Secondary School Teachers Attitudes Toward Information Technology

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ABSTRACT
Every aspect of human existence has been touched by information technology, and it has the ability to contribute to education and training—especially distance learning—to make it a cutting-edge learning environment. The need for new technology in the teaching and learning process is growing. With sound and unmatched feasibility for information exchange, communication, and discovery to support teaching and learning, the information age evolves into an era of knowledge. Information technologies support opportunities for knowledge exchange on a global scale. These can help by giving teachers and students access to the most recent knowledge and information. According to Haag (1998), information technologies are a "set of tools that can help provide the accurate and appropriate information that is necessary for effective teaching and learning".

INTRODUCTION
In this age of Information dominated by digital technology, which has influenced all aspects of human life, teacher education cannot be an exception. Digital technology has given devices which have the capacity to store, retrieve and process qualitative information both fast as well as accurately. Such an electronic device is known as Computer. Computers along with development in satellite communication have given birth to Information Technology.

According to UNESCO – Information Technology comprises, “scientific, technological and engineering disciplines and the management techniques used in information handling and with men and machines, and associated social, economic and cultural matters (OEDC ). It is used to cover Technologies used in the correction, processing and transmission of Information. It includes Micro-Electronics and info-electronics based technologies including computers, telecommunication, industrial robots and electronic components and software products.

Sansanwal (2000) defined Information Technology as the use of hardware and software for efficient management of information, i.e. storage, processing, retrieval, communication, diffusion and sharing of Information for social, economic, educational and cultural upliftment.

INFORMATION TECHNOLOGY AND TEACHER EDUCATION
Information Technology can promote the opportunities of restructuring the Teaching-Learning process. These can transform teaching and learning by offering alternatives to the teacher provided information, access to virtually unlimited resources and opportunities for real world communication, collaboration and competition. Information Technology facilitates teachers in their teaching process as
- Developing awareness- recognizing that something is wrong or different
- Present the material in more interesting and attractive way
• Guide and help student in searching the qualitative material
• Make the best use of time
• Provide individualized instruction
• Review and explore qualitative data
• Prepare learning material for students, rather teaching in conventional situations.
• Use right information at right time to achieve right objectives

REVIEW OF RELATED LITERATURE
Shah and Aggarwal (1994) – conducted a research study to evaluate teacher’s attitude towards computer education as well as computer assisted instruction. They found positive attitude in all the groups, though female teachers showed more positive attitude towards ICT.

Marriam et al (1999) – reveals in his study that the use of Information Technology helps in developing awareness, exploring new research ideas, and making a transition by leaving the old approaches behind.

Eric Klopfer, Scot Osterweil (2012) reveals that emerging trends have a reciprocal relationship with teaching. The emergence of new technologies pushes educators to understanding and leveraging these technologies for clear use.

Ennis (1999) – concluded in a study that “openness on the part of instructor increased their (learner’s) desire to discuss problems or topics of interest. These discussions expanded their (learner’s) understanding of the content and assisted them in planning the Information within a relevant context in their own lives.”

Syed Noor-Ul-Amin (2011) – The literature reviews has sought to explore the role of information technology in education as we progress into the 21st century. In particular, Information Technology have impacted on education practice in education to date in quite small ways but that the impact will grow considerably in years to come. Still now days, use of Information Technology has a great impact on teaching learning process, learning environment, quality and accessibility of education, learning motivation.

Rebecca Winthrof& Marshal S. Smith (2012) reviewing the array of critique in the literature and assessing the ways in which they have been addressed reveals a set of guiding principles that should inform technology programming in the developing world.

Lorena Terrazas Arnez (2012) – revealed that the use of Information Technology will serve as a basis for various functions specially in the field of research and modernization.

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Abel, Rob; Brown, Jack (2013) reveals that Higher education is entering a period in which it is the "connections" between everything and everyone that are of importance. This development is most conspicuous in teaching and learning and is enabled by information technology, social media, and mobile devices. This advent of "connected learning" is having an impact on all colleges and universities, faculty, and students.

Berge, Zane L. (2013) studied & concluded that to a large extent education can be thought of as a communication process among the participants. This article focuses on distance education, which has both the general communication processes that in-person education venues possess, and also communication specific to the technologies that mediate the teaching and learning taking place at a
distance. There are various opportunities and barriers to effective communication. An exhaustive review of literature regarding communication barriers to distance education summarizes the technical, psychological, social, cultural, and contextual challenges leading to a significant conclusion: that as technology used for distance education improves so does both the opportunities to overcome many of the barriers to ineffective communication and the complexity of the barriers that are faced by the participants.

NEED OF THE STUDY
As we know the Education is the base and backbone of a nation. The progress of a country wholly depends upon the system of education in that particular country. In our country, the system of teaching is still same as in earlier days i.e. by chalk and talk. Teachers and text books were considered to be the source of knowledge. Even the teachers used to stick to the contents of text books which were infrequently updated and contains many errors. By these traditional methods it will be not easy to bring the economy of a nation on a right track. There should be some changes, changes in teaching methods and classroom environment are required. The use of Information Technology should be included in our Educational system now. The last two decades have witnessed a revolution caused by the rapid development of Information Technology. Information Technology has the potential to remove the barriers that are causing the problems of low rate of education in our country. It can be used as tool to overcome the issue of cost, less number of teachers, and poor quality of education as well as to overcome the time and distance barriers.

From the convincing point of view some benefits of using Information and Technology in Education are –

- It includes scientific, economic, technological, information and multicultural literacy and global awareness.
- It promotes inventive thinking.
- It develops effective communication which leads to teaming, collaboration and interpersonal skills, moreover it induces personal, social and civic responsibility.
- It leads to high productivity which gives the ability to plan and manage results.
- It leads to examine the education scenario in present context.

So, the investigator felt the need to study whether Secondary School Teachers use Information Technology in their teaching process or not and its productivity.

STATEMENT OF THE PROBLEM
“Attitude of Secondary School Teachers towards Information Technology”

MEANING AND DEFINITION OF ATTITUDE
An attitude is a relatively enduring organization of inter-related beliefs that describes, evaluates and advocates action with respect to an object or situation with each belief having cognitive, affective and behavioral components.

Freeman says “An attitude is a dispositional readiness to respond to certain situations, persons or objectives in a consistent manner which has been learned and have becomes one’s typical mode of responses. An attitude has a well defined object of references.”
INFORMATION TECHNOLOGY
Haag (1998) Says -- “Set of tools that can help, provide the right people with the right information at the right time.”

OBJECTIVES OF THE STUDY
1. To study the attitude of secondary school teachers towards Information Technology.
2. To study the difference in attitude of urban and rural secondary school teachers towards Information Technology.
3. To study the difference in attitude of male and female secondary school teachers towards Information Technology.
4. To study the difference in attitude of government and private secondary school teachers towards Information Technology.

HYPOTHESES OF THE STUDY
1. Secondary School teachers have positive attitude towards Information Technology.
2. There is significant difference between attitude of urban and rural secondary school teachers towards Information Technology.
3. There is significant difference between attitude of male and female secondary school teachers towards Information Technology.
4. There is significant difference between attitude of government and private secondary school teachers towards Information Technology.

SAMPLE
Sample will be collected by Random technique. The sample will be consisted of 120 secondary school teachers. The secondary school teachers will be selected from Bathinda city and their adjoining rural areas having 60 urban and 60 rural teachers.

TOOLS TO BE USED
Nasrin and Fatima Islahi’s Test – Attitude Scale towards Information Technology for Teacher’s (ASTITT-NI). This scale consists of 30 items divided into four areas:
1) Impact of IT
2) Usefulness for students
3) Productivity for teaching
4) Teacher’s interest and acceptance – on Secondary School Teachers.

STATISTICAL TECHNIQUES TO BE USED
1. Test for proportion of success will be worked out to find the attitude of secondary school teachers towards Information Technology.
2. Descriptive statistics such as mean and S.D will be worked out to ascertain the nature of distribution of all the scores.
3. t-ratio will be used to find out the significance difference between –
   a) Attitude of urban and rural secondary school teachers towards Information Technology.
   b) Attitude of male and female secondary school teachers towards Information Technology.
c) Attitude of government and private secondary school teachers towards Information Technology.

Conclusions / Findings
A. Secondary School teachers have positive attitude towards Information Technology.
B. There is significant difference between attitude of Urban and Rural Secondary School Teachers towards Information Technology.
C. There is no significant difference between attitude of Male and Female Secondary School Teachers towards Information Technology.
D. There is significant difference between attitude of Private and Government Secondary School Teachers towards Information Technology.

So to conclude we can say that the Information technology should be made meaningful for learners and comfortable for teachers. Learning materials should include examples that they can make sense of the information. The teacher and the learner should be told the explicit outcomes of the information so that they can set expectations and can judge themselves whether or not they have achieved the outcomes of the information technology. Information technology helps the teacher in managing their classrooms in a best way. It also helps them in maintenance of record and data. Information technology helps teachers to monitor learners that how and what they are doing.

BIBLIOGRAPHY