



**ATTITUDE OF SECONDARY SCHOOL TEACHERS  
TOWARDS USE OF INFORMATION AND  
COMMUNICATION TECHNOLOGY (ICT) IN CLASSROOM  
TRANSACTIONS**

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Today, humanity can be classified as living in a "machine society" where technological tools are predominant at different levels, interfacing in the day-to-day activity of man. Information communication Technologies (ICTs) and Human Capital have become the centre of gravity and indeed the heart of sustainable National Development and in particular for structured education, advanced knowledge and intelligence activities, product development, manufacturing techniques as well as organisational financial and management systems - all of which are the cornerstone of global competition through automated globalisation.

Every year, technologies are invented; technology is made simplify the way we do thing. We use technology in our daily lives co accomplish various tasks. There so many ways technology is being used today, for example, we use technology in education, use it in communication, use it in business, entertainment, data and home security. We use technology in human resources management, in transportation and so much more.

The 21<sup>st</sup> Century the age of Information & Communication Technology (ICT). In India, over the past few years ICT has touched the every aspect of human life and it has become a part of our daily life experiences. Now, the educational institutions all over the globe are integrating ICT with the teaching teaming process in order to provide knowledge and skills to the learners to meet the challenging educational development. ICT is a scientific, technological and engineering discipline and management technique used in handling information, its applications and association with social, economical & cultural matters (UNESCO, 2002).

Now information and technology is popularly using in educational filed for making teaching learning process successful and interesting for students and teacher both. In 1998, UNESCO world education report refers about student and teachers must have sufficient access to improve digital technology and the internet in their classroom, schools, and teacher educational institutions. Teachers must have the knowledge and skills to use new digital tools to help all students achieve high academic standard. The quality of professional development of teacher education depends on the extent of ICT integration in teacher education programme.

Teachers are at the core of any living society. Technologies play an important role in training programme of teachers. Students' accesses knowledge and information through TV, digital media, cable network, internet and social media Facebook, Twitter, WhatsApp, LinkedIn, Line, and We chat etc. ICT is very important for Pre-service teacher education programme in the 21<sup>st</sup> Century. Without proper knowledge of ICT teacher cannot perform in his/her classroom.

The effective use of technology in education has changed the face of education and it has created more educational opportunities. Both teacher and students have benefited from various educational technologies. Teachers have learned how to integrate technology in their classrooms and students are getting more interested in learning with technology. The use of technology in education has removed educational boundaries, both students and teachers can collaborate in real time using advanced educational technologies.

Technolgy has helped in the growth of mobile learning and long distance learning The use of internet technology has enable to teachers to reach students across borders and also students from developing countries has used internet technology to subscribe for advanced educational courses. Many universities and colleges have embraced online education by creating virtual classrooms. Online education is flexible and affordable. Students can attend classrooms during their free time and they can also have a chance to interact with other students virtually.

Recent advancements in educational technologies have yielded positive results in our education sector. This educational technology is supporting both teaching and learning processes. Technology has digitized classrooms through digital learning tools like computers, IPods, smart phones and smart digital white boards. It has extended course offerings it has increased students' engagement and motivation towards learning.

Educational methodologies of the conventional kind are not adequate for the challenges of the time. Rapid changes in information and communication technologies necessitate corresponding paradigm shifts in the teaching learning process. In an environment that demands the use of technology, educators should be knowledgeable of the components that make up the overall computer attitudes of students and be willing to investigate the process and techniques of effective teaching and learning that can take place with computer technology. Over the last three decades, the availability of network technologies. In senior secondary classrooms is increasing, yet the use of such resources continues to be low. A major reason may be teachers' attitudes towards use of network technologies due to lack of opportunities for teachers to collaborate on integrating these

resources into classroom practices, there are many factors which influence teachers' use of computer technology such as knowledge, training, time attitude towards computers, gender influences etc. In order to utilize the growing range of electronic resources, teachers must acquire and practice the skills necessary to exploit them.

Educational technology plays an important role in teaching and learning process. The main issue is how to have an effective using of educational technology in instructional practices in the classroom. Barbara Gruber (2011) investigated initiative into the classroom. She argued that, the successful integration of a technology is the goal of any educational technology initiative and it's especially critical when the initiative has substantial budgetary impact.

Each equipment of a technology has a chance to be involved in teaching learning process. Since the last 20 years, e-learning took a place in the classrooms as a trend in using education technology. The E-learning is an important development taking advantage of computer technologies and software, communications and information, to be employed in the process of teaching and learning, where it has become one of the alternatives in the dissemination of education and activating the training, whether direct or indirect, overcoming the obstacles of space and time and risk and provided for the teacher's experiences effectively, enriched the learning and development teaching, and has become a modern teaching method, employing modern communication mechanisms; to support the educational process, enrich and improve the quality. (Hussein, 2011, p.43).

E-learning has many faces in classroom; interactive whiteboard is one of many equipments of e-learning. Interactive whiteboard is a large touch-sensitive and interactive display that connects to a computer and projector. A projector projects the computer's desktop onto the board's surface, where users control the computer using a pen, finger or other device (Gruber, 2011, p.19). The interactive whiteboard software allows for teachers to cue animation; equations and word problems that can be retrieved, dragged and dropped; projected information that a teacher can be retrieved, dragged and dropped; projected information that a teacher can highlight. Enlarge or conceal; stored additional resources and recorded student feedback. The interactive whiteboard allows for the creation of collaborative and interactive lessons by combining resources with a trained instructor's ability to move and manipulate objects (Essig, 2011, p.3). In addition, interactive whiteboard allows teachers to do many roles and get many benefits, for example, accessed and presented more relevant scientific content by linking to web resources and videos. Teachers can allow students to manipulate variables, test predictions, and see phenomena that would otherwise be impossible to observe (Schnittka; Bell, 2009, p.152).

Many studies investigated the using of interactive whiteboards in the classroom and its impact on teaching and learning process (Essig, 2008, p.28), including the effect of interactive whiteboards on pedagogy, motivation, interaction, perception, learning and achievement. These effects are related to contextual factors such as teacher training, teacher confidence, school culture, technical support, lesson preparation and practice time. And support the classroom learning environment for increases in student motivation, student learning and achievement (Diregorio & Sobel – Lojeski, 2009, p.255).

As a goal of a teacher preparation in education, technology use is increasing teacher's knowledge of educational technology. Knowledge in this context has often been limited to content knowledge of computer hardware and software affordance. Knowledge of educational technology use in teacher learning may be more complex, including knowledge of pedagogical strategies for teaching with computers, assessment methods for student products created with the aid of technology, awareness of student capacity and common obstacles and other factors yet unknown.

To examine what and experienced teachers know about technology use of teaching and learning, how they use knowledge of technology use in their practice, and how knowledge is shared. Investigation proposes to study teacher's attitude towards educational technology in their teaching. Globalization and technological change processes that have accelerated in tandem over the past fifteen years have created a new global economy "powered by technology, fuelled by information and driven by knowledge." The emergence of this new global economy has serious implications for the nature and purpose of educational institutions. As the half-life of information continues to shrink and access to low information continues to grow exponentially, schools cannot remain mere venues for the transmission of a prescribed set of information from teacher to student over a fixed period of time. Rather, schools must promote "learning to learn," i.e., the acquisition of knowledge and skills that make possible continuous learning over the lifetime. "The illiterate of the 21st century," according to futurist Alvin Toffler, "will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."

Concerns over educational relevance and quality coexist with the imperative of expanding educational opportunities to those most vulnerable by globalization—developing countries in general; low income groups, girls and women, and low-skilled workers in particular. Global changes also put pressure on all groups to constantly acquire and apply new skills. The International Labour Organization defines the requirements for education and training in the new global economy simply as "Basic Education for All", "Core Work Skills for All" and "Lifelong Learning for All".

Information and communication technologies (ICTs) which include radio and television, as well as newer digital technologies such as computers and the Internet have been touted as potentially powerful enabling

tools for educational change and reform. When used appropriately, different ICTs are said to help expand access to education strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others helping making.

Teaching and learning into an engaging, active process connected to real life. However, the experience of introducing different ICTs in the classroom and other educational settings all over the world over the past several decades suggests that the full realization of the potential educational benefits of ICTs is not automatic. The effective integration of ICTs into the educational system is a complex, multifaceted process that involves not just technology-indeed, given enough initial capital, getting the technology is the easiest part!-but also curriculum and pedagogy. Institutional readiness, teacher competencies, and long-term financing, among others. This primer is intended to help policymakers in developing countries define a framework for the appropriate and effective use of ICTs in their educational systems by first providing a brief overview of the potential benefits of ICT use in education and the ways by which different ICTs have been used in education thus far. Second, it addresses the four broad issues in the use of ICTs in education – effectiveness, cost, equity, and sustainability. The primer concludes with a discussion of five key challenges that policymakers in developing countries must reckon with when making decisions about the integration of ICTs in education, namely, educational policy and planning, infrastructure capacity building, language and content, and financing. With this expertise as a basis, we've compiled five top tips for making the most of TCT and encouraging teachers to embrace its potential innovations in school.

**References:**

1. Promote 21<sup>st</sup> century educators; Ensure that all teachers have the knowledge, tools and enthusiasm to fully integrate quality learning activities into ICT. This will maximise the impact on child's classroom experience and education as a whole.
2. Keep Best Practice Guidelines for all ICT hardware and software; They should not simply just be administrative tools or electronic proxies, but function more as an integrated part of the classroom and the lesson plan.
3. Create a virtuous circle based around ICT and innovative teaching; Remember that teachers who are more engaged with ICT in the classroom show greater use of innovative teaching methods, and teachers inclined towards innovative teaching methods use classroom ICT better.
4. Use ICT to link home and school effectively; ICT can do this by increased communication and transparency, as well as recreating a positive environment. Engaging parents will also increase student motivation and thus raise standards.
5. Positive associations with computers; Children associate positively with computers – they are therefore welcomed as a learning platform. Technology should be embraced and its appeal to students should be considered as positive!