 91 student teachers in a college of education. Simple random sampling technique was adopted in this study.

The researcher developed a closed ended questionnaire which consists of 48 items with two dimensions namely intellectual and emotional. Out of total 48 items, 11 items were for personal profile, 13 items to assess the awareness of technology, 9 items were for intellectual domain and 15 items regarding emotional domain. The questionnaire has five options such as: Always, Often, Seldom, Never and Undecided.

For establishing face validity and content validity, the tool was given to a panel of experts. Based on their expertise, the tool was fine-tuned with necessary modification. Cronbach's Alpha test was adopted to measure the reliability of tool because Cronbach's alpha test determines, how closely related a set of items are as a group or the internal consistency or average correlation of items in a survey instrument to establish its reliability (Reynaldo & Santos 1999, Bruin, 2006). The reliability coefficient for the tool is 0.512.

Hypothesis 1 There is no significant difference between Male and Female student teachers' awareness on technology

Table 1: Shows the awareness of technology based on gender

Gender	Mean	S.D	Statistical inference
Awareness on technology			
Male (n=23)	41.65	7.352	T=1.360 Df=89
Female (n=68)	39.29	7.130	.177>0.05
			Not Significant

From the above table the p value 0.177>0.05 shows that there is no significant difference between Male and Female student teachers' awareness on technology.

Hypothesis 2 There is no significant difference in intellectual domain of student teachers based on Gender

Table 2: Shows the Intellectual domain of student teachers based on gender

Intellectual domain	Mean	S.D	Statistical inference
Male (n=23)	33.35	4.820	T=.664 Df=89
Female (n=68)	32.54	5.077	.508>0.05 Not Significant

From the above table the p value 0.508>0.05 shows that there is no significant difference between Male and Female student teachers in intellectual domain.

Hypothesis 3 There is no significant difference in emotional domain of student teachers based on Gender

Table 3: Shows the Emotional domain of student teachers based on gender

Emotional domain	Mean	S.D	Statistical inference
Male (n=23)	53.26	7.563	T=2.474 Df=89
Female (n=68)	47.59	10.061	.015<0.05 Significant

From the above table the p value 0.015>0.05 shows that there is significant difference between Male and Female student teachers in emotional domain.

Hypothesis 4 There is no significant difference between UG and PG student teachers' awareness on technology.

Table 4: Shows the awareness of technology based on Educational qualification

Degree	Mean	S.D	Statistical inference
Awareness on technology			
UG (n=82)	40.22	7.392	T=1.319 df=89
PG (n=9)	36.89	4.676	.190>0.05 Not Significant

From the above table the p value 0.190>0.05 shows that there is no significant difference between UG and PG student teachers' awareness on technology.

Hypothesis 5 There is no significant difference in intellectual domain of student teachers based on Educational qualification

Table 5: Shows the Intellectual domain of student teachers based on Educational qualification

Intellectual domain	Mean	S.D	Statistical inference
UG (n=82)	32.84	4.968	T=.541 df=89
PG (n=9)	31.89	5.510	.590>0.05 Not Significant

From the above table the p value 0.590>0.05 shows that there is no significant difference between UG and PG student teachers in intellectual domain.

Hypothesis 6 There is no significant difference in emotional domain of student teachers based on Educational qualification

Table 6: Shows the Emotional domain of student teachers based on Educational qualification

Emotional domain	Mean	S.D	Statistical inference
UG (n=82)	49.06	9.791	T=.114 df=89
PG (n=9)	48.67	10.173	.909>0.05 Not Significant

From the above table the p value 0.909>0.05 shows that there is no significant difference between UG and PG student teachers in emotional domain.

Hypothesis 7 There is no significant difference between Nuclear and Joint family student teachers' awareness on technology.

Table 7: Shows the awareness of technology based on type of family

Type of family	Mean	S.D	Statistical inference
Awareness on technology			
Nuclear (n=53)	40.92	7.656	T=1.629 df=89 .107>0.05 Not Significant
Joint (n=38)	38.45	6.383	

From the above table the p value 0.107>0.05 shows that there is no significant difference between Nuclear and Joint family student teachers' awareness on technology.

Hypothesis 8 There is no significant difference in intellectual domain of student teachers based on type of family

Table 8: Shows the Intellectual domain of student teachers based on type of family

Intellectual domain	Mean	S.D	Statistical inference
Nuclear (n=53)	33.13	4.682	T=.866 df=89 .389>0.05 Not Significant
Joint (n=38)	32.21	5.428	

From the above table the p value 0.389>0.05 shows that there is no significant difference between Nuclear and Joint family student teachers intellectual domain

Hypothesis 9 There is no significant difference in Emotional domain of student teachers based on type of family

Table 9: Shows the Emotional domain of student teachers based on type of family

Emotional domain	Mean	S.D	Statistical inference
Nuclear (n=53)	50.57	8.913	T=1.802 df=89 .075>0.05 Not Significant
Joint (n=38)	46.87	10.604	

From the above table the p value 0.075>0.05 shows that there is no significant difference between Nuclear and Joint family student teachers emotional domain.

V. Results

The study found that there is no significant difference in Intellectual domain of student teachers based on gender. There is a significant difference in Emotional domain of student teachers based on gender. With regard to the educational qualification (UG and PG) there is no significant difference among student teachers based on Intellectual and Emotional domains. As far as the type of family (Nuclear and Joint) there is no significant difference among student teachers based on Intellectual and Emotional domains. On the whole low utilization of information resources and lack of awareness in using technology has been witnessed in this study.

VI. Recommendations

1. Internet connection can be provided to student teachers who can go through many related websites for their teaching learning process.
2. Orientation programme can be conducted to the student teachers to use the technology resources effectively.
3. Workshops can be organized to update the technological knowledge of the student teachers

VII. Conclusion

An attempt is made to study the technological awareness among student teachers. Technologies are electronic devices that have come to reshape the world in all aspects of human endeavor with its stronghold in the provision of education for all. Pivotal to the provision of education for all are teachers who have been trained professionally to educate, improvise and integrate emerging technologies into the paradigm of education.Traditional methods of teaching could never develop plan effective foundation for critical thinking and understanding for the students. They could learn more when learning became personal and it is only possible by using Technology in class room situation. Through it the learners would be able to construct their own concept and find their own solutions to their problems. It will be more possible only when teachers will have adequate knowledge and the awareness regarding technology. The student teachers should be given appropriate training for inculcating skills associated to technology for its awareness. It is expected that if the student teachers are fully aware, they will be able to guide their learners for their bright future.

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