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## Challenges Faced by Teachers in an ICT Equipped Classroom

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**Abstract:** *Today's age is the age of digitization. On the one hand digitization has brought revolution in the field of education and on the other, some key concerns like digital literacy, availability of e-resources, proper infrastructure etc. are also emerging. ICT means Information and Communication technology. ICT in education means teaching and learning with technology. The current paper aims at exploring challenges and issues in ICT based education. Students in ICT based education. It highlights the different issues faced by student in education system. It also suggests the ways and for innovation. The current paper is a conceptual paper; it derives understanding from various scholarly articles and researches available on the concerned issue. The results highlight the factors affecting ICT pedagogy. The paper also talks about perceptions of students and teachers on ICT based pedagogy. The challenges faced by students and teachers in ICT based classrooms. In this conceptual paper, issues and challenges in planning, implementing digital technologies for learning and teaching at school level are discussed by focusing on pedagogical aspects and the classroom interactions and experiences. Innovative technology utilized as help for insight has more noteworthy impacts than the innovation utilized for introduction of substance (Passey et al., 2016). The current paper opens the ways for bringing innovation in ICT based pedagogy at school level. Further, it will be very effective in modifying pedagogical aspects related to ICT.*

**Keywords:** *Digitization, Gaps and Challenges, School Education, Pedagogy*

### 1. INTRODUCTION

ICT stands for Information and communication Technologies (Kanvaria, 2014). It also helps in improving teaching and learning process. ICT based classroom makes both students and teachers to get engaged in teaching and learning process in a more active manner. In today's times technology has become an integral part of our day to day life. Instructing with the assistance of ICT is more effective and compelling than the conventional technique for educating (Watkar, 2014; Aggarwal, 2010).

This paper aims at looking into the classroom challenges and concerns faced by students and teachers in an ICT equipped classroom. It also highlights the various problems faced by the teacher while delivering a lesson using Information and Communication technologies. The paper also provides some key factors related to pedagogy while teaching in an ICT equipped classroom.

Though technology has given advancement to the educational system, teachers and students have to do lots of hard work to become efficient users of the ICT equipped classrooms. This paper sheds lights on certain specific concerns faced by the teachers while teaching in an ICT equipped classroom.

ICT and Pedagogy are two different terms but when dealt in the context of education both become deeply interrelated. ICT in education has no meaning without the proper pedagogy.

### 2. LITERATURE REVIEW

Information and communication technologies (ICTs) - which include radio and TV and in addition more up to date instructive advancements, for example, PCs and web have been touted as possibly effective empowering devices for instructive change and change. ICTs are said to help, grow access to training, fortify the significance of instruction to the undeniably computerized work place and raise instructive quality by, among others, helping influence educating and learning into a dynamic process associated with genuine living (Shastry, 2009). Technology has really been a boon to mankind. It is a great gift to development and proceed further and to achieve new goals and milestone in every aspect of life. As far as education is concerned it has become inevitably important to equip our learners with ICT facilities. It is important not only because of giving our learners a techno friendly environment where they can get themselves skilled in using technology but also to make them learn new things with a greater efficiency and accuracy. ICT equipped classroom provide such opportunities to our young learners.

Apparatuses and gadgets are never again isolated from learning. They are a piece of learning. New media as a discipline is not any more a methods with which to instruct understudies. New media is the establishment on which we instructors manufacture our instructional method that will teach understudies. Learners' communication with innovation in instruction and their own interest in innovation, regarding time, vitality and capital, altogether influence how they learn and, consequently, how teachers ought to build up teaching method (DePietro, 2013). While talking about ICT equipped classroom, it is very important to link with the pedagogical aspect also. The way a teacher designs activities to attain predetermined activities, how teacher will select those activities, and through which media transaction of these activities will take place. Also the teacher should keep in mind the effectiveness and appropriateness of the software and technology through which the teacher is going to teach in the classroom. For instance, if the teacher plans to teach photosynthesis to class 8 students the teacher must know the best method. The teacher may use power point presentation followed by a worksheet. The teacher must consider the age appropriateness while choosing and designing the activities. As mentioned above learning environment also play an important role in developing pedagogy. Classroom environment and the children's environment or settings, where he learns, comprise the learning environment. In an ICT equipped classroom, it is very important to create the classroom environment in such a manner so that ICT can change the classroom environment and it may be considered to be more useful in supporting student-centred approach to instruction. It can also play an important role in developing the highest level of thinking i.e. reflective thinking and higher order skills in students. ICT provides a scope for student centred environment. It provides scope for learning at different pace. For instance, teacher can provide instructions in digital form and each individual can work on his/her respective system on their own pace.

Pedagogy is the most used word in educational discourse, we all are familiar to this term but its meaning is very vast and it is also very important in teaching learning process. There are many definitions of pedagogy of ICT, a few of which include: teaching science lesson, organising maths activities and engaging children in self-directed learning: the art, science, or profession of teaching- especially in the field of education. Pedagogy and instructional method may likewise be characterized as the capacity or work of an instructor; instructing or potentially the craft of investigation of educating; training or instructional strategy (Crumly, 2014).

Rights, obligations and principles give methodologies to our classroom. Schedules strengthen our classroom rules and other everyday practice. They make everybody's life less demanding and free up our most valuable resource thinking time schedules are particularly essential in an ICT room where there are visit advances between educator directions, diverse PC based exercises and gathering work or talk (Simmons & Hawkins, 2009).

As they share, the ICT classroom shows various particular difficulties to keeping up educator mindfulness. Most ICT instructors improve their introduction by utilizing a blend of programming, projectors intuitive whiteboards and remote introduction devices. This can be diverting for instructors and understudies; it is likewise too simple to lose attention to the classroom when you endeavour to connect with a specialized glitch. At the point when understudies are utilizing PCs their activities can be covered up. Little heaps can vanish behind PC screens. It is likewise simple for understudies to conceal them on screen activities by limiting windows at whatever point an educator is close.

### **3. CHALLENGES IN THE CLASSROOM**

Some of the challenges in an ICT equipped classroom are as follow:

- **Layout of classroom:** Layout of the classroom is very important in ICT equipped classroom. If the classroom is not structured properly then it becomes very difficult to use pedagogical tools especially made up for ICT classroom. For instance, if the teacher is showing some video to the students and the students who are sitting at the corners would not be able to see the screen then it would not be that much effective and useful for teaching a lesson as some of the students are deprived of it because of invisibility of the screen. So it is very important to organise the layout of the classroom properly.
- **Pupils hide their actions:** In ICT equipped classroom where students used to learn through computers, engage with different academic activities. Being an active and alert teacher and with an understanding of children's mischievous behaviour, the teacher should be aware of children's activities on their respective desktops. Yes of

course it is very challenging for a teacher to keep an eye on each and every student but the teacher has to be smart enough to handle such issues and devise some strategies to ensure avoidance of engagement of any student with non-academic activities on computers.

- Pupils of short height hide themselves behind computer monitors: A classroom consists of diversity of students in terms of physical as well as non-physical aspect. If we talk about physical aspects some students have relatively shorter height than their fellow classmates. They can easily get them hide behind computer monitors.
- Surveillance: For teachers while using ICT pedagogy tools surveillance is a very big challenge. Educators frequently need to sit beside understudies to work through an issue thus wind up undetectable to the class (Simmons & Hawkins, 2009). During this time some of the students may cause disturbance and the rest of the class may get distracted.
- Time management: Sorting out ICT extends inside the time accessible is testing commonly the time accessible for utilizing a PC is a most extreme of 45 minutes and numerous understudies invest an extent of this energy essentially recalling where they were up to from the earlier week. A noteworthy piece of ICT instructor work subsequently is to keep students concentrated and on tracks (Simmons & Hawkins, 2009). Researchers found that teachers are not adequately trained for using ICT tools effectively. There is a lack of training and resources in this area. Teacher training institutions do provide pupil teacher with training in ICT but it seems like that there is a lack of adequacy which reflect in their teaching. Teachers spend more than enough time in managerial task rather than teaching- learning process.
- Selecting and developing resources: Resources fill in as to give a fortifying setting, structure the learning knowledge and advance freedom. Assets to be adjusted at different stage-test generators, video recording/altering, video conferencing, intelligent whiteboards, virtual learning condition and video instructional exercises (Simmons & Hawkins, 2009). Selecting resources appropriately keeping in mind the stage and interests of learners is very important and big task. It is the responsibility of the teacher to address each and every child present in the classroom. Teacher should select resources in such a way that all the students can engage in the learning process. For instance, if there are differently abled students sitting in an ICT classroom, the teacher can use a video with caption so that student with hearing inability can read themselves and understand better. Or teacher can develop different software and programmes for students who learn at different pace.
- The Physical and Virtual Environment: Showing ICT offers opportunity and test in pretty much equivalent measure. The supernatural box which sits before your students can play music, recordings, and recreations. Most understudies would locate that lovely diverting particularly when they are withdrawn with what is occurring in the classroom. Indeed, ICT educator need to oversee two learning spaces, the physical classroom and the virtual condition (Simmons & Hawkins, 2009). For a teacher it is very challenging to manage these two spaces (physical and virtual environment) so that classroom transaction will be most effective. In an ICT classroom, students can get distracted from their lesson they might be showing greater interests in watching videos and playing games on the computer.
- Technology as Competitor: Now and again the educator dislikes the utilization of innovation in training, maybe in light of the fact that he considers innovation a contender which may totally dispose of him from instruction. This dread is supported to some degree, since now and again training can be conferred through innovation without the instructor. Would technology be able to totally kill the instructor from training? In spite of the fact that innovation can complete various showing capacities successfully, there will even now be a place for the educator in training. In any case he decides the goals of instruction and plans a training framework which can accomplish the targets (Rohtash, 2013). Technology has posed a new question to the agency of teacher. Some people say that teacher has become useless in today's advanced technology times. This has created a sort of pressure on teachers for sustaining themselves in such a technical scenario. For this, teachers have to be very updated and prepared, they have to update their knowledge and ICT skills; they have to be 4 times ahead than the technology.

#### **4. EDUCATIONAL IMPLICATIONS**

Some typical educational implications can be as:

- Teacher should plan the lesson in such a manner to avoid wastage of time.
- Teacher should focus on academic tasks rather than devoting much time on managerial tasks.
- Teacher should be prepared and updated.
- Teacher should select the resources keeping in mind the student's interests and diversity of students.
- Teacher should organise the physical and virtual environment to ensure maximum engagement of all the students and to minimise distractions.
- ICT equipped classroom should have CCTV surveillance.

## 5. CONCLUSION

The current paper presents a relationship between ICT and pedagogy. The outcomes can be used as means to forecast, explain, and improve the integration of these digital mobile devices for fostering learning activities and generic competencies in the educational context. ICT equipped classroom possess a number of challenges like organising layout of the classroom, pupils can hide their actions behind computer monitors, issue of surveillance, providing each and every students proper scaffolding and support, ensuring minimum distractions, keeping teachers and systems updated and safe, to ensure that pupils do not engage in non-academic tasks over computers.

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