ATTITUDE OF TEACHER EDUCATORS TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) TEACHING

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Abstract - The aim of this study was to assess the teacher educators' attitudes towards ICT teaching. Purposive sampling technique was used to select the college and random sampling to select the desired sample. ICT teaching attitude scale (ICTTAS), 2013 by T. Pardeep Kumar was used to collect the data. Mean, standard deviation and T-test were used to analyze the data. The findings of the study conducted indicate that the most of the teacher educators have favourable attitudes towards ICT teaching. No significant gender difference has been found between the attitudes of teacher educators towards ICT teaching. It also has been found that urban teacher educators have more favourable attitude towards ICT teaching than rural educators.

Introduction

Teacher is an effective and dominating factor among the ones contributing to educational improvements. The teacher effectiveness depends mainly on the teachers' attitude, characteristics and the classroom phenomena such as environment and climate, organisation and management. The use of information and communications technology (ICT) in education is a relatively new phenomenon. Educators, researcher and thinkers have taken up the challenges of using ICT since the 1980s with varied success. Integrating ICT in teaching and learning is high on the education reform agenda. Often ICT is seen as indispensable tool to fully participate in the knowledge society. For developing countries like India, ICT can moreover be seen as a way to merge into globalizing world. Today's school continues to be challenged by the increased visibility roles and cost of education technology. The advent of the internet and the World Wide Web has pressured new productivity and service demands as well as expectations on these endeavours although research to guide best practices remains scant and elusive. Considering current trends in education modern classroom would not be complete without computer, software, internet connection, projector and a variety of other high-tech devices (Keane, 2002). According to Hasselbring (2000), schools will be equipped with the best hardware and software in the near future, but it is unlikely that teachers and students will use them effectively, if teachers are not trained. The success of technology infusion in schools depends on training of both in-service and pre-service teachers. In this digital age, public schools require teachers who are competent with technology skill and able to effectively implement educational technology. Teacher education is a continuous process and its pre-service and in-service components are inseparable (The National Policy on Education- 1986). The teacher can play the roles of director of learning, motivator, guide and organizer. For that he has to enrich his knowledge through the advancement of technologies, specifically the information technology. According to Dr. S. Radhakrishan, “A good teacher must know how to arouse the interest of the pupil in the field of study for which he is responsible. He must himself be a
master in the field and be in touch with the latest development in the subject. He must himself be a fellow traveler in the exciting pursuit of knowledge” (Aruna Goel, 2005). The UGC plan rightly states that we are in the age of ICT revolution. The information and communicator network in universities and colleges would provide intranet and internet facilities. The flow of information enables the teachers to access multimedia material for teaching. The role of information and communication technology in teacher training should be considered in a larger perspective.

Information And Communication Technology

ICT is an acronym that stands for- *Information *Communication *Technology

Information - The nature of information (the "I" in ICT) covers topics such as the meaning and value of information; how information is controlled; the limitations of ICT; legal consideration, management of information; keeping information secure, designing networks to share information.

Communication - ICT refers to the communication of data by electronic means usually over a distance. This is often achieved via networks of sending and receiving equipment, wires and satellite links.

Technology - The word 'technology' can also be used to refer to a collection of techniques. In this context, it is the current state of humanity's knowledge of how to combine resources to produce desired products, to solve problems, fulfill needs or satisfy wants. It includes techniques, tools and raw materials.

ICT covers any product that will store, retrieve, manipulate and transmit or receive information electronically in a digital form - for instance, personal computers, digital television, email and robots etc. So ICT is concerned with the storage, retrieval, manipulation, transmission or receipt of digital data importantly. Information communication technology is a potentially powerful tool for extending educational opportunities formal and non-formal. ICT especially computer and internet technologies enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way. These new ways of teaching and learning are underpinned by constructivist theories of learning and constitute a shift from a teacher centered pedagogy - in its worst form characterized by memorization and rote learning to - one that is learner centered. ICT supported education can promote the acquisition of the knowledge and skills that will empower student for lifelong learning. According to OECD, The term ‘information and communication technology’ is “used to cover technologies used in the collection, processing and transmission of information. It include microelectronic and info electronic based technologies incorporated in many products and production processes and increasingly affecting the service sector. It covers interlays computer, electronic office equipment, telecommunication, industrial robots and computer controlled machine, electronic components and software products.” According to UNESCO, “Information and communication technology (ICT) is scientific, technological and engineering disciplines and the management techniques used in information handling and processing, their application, computer and their interaction with man and machines, and associated social, economic and cultural matters.” According to Smith and cambell, “A mosaic of technologies, products and techniques has combined to provide new electronic dimensions to information management. This mosaic is known by the name of information and communicable technology.”
Attitude

Attitude is one of the important factors behind a successful teacher. A successful teacher must have some qualities and having positive attitude is one of them. Success in teaching, as in most areas of life, depends almost entirely on the attitude and approach of teachers. A positive attitude is a great asset in life. An ‘Attitude’ may be defined as a relatively enduring but modifiable tendency or readiness on the part of a person to behave in a particular way towards some persons, objects or issues. Attitudes are powerful source of motivation and capable of arousing and sustaining concentrated effort. They determine our pattern of life as well as success and happiness. Attitude is a specific mental state of the individual towards something according to which his behaviour is molded. Attitude guide our behaviour more than knowledge and is equally essential for the wholesome development of an individual, Attitude is a way of thinking about things, persons, forms of readiness, likes and dislikes for objects and certain values. An attitude is dynamic in nature. It changes with time and experiences. It is not determining the success or failure of one’s pursuits in any field. Attitudes play a major part in determining a person’s personality. This is because attitude affects the way people perceive and act towards people, objects or event that they encounter. Besides that attitude can also have an effect on one’s social interactions that is why it is important to know what attitude is how it is developed and its impact on people. The term ‘attitude’ necessarily implies for favourableness, unfavourableness, liking or aversion towards a given object, person or situation. One who has a favourable attitude towards an occupation is likely to be a better member of the profession, than one who has an unfavourable attitude. According to baron and byne (1993) ”Attitude can be defined as lasting general evaluation of people (including oneself) objects or issues. Attitude is lasting because it persists across time. a momentary feeling does not count as an attitude. According to Vaughan & Hogg (1995), “Attitude is a relatively enduring organization of beliefs, feelings and behavioural tendencies towards socially significant objects, groups, events symbols or a general feeling or evaluation (positive/negative) about some person, objector issue.”

So we can say that attitude provide us with a personal outlook on the world through our feeling, biases, preconceived notions, ideas, fear, threats and convictions.

Review Of Related Literature

Haeland(2000) found that the share of teachers who state that they have a good command on the use of the internet is negatively correlated with age. About 77% of the teachers who are 25 years or younger stated that they have a good command on the use of internet compared to 25% of the teachers who are 56 years or older. Yueh (2001) revealed that secondary school teacher’s affective attitudes, general usefulness, behavioural control, pedagogical use significantly determine the use of ICT for instruction purpose. Harris (2002) concluded that the benefits of ICT will be gained when confident teachers are willing to explore new opportunities for changing their classroom practices by using ICT. Kumar (2003) reported that most teachers believe that the amount of computer experience has a positive effect on attitude towards use of computer. Bullock (2004), found that teacher’s attitude is major enabling and disabling factors in the adoption of technology. Chong, et al. (2005) in a survey, to study the barriers preventing the integration and adoption of information and communication technology (ICT) in teaching mathematics, identified six major barriers, that were lack of time in the school schedule for projects involving ICT; insufficient teacher training opportunities for ICT projects; inadequate technical support for these projects, lack of knowledge about ways to integrate ICT to
enhance the curriculum; difficulty in integrating and using different ICT tools in a single lesson; and unavailability of resources at home for the students to access the necessary educational materials. Lindfors (2007) revealed that teacher yield immense power in influencing in using ICT by students. He asserted that the teacher's confidence in using ICT influenced the degree to which his students used the same. Lee (2008) found a high level of positive computer attitudes in higher education students in Singapore. There was no significant differences in computer attitudes by gender although male students reported more positive attitude towards the computer than female students. Significant differences in computer attitude were found between students who own computers at home and those who do not. Students who own a computer at home also reported a lower level of computer anxiety compared to those who do not. Sahu (2009) found that 77% of the medical students were of the opinion that ICT should be included in their syllabus. Nearly all respondents expressed their desire to have a computer lab in their college. Havocking (2010) reported that the teacher who receive adequate ICT support from the administration are more likely to use ICT in their teaching practice while those who do not receive ICT support from the higher authorities in school are less enthusiastic in use of ICT's in school.

**Statement Of The Problem**

Attitude Of Teacher Educators Towards Information And Communication Technology (ICT) Teaching

**Objectives**

1. To study the attitude of teacher educators towards ICT teaching in relation to their gender.
2. To study the attitude of teacher educators towards ICT teaching in relation to Locale.

**Hypotheses**

1. There is no significant difference between the attitude of male and female teacher educators towards ICT teaching.
2. There is no significant difference between the attitude of rural and urban teacher educators towards ICT teaching.

**Methodology**

In the present study, descriptive survey method was used to investigate the attitude of teacher educators towards information and communication technology (ICT) teaching.

**Sample Of The Study**

The study was conducted on 80 teacher educators (40 males and 40 females) randomly selected from educational institutions, situated in rural and urban areas of Moga District.

**Tool Of The Study**

ICT teaching attitude scale (ICTTAS), 2013 by T. Pardeep Kumar was used for the present study to collect the data. This scale consists of five point Likert type 35 items out of which 17 are positive and 18 are negative. The lowest possible score on the scale is 1 and the highest score is 5. Getting a high score from the scale means that teacher has a positive attitude towards ICT teaching.
Statistical Techniques Used

Mean, S.D and t-test were used for analysis of the data.

Analysis And Interpretation Of The Data

Table 1

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of Teachers</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>40</td>
<td>143.2</td>
<td>13.64</td>
<td>0.415 Not Significant</td>
</tr>
<tr>
<td>female</td>
<td>40</td>
<td>140.4</td>
<td>9.15O6</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows the mean, standard deviation and t-ratio of attitude of male and female teacher educators towards ICT teaching. The calculated mean scores of attitude of male and female teacher educators towards ICT teaching are 143.2 and 140.4 respectively. This shows that both male and female teacher educators have favourable attitude towards ICT teaching. The t-ratio is 0.415 which is not significant. Hence the hypothesis there is no significant difference between the attitude of male and female teacher educators towards ICT teaching is accepted.

Table 2

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of Teachers</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>40</td>
<td>136.4</td>
<td>11.456</td>
<td>4.668 Significant at 0.01 level</td>
</tr>
<tr>
<td>Urban</td>
<td>40</td>
<td>147.2</td>
<td>9.10</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that the mean score of the attitude of rural teacher educators towards ICT teaching is 136.4 with S.D. as 11.456 and mean score of the attitude of urban teacher educators towards ICT teaching is147.2 with S.D. as 9.10. The mean score of attitude of urban teacher educators towards ICT teaching is higher than that of rural teacher educators. The value of t-ratio is 4.668 which is significant at 0.01 level. Hence the hypothesis that there is no significant difference between the attitude of rural and urban teacher educators towards ICT teaching is rejected.

Findings

• There is no significant difference between the attitude of male and female teacher educators towards ICT teaching;

• There is significant difference between the attitude of rural and urban teacher educators towards ICT teaching.

Conclusion

ICT has revolutionized the entire concept of education, learning and research by offering new opportunities and challenges in creation and dissemination of information. Information and communication technologies have brought new possibilities to the education sector, but at the same time, they have placed more demands on teachers. Knowledge of ICT and skills to use ICTs in...
teaching learning has gained immense importance for today’s teacher. The result of the present study shows that in general, all the teacher educators were in favour of ICT teaching. This positive attitude is an important indicator of willingness and first step to integrate technology with classroom teaching.

References

- Blackmore, J. (2010). *Effective use of information and communication technology (ICT) to enhance learning for disadvantage school students* Canberra, ACT: Department of education science & training.


• Singh, K.S. (2012). Teachers’ Attitude towards Information and Communication Technology (ICT) Shodh Sanchayan, 3(2) 1-4.

• Yasothenapriya, M.(2010). The Role of ICT in improving the Quality of Education. Edutracks, 10(4)19-22.