



Attitude and Awareness of Sanskrit Teachers Towards ICT in Teaching Learning

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Abstract:

The use of Information and Communication Technology (ICT) has been admired worldwide for decades. ICT has influenced all aspects of life. Processing the knowledge of ICT is really the need of the hour. This paper describes the ICT attitude & awareness among Sanskrit teachers. The framework raises important questions of how teachers use technological devices in their teaching learning process in order to understand the concept in the better way. It also emphasizes Sanskrit teachers to integrate technology into the instructions in the 21st century. The aim of the present study is to appraise the attitude and awareness among Sanskrit teachers.

Keywords: ICT, Attitude, Awareness.

1. Introduction

Information and Communication Technology (ICT) has suffused in every walks of life influencing the technology fields such as enabling satellites, business, commerce and also social networking. In the fast-growing and fast-changing digital era, teaching becomes the most challenging profession all over the world, where knowledge is expanding and exploring quickly and much of it is available to students as well as Sanskrit teachers at their learning environment. To meet the educational needs of the Gen Z society, active learning, critical thinking, problem solving skills, communication skills, information handling skills and self-directed learning are referred as 21st century skills.

ICT can provide access to information sources, enable communications, create interacting learning environment and promote change in methods of teaching. Therefore, the ways of learning have been transformed by ICT and are no more restricted to medium of print, bibliographies, and abstracts. The sources of knowledge for students and teachers have also broken out of all geographical boundaries. As such it becomes very important that those associated with teaching learning process should not only be familiarized with this technology but also realize and put into action its useful aspects. In the proceeding paragraphs the meaning of ICT, its historical background, relationship of ICT with students, teachers and education, attitude, attitude of teachers, awareness of teachers etc. have been given, which can provide the conceptual framework for the present study.

2. Concept of ICT

- Information & Communication Technology (ICT) that can helps in coping with the information explosion.
- Information & Communication Technology (ICT) is the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a micro-electronic-based combination of computing and telecommunication.
- Anything that renders data, information or perceived knowledge in any visual format whatever, via any multimedia, distribution mechanism, is considered part of the domains space know as information technology.

- Communication technology is the activity of designing and constructing and maintaining communication system.

3. Meaning of ICT

Different scholars stated the meaning of ICT in different ways. Some of the definitions of ICT is given here which would help to explain the meaning of ICT.

According to Raghavan (2000) ICT refers to a range of technologies, which includes computers, computer work situations, display facilities, hardware, software, recording and processing system for sound, still and moving pictures, graphics, calculations and a wide range of communication facilities.

Mahajan (2002) defined ICT as the modern science of gathering, storing, manipulating, processing and communicating desired types of information in a specific environment.

According to UNESCO, ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economical and cultural matters.

According to Chakraborty (2002) “ICT is the collective term for various technologies involved in processing and transmitting information. They include computing, tele-communication and micro-electronics.”

4. ICT in teaching-learning process

ICT supports teaching in many ways. The use of ICT makes teaching interesting and considerably reduces the workload to Sanskrit teachers. Sanskrit Teachers can be creative; can save time and effort that they normally spend on preparing notes. ICT helps to maintain discipline as it ensures more eye-contact, when dealing with a large class size. Maintaining discipline results in better class management.

ICT contributes to better and effective learning. They offer safe, non-threatening environment for learning. Social constructivists like Vygotsky (1962) considers learning as the social construction of knowledge. Learning is a collaborative process, where learners are put together and learning resources are shared. From this perspective, the emerging multimedia technology offers Sanskrit teachers a powerful pedagogical tool-kit. ICT promotes interactive learning. Interaction with authors, text, message, machines and visual ensures meaningful learning. ICT develops self-discovery and self-evaluation skills in learners.

One of the enormous advantages of ICT is that it can incorporate many different media into one machine. Inclusion of voice, text, photographic images, music, sound effects and video provide Sanskrit teachers with an extremely powerful learning tool. The advent of WWW, internet, teleconferencing and e-mail communication offers unlimited educational benefits. ICT is perhaps the perfect illustration of the vital importance of lifelong learning.

The various initiatives set up by international agencies like British Educational Communications and Technology Agency (BECTA), National Council for Educational Technology (NCET) has been targeted towards encouraging teachers to include ICT in the delivery of their chosen subject and “to create a society within ten years where ICT has permeated every aspect of education”.

5. Functions Of ICT

The four function of ICT are identified by Document requirements for course of Initial Teacher Training, (Ager, 1998), which can be used by teachers to achieve teaching-learning objectives. These are:

- The speeded automatic function of ICT
- The capacity and range function
- The provisionality function

- The interactive function of ICT

6. ICT skills

ICT skills are often touted as the rationale for using computers in teaching. ICT skills include 'information' retrieval skills, data handling skills and communication skills. For effective integration of ICT in teaching-learning process, Sanskrit teachers should possess basic ICT skills and knowledge. Sanskrit Teachers with necessary skills should be relatively comfortable with the prospect of using ICT to support the learning process. Sanskrit Teachers' familiarity with a range of ICT equipments and software instils confidence in them. To supplement teaching with ICT, a Sanskrit teacher should possess basic or core ICT skills in addition to the knowledge of different kinds of information sources, software and equipments. 'Basic ICT skills refer to simple computer operations like opening programs, shutting down, organizing work, saving and managing files and folders, word processing skills and browsing skills'(Ager, 1998). Sanskrit Teacher's interaction with a wide range of software like internet software, presentation software, educational software and equipments like desktop computer, data projector, printer, scanner, digital camera, video, interactive whiteboards, etc. is essential for successful integration of ICT. If the teacher fails to have a grasp of ICT skills "it will indirectly result in experiencing 'technophobia' and they feel left behind with developments" (Chin, 2004).

7. ICT in india

India has made impressive progress in the application of information and Communication Technology in recent years. The pace of developments in ICT in India has been breathtaking. The government at the center and the state governments have entered in the area of ICT in education in a big way. The ministries, UGC, NCTE, NCERT, SCERT and other agencies like Intel are supporting the use of ICT in education at different levels. The NCERT has also been organizing ICT Literacy Camps for teachers throughout India. "The objective is not to prepare technocrats but techno pedagogs" (Edu Tracks, 2006). A dedicated satellite for education, EDUSAT, has recently been launched and the Government of India envisages that the computer and internet facilities will be made available to every school in the country.

8. Barriers to ICT Integration

The emerging issues in the integration of ICT in education are wide and varied. It is challenging task as it involves technological, pedagogical, ethical and economical aspects. Burger (2003) pinpoints two levels of factors that inhibit ICT integration in education. The first factor is School and the other one is Educator. The school level factors include technical requirements, high cost, lack of security and lack of technical support. The obstacles that exist for inhibiting teachers to adopt ICT in teaching are: lack of understanding of the impact of ICT on education, lack of ICT skills, inadequate training and insufficient time for preparation.

There is an urgent need to have media-aided instruction; but rarely teacher education institutions in India have made provisions for training teachers in ICT. Teacher education institutions have been found to focus on microteaching skills. Along with microteaching skills, there is need to identify and develop ICT skills in teachers. For successful technology integration in schools, teacher education programmes play a crucial role. Teacher preparation on technologies should provide teachers with a solid understanding of the various ICT devices, their advantages and their constraints.

It is only when teachers feel they have a firm grasp of the new technology as a pedagogical tool, it can become a tool for change. They should realize the relevance of ICT in education and feel confident that they have skills and resources at their disposal to successfully use ICT in their teaching. "In an environment when teachers are not aware of the facilities and there are no perceived expectation, teachers may not have the internal motivation to take ownership of their usage" (Bergh, 2002).

The pivotal role of teaching faculty cannot be ignored for the successful implement of ICT. Implementation of ICT depends mostly upon the positive attitude of teachers rather than upon technological infrastructure. "For, it is the teacher who will ultimately determine the extent that ICT is used to enhance the learning process" (Burger, 2003). Teacher's conservatism can foster resistance to the positive opportunities that technology brings to education. Even if the school system decides the use of ICT in the learning process, teacher's attitude can determine this decision. Attitude of teachers towards the use of ICT thus plays a significant role in determining the success of integration. Poor infrastructure, lack of technological culture, lack of a definite ICT policy, inadequate software and equipments, lack of training and support programmes can affect successful ICT integration.

9. Attitude

Attitude is the mental state of individuals, which tends to act or respond or is ready to respond for or against objects, situations etc. with which their vested feelings or effect, interest, liking, desire and so on are directly or indirectly linked or associated. During the course of development the person acquires tendencies to respond to objects. These learned cognitive mechanisms are called attitudes.

10. Definition of Attitude

According to Allport, 1935, an attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence up on the individual's response to all objects and situations with which it is related. Attitude are acquired not innate. Attitude are modifiable.

According to Aiken, 2000 defined attitude as, "a learned predisposition to respond positively or negatively to a specific object, situation, institution or person."

Dictionary of Psychology, Warren. 1934, Attitude = the specific mental disposition towards an incoming (or arising) experience, whereby that experience is modified or a condition of readiness for a certain type of activity.

Thomas and Znaniecki, 1918, by attitude we understand a process of individual consciousness which determines real or possible activity of the individual counterpart of the social value; activity, in whatever form, is the bond between them.

Morgan, 1934, attitude are literally mental postures, guides for conduct to which each new experience is referred before a response are made.

Bogardus, 2002, an attitude is a tendency to act towards or against something in the environment which becomes thereby a positive or negative value.

11. Nature of Attitude

Following are the features which contribute to the meaning of attitude

1. Attitude refers to feelings and beliefs of individuals or groups of individuals.
2. The feelings and beliefs are directed towards other people, objects or ideas. When a person says, "I like my job." It shows that he has a positive attitude towards his job.
3. Attitudes often result in and affect the behaviour or action of the people. Attitudes can lead to intended behaviour if there are no external interventions.
4. Attitudes constitute a psychological phenomenon which cannot be directly observed. However, an attitude can be observed indirectly by observing its consequences. For example, if a person is very regular in his job, we may infer that he likes his job very much.
5. Attitude are gradually acquired over a period of time. The process of learning attitude starts right from childhood and continues throughout the life of a person. In the beginning the family members may have a greater impact on the attitude of a child.
6. Attitude are evaluative statements, either favorable or unfavorable. When a person says he likes or dislikes something or somebody, an attitude is being expressed.
7. All people, irrespective of their status and intelligence hold attitudes.
8. An attitude may be unconsciously held. Most of our attitudes may be about those which we are not clearly aware. Prejudice furnishes a good example.

12. Characteristics of Attitude

1. Attitudes are the complex combination of things we tend to call personality, beliefs, values, behaviours and motivations.
2. It can fall anywhere along a continuum from very favorable to very unfavorable.
3. All people, irrespective of their status or intelligence, hold attitudes.
4. An attitude exists in every person's mind. It helps to define our identity, guide our actions and influence how we judge people.
5. Although the feeling and belief components of attitude are internal to a person, we can view a person's attitude from his or her resulting behaviour.
6. Attitude helps us define how we see situations, as well as define how we behave towards the situation or object.
7. It provides us with internal cognitions or beliefs and thoughts about people and objects.
8. It can also be explicit and implicit. Explicit attitude is those that we are conscious but still have an effect on our behaviours.
9. An attitude is a summary of a person's past experience; thus, an attitude is grounded in direct experience predicts future behaviour more accurately.
10. Attitudes cause us to behave in a particular way towards and object or person.
11. It indicates the sum total of a man's inclinations and feelings.

13. Components of Attitude

Attitude comprise of three basic components: informational, emotional, and behavioural.

1. Informational or Cognitive Component
2. Emotional or Affective Component
3. Behavioural Component

14. Functions of Attitude

Attitudes perform four-fold functions (Bird, 1940). Adjustment function or the instrumental function is the first function of attitudes. This function helps a person form acceptable attitudes and thereby obtain favourable response from his associates. Secondly, attitude performs ego-defensive function. It protects a person's ego from his own unacceptable impulses. Attitudes defend one's self-image. The value-expressive function helps to express one's real nature openly. They enhance one's image in the society. Finally, there is the knowledge function. Knowledge represents the cognitive component of the attitudes. Knowledge gives meaning to what would otherwise be an unorganized chaotic universe. The adjustive and the knowledge functions represent the normal consequences of cognitive adaptation for the external world. The ego-defensive and the value expressive functions have reference to inner motive states.

15. Development of Attitudes

Attitudes are developed on the basis of experiences in life. Environmental forces help an individual to develop various attitudes. An attitude is primarily a product of the interaction of one's self with his environment. The physical, social, emotional, intellectual and ethical aspects significantly contribute to the development of attitudes in individuals. Home, family, neighbourhood, school, community, media and society also play a key role in shaping attitudes. Reinforcement and imitation also help to develop attitudes.

16. Attitude Change

Attitudes are not static and permanent. They are susceptible to change and development. They are dynamic. Attitudes can be changed in many ways. New information, mass media, changes in the cognitive component of a person's attitude, new life experience, etc. contribute to attitude change. Education and propaganda bring changes in the attitude of individuals. Several factors like mutual contacts, group discussion, individual influence, etc. are possible for attitude change. Development of

attitude and changes take place at a slow rate. The important factors which are responsible for this change and development are known as determinants of attitudes. There are cultural determinants, psychological determinants and functional determinants.

17. Measurement of Attitudes

Attitudes are measured on the basis of a person's actions or verbal statements of belief or feeling or disposition towards the object. Attitudes can be measured directly by asking respondents to report their beliefs or evaluation; indirectly by studying responses that are thought to be related to attitudes. Direct attitude measures may consist of a single item accompanied by a numeric response scale or of a series of such items. Attitudes are usually measured by using attitude scales.

Attitude is an enduring evaluation positive or negative of people, objects, and ideas. Thus attitudes are evaluative statements or judgements concerning objects, people or events.

18. Awareness

Awareness is the ability to directly know and perceive, to feel, or to be cognizant of events. More broadly, it is the state of being conscious of something.

Awareness is a relative concept. Awareness may be focused on an internal state, such as a visceral feeling, or on external events by way of sensory perception. Insects do not have consciousness in the usual sense because they lack the brain capacity for thought and understanding.

19. Awareness of Teachers

The explosion of digital technology has created a revolution in educational instructions. The flexibility, high speed and huge storage capacity of ICT is causing teachers to redefine and rethink the traditional process of teaching. The challenges facing Sanskrit teachers are to evaluate relevant applications of information and communication technologies in the teaching learning process. At the same time, instruction utilizing information and communication technologies must reflect what is known about effectiveness of student-centered teaching and learning process.

The digitization of technologies has made a great impact on Sanskrit teachers' role. The impact can be felt in many ways. Digital technologies are changing the ways Sanskrit teachers interact with students in the classroom. As the importance of language to learning, the ways organizing and relating information facilitates understanding and the influence of social factors in the classroom are all impacted by digital technologies. Now the instructional approaches are also influenced greatly, as they are incorporated by a variety of technologies. Now teachers and students alike are interacting in new ways afforded by digital technologies. Teachers and students have virtual discussion related to course content, advice and counseling in a wide variety of times and paces through e-mail and other features of the web. Teachers and students now produce documents with more information and in far more diverse formats as a result of desktop publishing, online libraries and databases and file transfer capabilities. The pervasiveness of digital technologies motivates a thorough review of technological impact of instruction in education.

Present school education courses should take advantage of the capabilities of technology and extend instruction beyond or significantly enhance what can be done without technology. Sanskrit Teachers should experience technology as a means of helping students explore topics in more depth and in interactive ways. As a large number of Sanskrit teachers are not computer and ICT literate, they have to face a tuff time in near future due to gradual shifting interest of students towards ICT. The time may be imagined to see the miserable conditions of an ICT illiterate Sanskrit teacher teaching ICT literate students. In this context, now it is the high time for every ICT illiterate Sanskrit teachers at least to

create awareness about ICT, ICT literate teacher to be the ICT masters and the ICT masters to see it as sky is the limit.

20. ICT Use of Sanskrit Teachers

In this new technology era, the role of Sanskrit teachers has changed and continues to change from being an instructor to a constructor, facilitator, and coach to create learning situation and environment. ICT is very useful for teachers with this new role. Teachers can integrate ICT into teaching-learning process effectively if he developed various skills and competences like, creativity, flexibility, logistic skills, skill for project work, administrative and organizational skills and collaborating learning skill. Apart from these skills and competencies, the effective and efficient use of ICT depends largely on the technical competency attitude, appreciation of sanskrit teachers for ICT. They should be able to appreciate the potential of ICT and have positive attitude towards ICT. They should operate computer and use basic software for work processing, spreadsheets and PowerPoint etc. They have to evaluate the use of computers and related ICT tools in education of students. The minimum use of ICT by teachers are desired. The extensive use of ICT may include the evaluation of educational software and courseware, search on internet for resources and use of e-mail, chat, new ICT based instructional principles, research and appropriate assessment practice, effective multimedia based presentations to support teaching learning, integrate ICT tools into learning activities throughout the curriculum, create hypertext documents and understand about network, keep up-to-date as far as ICT or educational technology is concerned. There is immense potential of ICT which can be grabbed by the Sanskrit teachers using ICT optimally and maximally in their class instruction and for their professional developments.

21. Conclusion

Information and Communication Technology (ICT) has undoubtedly become a powerful tools that is breaking the traditional teaching learning methods of education. ICT incorporated teaching learning process may lead the education system to be more productive and creative. The attitude and awareness of ICT is necessary in the 21st century teachers since the conventional modes of teaching learning will not serve the purpose. There is no doubt that ICT based teaching learning process will enhance the outcome of education.

References

1. Chauhan, S. S. (1992). Innovations in Teaching and Learning Process. New Delhi: Vikas publication House Pvt. Ltd.
2. ICT in Education (2006). Information and Communication Technologies in Teacher Education: A planning guide.
3. Kour, (2011). Application of ICT in Teacher Education. I. Sahoo, P.K. Sahoo, D. Das. Professionalism in Teacher Education.
4. Vanaja. M. & Rajasekhar, S. (2009), Educational Technology and Computer Education. Neelkamal Publication Pvt. Ltd. Hyderabad.
5. Dash, K. M. (2009). ICT in Teacher Development, Neelkamal Publication Pvt. Ltd. Educational Publishers. New Delhi.
6. Biranchi Narayan Dash – Teacher and Education In The Emerging Indian Society- Neelkamal Publication Pvt. Ltd., Sultan Bazar, Hyderabad – 500095.
7. Ktoridou, Zarpetea & Yiangou (2002) conducted a study on “Teacher Attitude towards Technology.” The study was carried out at colleges, the University of Cyprus and Secondary School in Cyprus.
8. Hardiman (1988). “the attitude of secondary school principals towards microcomputers.”
9. Dupagne and Krendl (1992). “Teachers’ attitudes towards computers”.
10. Nikilaus (1985). “The attitude of Tennessee teachers toward computer in schools.”

11. Davis (1988).“The attitude of early childhood teachers towards the use of computers in their classroom.”
12. Asan (2002).“computer technology awareness by elementary school teachers.”
13. Rathod (2002).“Computer awareness of secondary school teachers.”
14. Morales (1998).“the attitudes of Ninth Graders and their teachers towards computers and informatics.”
15. www.google.com
16. www.wikipedia.com