Developing Information Seeking Skills in the Prospective Teachers in Pakistan through ICT

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ABSTRACT

Teaching is the key to develop and sustain the education system of any country. In the rapidly changing world of information, there is need to prepare prospective teachers to become well aware of the use of latest information technologies in their teaching. The objective of the study was to develop the information seeking skills in prospective teachers through ICT at higher educational institutions in Punjab-Pakistan. It was an experimental research study. For this study a Pretest Posttest control group experimental design was used. Researchers selected a private teacher training university on convenient basis. A sample of 100 prospective teachers was selected randomly using SPSS random sampling technique without replacement. The researchers developed a MCQs type achievement test for measuring the development in the information seeking skills of prospective teachers. The test covers the different aspects of information seeking ability for example use of internet, through software, use of online libraries etc. The collected data were analyzed through descriptive and inferential statistics. The findings of the study showed that ICT proved to be effective in developing information seeking skills in prospective teachers in Pakistan.

Keywords: ICT, Prospective Teachers, Information seeking skills

INTRODUCTION

The real challenge is not to generate information but to seek and use information. It is taken as a critical resource in the performance and success of any institution. It affects both the process and the product. In any managerial activity the availability of timely information is vital (Babu, Singh &Sachdeva, 1997). A teacher is unable to manage the teaching and learning related issues in the absence of accurate and timely information. The right decision making requires right information (Waheed, 1990).

Information seeking is a purposive activity and motive behind this activity is to satisfy some goal. People may adopt different information seeking behaviors and interact with any information systems like manual or computer-oriented (Wilson, 2000). Pettigrew (1996) stated that the sources are very important in the search of needed information. It is widely acknowledged that information seeking skills are lacking in students (Probert, 2009). There is great need and increasing demand of developing such skills (Kirschner, Sweller& Clark, 2006). The rapid uptake of information technology and use of internet in the field of education has developed a wider understanding and need of information seeking skills. Around ten years ago the writing about information seeking skills was the area of librarians (Bruce, Candy & Klaus, 2000; Todd, 2000). Now academics from different disciplines are joining libraries for highlighting the need of developing information seeking skills (Walraven, 2008). The importance and need of information seeking skills is addressed in various studies (Bryce &Wicthers, 2003; Bruce, 2002, Hepworth, 2000).

Cass (2004) and Henri (2004) have highlighted the importance of the development of such skills in the teachers. Teacher education has always remained the focus of researchers all over the world. There are more than 130 higher educational institutes in Pakistan for teacher education. In order to develop teachers, these institutes are running many programs related to teacher education i.e. B.Ed, M.Ed, BS Ed. These institutes develop their own curricula, teaching strategies, and evaluation of prospective teachers. The fact is that these institutes are producing prospective teachers in a large number but with week information seeking skills. Higher educational institutes are lacking in trained teaching staff, not well familiar with the use of ICT. Mostly, there is lack of ICT resources in higher educational institutions in order to develop teachers with strong information seeking skills.

Teachers can play their critical role in order to develop the youth of the nation. There are many tasks in the education system which is being performed by teachers like paper setting, evaluation of students, class discipline, assistance in managing school activities, and especially teaching. In short teacher is a key person in the education system to develop it according to the standards.

In Pakistani context teachers do not perform well to develop youth to meet and compete at international level. Question arises that why teachers can't do their work specifically related to teaching? The answer might be the lack of information related to subject matter. They are lacking in information seeking skills (Wen & Shih, 2006; Probert, 2009). That's why they do not perform their maximum to develop strong holistically human beings. The rapid advancements in information technology has made it easy for everyone to search for - information on any topic. To go and find the desired information still requires the related skills. Computer technology is in the approach of everyone and it is a blessing for today's generation.

In the context of teacher education, there is need to train and develop teachers' information seeking skills in order to prepare them a better teachers. In comparison with developed countries like UK, USA, and China where the use of information technology is extensive to prepare the future teachers Pakistan need to use ICT resources to develop skills of prospective teachers. In rapid changing world there is dire need to enhance Information seeking skills of prospective teachers in Pakistan. Keeping in view the importance of ICT and teacher education this study was aimed to develop the information seeking skills of prospective teachers through using ICT. In the light of the aim of the study the following research question was formulated:

Does the use of ICT develop the information seeking skills in prospective teachers?

METHOD AND PROCEDURE

The study was quantitative in approach; further it was an experimental research study. For this study a Pre-Post test control group experimental design was used. Researchers conveniently selected a private teacher training university. A sample of 100 prospective teachers was selected using SPSS through random sampling technique without replacement. The researchers developed a MCQs type achievement test for measuring the development in information seeking skills of prospective teachers. Achievement test was validated through expert opinion. Initially, forty items were developed. Finally, thirty four items were selected with the help of experts' opinion. The test covers the different aspects of information seeking ability (See Table 1).

The researchers also developed a module, consisting of lesson plans. Researchers used Lecture, drill and practice methods with ICT in delivering the lessons. There were 10 lessons

in that module. Researcher delivered one lesson in a week. The duration of the experiment was two and half months.

Table 1

No	Items/ Main Factors	No. of Items
1	What sources do you consult for finding the general information?	4
2	What sources do you consult for finding the current facts & statistics?	4
3	What sources do you consult for finding the historical?	4
4	What sources do you consult for finding the opinions?	3
5	What sources do you consult for finding the maps images charts?	3
6	What sources do you consult for finding the breaking news?	3
7	What sources do you consult for finding the broadcasts?	3
8	What sources do you consult for finding the reliability?	10

It was administered by the researchers themselves. The result was analyzed through descriptive and inferential statistics such as Mean, SD, and independent sample t-test.

FINDINGS

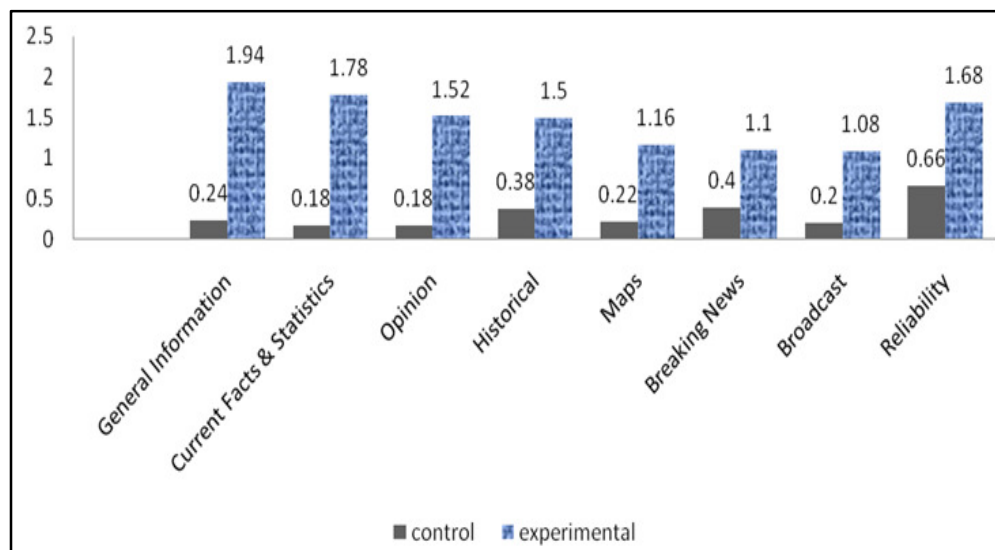On the bases of the collected data the following findings were found.

Figure 1

The figure 1 shows the mean values of control and experimental group for the content of the achievement test. As the visual display very clearly showed that there is considerable difference in the mean values of both groups. The figure also shows that information seeking skills were very much lacking in the prospective teachers.

Table 2

Type of Info	Groups	N	Mean	t	Df	Sig. (2-tailed)
General Information	Control	50	.24	-14.036	98	.000
	Experimental	50	1.94	-14.036	78.870	.000
Current Facts & Statistics	Control	50	.18	-11.436	98	.000
	Experimental	50	1.78	-11.436	66.252	.000
Opinion	Control	50	.18	-13.579	98	.000
	Experimental	50	1.52	-13.579	85.555	.000
Historical	Control	50	.38	-9.757	98	.000
	Experimental	50	1.50	-9.757	91.335	.000
Maps	Control	50	.22	-7.831	98	.000
	Experimental	50	1.16	-7.831	77.527	.000
Breaking News	Control	50	.40	-5.584	98	.000
	Experimental	50	1.10	-5.584	91.215	.000
Broadcast	Control	50	.20	-7.739	98	.000
	Experimental	50	1.08	-7.739	78.716	.000
Reliability	Control	50	.66	-3.245	98	.002
	Experimental	50	1.68	-3.245	68.297	.002
Total	Control	50	2.46	-20.433	98	.000
	Experimental	50	11.76	-20.433	84.058	.000

The table shows that there is significant difference in the scores of control and experimental group for the search of general information with t value -14.036 and $p<0.001$. The significant difference is also found for the factor of current facts with t value -11.436 and $p<0.001$. For the factor opinion the significant difference is found with t value -13.579 and $p<0.001$. Similarly significant difference is found for the factors historical and maps/ images/ charts with t values -9.757 and -7.831 with $p<0.001$. For the factors breaking news, broadcasts, and

reliability the findings are also showing significant difference with t values -5.584, -7.739 and -3.245. Similarly the total score of all the factors showed significant difference in the scores of experimental and control group with t value -20.433 and p<0.001.

DISCUSSION

The study was aimed at developing information seeking skills in prospective teachers through the use of ICT. The researchers found that prospective teachers are poor in information seeking. Most of the relevant sources they have never used for the search of their needed information. They are just using some of the sources. It is an alarming situation that if teachers are lacking in information seeking skills then how they will search to needed information to teach their students. The researcher has used teaching modules for experimental groups to enhance the information seeking skills of the students. The findings support the previous findings of Wen & Shih (2006) and Probert, (2009). Who found the lacking of information seeking skills in prospective teachers and adopted experimental research technique to develop these skills using ICT. The researchers had developed teaching modules by themselves and used them from training which shows that there is need of such valid and reliable teaching modules. These modules should by developed at validated on a large population of teachers.

RECOMMENDATIONS

In the light of findings following recommendations are:

1. There may be extensive use of ICT in teacher education programs in order to develop the information seeking skills in prospective teachers

2. Sample may be increased in order to generalize the findings of the research.

3. The research was quantitative in nature, researchers may include interviews for triangulation for further research in future.

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