

Technology in K-12 Education: A Boom or Bane A study

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Abstract

The purpose of this study was to discuss the good and bad effects of using Information and Communication Technology (ICT) in schools from teachers' and students' point of view. We have discussed here three main issues: on ICT use and its proficiency, on teachers in the school community, and on learning environment and teaching practices. The study is totally related to the national educational theory whose objective is to support the proper implementation of ICT in an effective way at all educational levels. We have thought to make the teaching and learning environment fully technology oriented at what extent we achieved this goal, as Government had funded a big amount for this project.

Keywords: *ICT, proficiency, perceptorial, SCT, CMT.*

INTRODUCTION

The phenomena were done using a mixed methods approach. The qualitative data from three case studies and the quantitative data from three statistical studies were combined. Students have the skills to use ICT based applications and new forms of technology, but the working habits might be ineffective and in wrong way. In fact, the majority of teachers have perfection in their routine practices but many of them still have difficulties in using ICT skills. There is a huge generation gap between teachers and students using ICT tools. This is manifest especially in the ICT-related perceptorial practices in the majority of schools.

New digital technology (ICT) is giving a significant impact on our educational practices. ICT also playing a vital role in changing the thinking student in understanding of concepts, mental attitudes to achieve the target, moral values towards the society [1]. We are using conventional methodology and old ICT tools, which are not much interesting and motivational to students. Sometimes

this creates boredom in the classroom for both teachers as well as for the students. Our, students find the outside world and environment more enthusiastic because of availability of advanced and updated learning technology and ICT tools. Many teachers are using the interactive ICT tools depending upon the situation, method of teaching and learning goals by giving the students free hand to use the tools, giving opportunity of sharing of knowledge, introducing new factual and realistic activities, makes students more responsible and active to participate in class room activities. These are, indeed, strongly dependent on the ICT related practices of the teacher. Even, changes towards technological improvements in well-organized developmental projects and institutions are slow. [4]

LITERATURE REVIEW

In 1999 to 2010, there was the initiative for the implementation of Smart Schools taken by the Malaysian Government; they accessed the advanced ICT technology (Bajunid, 2000; Frost & Sullivan, 2004). Accordingly, it has changed (not

completely) the strategies for the teaching and learning, we have followed so far (Bajunid, 2000; Ya'acob, 2005), the current school scenario (MMoE, 1997a), the teacher training perspectives (MMoE, 1999) and the educational management training for the teachers (MMoE, 1999). Although the Malaysian Government had given a huge fund to transform the schools with the use of technology, still the classrooms are driven by old traditional lecture methods, using the textbooks and the conventional chalk board methods (Ahmad, 2005b; Ahmad, 1998; Bajunid, 2000; Konting, 2003; Lee, 1999). In 2004, the smart school project was launched in Iran based on the Malaysian model. At the experimental stage, the project was implemented in four high schools in the capital city of Tehran, by the Iranian Ministry of Education. Later, other educational districts also implemented the project in 2011. Today main focus is to equip the schools with computers, and other network facilities to make the learning fully technology oriented. An implied assumption had been the big barrier in the project: by implementing computer hardware in schools, technology integration is becoming a trend at all educational levels (Thang, Hall, Azman & Joyes, 2010). Unfortunately the U.S. high schools come under the category of low-performing schools, in fact, these schools need major transformation. Observers said there are a lot of factors causing young people to leave high school because of losing essential skills. A very high dropout rates revealed by the Urban Institute Study (Orfield, Losen, Wald, & Swanson, 2004). There are enough evidences which shows we don't provide adequate knowledge to the students which is very much required in the outside technological world in this era. Only a few students have that much knowledge which is essential today to get a higher position in the society. According to the Blurton (1999), ICT is the set of all

technological tools and resources which we use for communicating, for creating, for disseminating, for storing and for managing the information.

GOALS OF THE STUDY

The overall focus of this research paper was on the effects of ICT in school, and we investigated the topic widely from teachers' perspectives as well as from students' perspectives and at the classroom and at school level. We started the research with the issues keeping in mind:-

First, issues related to technology: Do students and teachers access the technology in the classroom?

Second, issues related to the activity based learning: Is the teaching and learning process really changed?

Third, issues are the management and organization related: Are they fulfilling all the needs to make their school ICT based in general. Do they provide training to teachers?

The traditional approach of lecture and notes taking has lost its effectiveness as the new generation wants something more and this is also the demand of our society [1]. ICT usage spreads everywhere from small organization to big one. It is in demand everywhere.

METHODOLOGY

The sampling and tools are used as follows:

1. Sample: The sample for the present study consists of X-XII standard students in a reputed public school in delhi.
2. Tools used: For collecting data the investigator has used questionnaires among the students.

Statistical technique used: The collection data were analyzed by applying statistics on the usage of ICT learning in school.

The sample was distributed on the basis of different classroom teachings into two

types i.e. Smart Classroom teaching (SCT) and traditional mode of teaching (TMT).

The distribution of the sample on the basis of these strategies is presented in table 1.

Table 1: Showing Distribution of Sample on the basis of different classroom teachings

S.NO.	CLASS	GROUPS		Total No. of STUDENTS
		Experimental (Group learning with SCT)	Control (Group learning with TMT)	
		No. of Students	No. of Students	
1.	X	120	40	160
2.	XI	40	70	110
3.	XII	45	85	130
TOTAL		205	195	400

CONCLUSION

After analyzing the above-mentioned study, it has been observed that till X standard students are majorly using the ICT while learning on the other hand the XI-XII students still concentrating on the conventional method of teaching, since they are supposed to compete and score good number for further studies, which can only be obtained by conventional studies since our teachers are supposed to refer those patterns while checking answer sheets.

On the other hand, till X standard, students are having the open ideology, factually involved and more enthusiastic towards using the ICT. Given a chance, I will be more interesting to motivate the student of XI-XII to be more realistic and factual with the help of ICT. They should present themselves freely, conceptually, technically more sound with the help of more and exceptional usage of ICT. Students should be provided with internet accessibility of course under PG category, so that they can keep themselves updated in terms of technologically, socially and educationally. Being senior students they have the capability to explore the things by themselves.

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