



## **Impact of White board revolution in Indian teacher education scenario**

**Ani Vadakke Purayil,**

Zainab Memorial College of Teacher Education,

(Affiliated to Kannur University)

Cherkala, Kasaragode, Kerala

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### ***Abstract***

*We are part of a digital world of Information and Communication Technologies (ICTs) which guide the activities of our social life. The basic use of computers and Internet has become crucial part of our day to day life. Here the teachers and academicians have opportunity to foster their profession by applying technology in personal and classroom betterment. It is seen as now imperative that a child should possess basic computer literacy from primary class itself. So as to compete with this advance our teachers should also run along with the technological changes. Information and Communication Technology (ICT) can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration. UNESCO takes a holistic and comprehensive approach to promoting ICT in education. Access, inclusion and quality are among the main challenges they can address. The Organization's Intersectoral Platform for ICT in education focuses on these issues through the joint work of three of its sectors: Communication & Information, Education and Science. For the successful implementation of these global developments in our schools, we should first produce technically advanced teachers. Only such teachers can bring altogether development in the social life of individuals. In this article I examine the progressive adoption of interactive white board training to the potential teacher trainees self development cop with the world of Artificial Intelligence.*

**Key Words:** white board, digital natives

## **Introduction**

It's a world of digitalization and the digitalization entered in all aspects of human life, especially in education. The children of present world is treated as 'digital natives' as they are born and brought up in a digital world. They are totally different from previous generations and do they utilize technology in different ways than those of the teacher. In this contemporary era, individuals should have great deal of skills with improvements since science and technology take progress rapidly. In this context, different learning methods should be used in schools. One of these methods is "Computer Assisted Instruction" based on the constructivist learning theory. The objective of this study was to investigate application of educational technology in the field of teacher education to make the emerging teachers capable enough to handle the white board classroom. They apparently think differently because they have adapted to their digital environment (Prensky, 2001; Gee, 2003; Squire, 2003; Oblinger, 2004; Shaffer, 2006 and many others). However, many of us that support the application of technology as a learning tool It is said that cognitive abilities such as memory retention and analytical skills are improved by repeated playing of digital games, even to the extent of assisting with the offset of learning disabilities (Klingberg, Forsberg and Westerberg, 2002). Now, education technology is making life easier for both students and educators. Schools are increasingly adopting digital teaching technology to make the students active with the latest emergence like Tablet computer. To suit the increasing high demand and interest in technology for school education, there the Govt. of India introduced an education-focused tablet computer in the market with brand name Aakash.

The Central Board of Secondary Education has issued directives to all the affiliated schools to establish digital classroom from primary to secondary level. However, such classrooms were proved helpful to some schools, but soon they will become a part of every school. The HRD ministry has announced 2010-20 as decade of reasoning and critical thinking and the board is implementing ICT in schools to get maximum output. So within a short time span the interactive whiteboard will replaced with the traditional black board and chalk from our school classrooms. According to media reports of Educomp Solutions, a leading educational technology provider, more than 12,000 schools across 560 districts in India have adopted Smart class. More importantly, the number is growing at almost 20 schools a day. On average, in each of these schools eight classrooms are using Smart class. Meanwhile, state governments are also giving a boost to the adoption of technology in schools. Edureach, a division of Educomp, has partnered with 16 state governments and more

than 30 education departments and boards in the country, covering over 36,000 government schools and reaching out to more than 10.60 million students. Besides metros, digital classroom solutions are also present in schools at rural locations. The Indian government is also aiming to bridge the digital divide by delivering technology and content that makes access to digital learning inexpensive for rural areas.

### **Teacher Education and Smart classroom**

Interactive whiteboards lie at the core of these digitized classrooms. A good number of schools are experimenting with smart boards in their classrooms and exploiting multimedia and video as learning mediums. An interactive whiteboard is a large interactive display board that connects to a computer. A projector projects the computer's desktop onto the board's surface which is mounted to a wall where the operator control the computer using a pen or stylus. The relevance of technology proficiency of teacher educators is very clear in the on looking into the following survey result of ICT four Education. *infoDev* commissioned PricewaterhouseCoopers India to survey the experience of South Asia in ICT4Education. The result is a comprehensive

The Summary briefly surveys each country's ICT4E policy and implementation,

In nearly all countries, **four main themes** emerge:

- The importance of ICTs for training teachers. Much of this takes the form of basic computer literacy instead of how to integrate computers into teaching methods, but the emphasis on building capacity is important.
- Secondly, providing and sustaining ICT infrastructure in schools, especially through public-private partnerships, is essential.
- Thirdly, while ICT is an important part of formal educational institutions, it can be just as powerful in non-formal education settings, creating the opportunity for life-long learning.
- Finally, several countries have very strong Open and Distance Learning initiatives that seek to provide mass education and overcome geographic or financial barriers.

Here the prime importance is given for training teachers to handle ICT integrated classrooms in schools. Training educators is the other big impediment that schools are facing. Teachers are often unequipped to handle the technology assets of a classroom and that cascades into the problem of limited or no usage that many schools face after the implementation is over. Watal of Spring dales believed that, "Failure of technology in education is poor alignment between learners and teachers." She was also of the view that traditional methods of training



and development for teachers had to be covered into the deployment cycle of new technologies

### **Significance of Technology in Teacher Education**

“The quality of Nation depends upon the quality of its citizens. The quality of its citizens depends not exclusively but in critical measures upon the quality of their education. The quality of their education depends more than quality of the teachers.” (American Commission on Teacher Education 1974).

If the traditional methods are thought to be insufficient in educating an individual who is supposed to have the contemporary skills, one of the most effective ways is taking advantage of instruction technologies, especially the computers (Altun, Uysal and Ünal, 1999; Yiğit and Akdeniz, 2000). The computer is considered as a basic element in every area that is talked about reforms in teaching- learning process. One major factor which is related to academic performance is improper transferring complex ideas and concepts. The technological development to education helps the teachers in presenting the complex topic vividly.

The Govt. provide costly equipments to schools and the school authorities also collect expensive equipments at their own will, but bad to say no one is aware how to handle it. For a long time the school smart classroom become an ICT museum. Presently our teachers first have seen the educational technology equipments only when they join a school after the completion of B.Ed or M.Ed course. We should restructure our teacher education curriculum by providing adequate periods for educational technology, both theory and practical. Reforms are essential to employ equal importance to educational technology in tune with Educational Psychology and Philosophy. This is not proper approach; they should get sufficient skill in handling modern educational tools along with the traditional classroom atmosphere.

Tagore has said, ‘A lamp can never light another lamp unless it continues to burn its own flame, a teacher can never truly a teacher unless he is still learning himself.’ To keep the lamp lightened we should train our teachers by applying latest technological advancement. The major benefits of this white board based training are;

- Develop a broad understanding and competence in the application of technology in general education.
- Avoid the typical classroom which characterized by students sitting through hour-long teacher monologues.

- Develop a comprehensive understanding of technology, significance, and relationships to student's achievements in connection with society and the environment.
- Digital class room establishes an enabling environment to promote the usage of technology in Schools.
- White board learning improves the learning levels of Mathematics, Pure Sciences, Social Sciences, language and numerous extra-curricular activities.
- Promote experiential learning, analytical thinking and develop self learning
- Enable secondary school students to acquire skills needed for the digital world for higher studies and gain better career opportunity.
- Build capacity in teachers to upgrade their learning and teaching skills by using ICT supported learning and teaching environment.
- The application Game Based Learning ensures more student participation in the teaching learning process.
- White board technology and online resources open a wide scope for teachers to prepare better lesson plans
- Keep the classroom active and live
- Attain abilities and teaching competencies necessary to meet individual as well as classroom needs.
- Identify and develop content and strategies for teaching others for the effective utilization of technology.
- Create an excellent technology sophisticated teacher, representing and promoting the profession in a positive manner.

### **Concluding statement**

In conclusion I would like to quote Microsoft's Bill Gates statement "Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important." Every teacher considered the development of positive attitude towards the application of technology along with the subjects as his center responsibility. According to Yara (2009), teacher, attitude and his method of teaching can greatly influenced the students' attitude. What I am suggest for developing a high and consistent standard of continuing professional development for secondary school teachers, and for more and better quality practical work with the technology of teaching. The issue remain crucial to improving the motivation of secondary level school teachers, raising the quality of teaching, and thus to

engaging young people learn well. A great problem in our education system is the perception that the traditional science subjects and mathematics are more difficult than other subjects, and that it is consequently more difficult to achieve impressive result. Digitalization of classroom helps to reduce these complexities to an extent.

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