

# ICT In Education

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## Abstract

ICT (Information and Communication Technology) and is called a preferred levels of technical technological abilities for teachers. As a teacher we already have a relationship with technology and the relationship is a conditional dependency, it is dependent on when we need specific types of technology that we will use as a teacher. For example, if we need to be using a laptop for our teaching that's part of your role then we will use a laptop and that's the skills, those are the skills we will use in terms of our teaching ability if we need to use a smart board or a phone or any special other electronic equipment or digital equipment then we will have a certain arrangement or certain relationship with those items. we will be able to use them based on the level of our abilities and that's what your engagement is so the level of our skill determines how much engagement we have with certain bits of technology.

**Keywords:** ICT, Education, Pedagogy, Skills,NEP,

## Introduction

ICT plays a very significant role in all the aspects of life. we know, this world has become completely digital, everything in this world is dependent on the Information Communication and Technology. All the required information we get through the help of ICT. It has been observed that ICT has significantly impacted the human civilization. And we are dependent on the internet, where we look for information. Yes, you heard right Information, which everyone needs (like you have now). But do

you know how this digital information reaches your mobile or computer? The answer is that some technology has been used to reach this information to you, whose name is information technology. Similarly, nowadays every electronic device is connected to you through network or internet. Through which you communicate. Now the technology that has been used here is called Communication Technology. Both these technologies come under ICT. ICT also plays a very important role in education sector also.

## ICT Skills Levels for Teachers

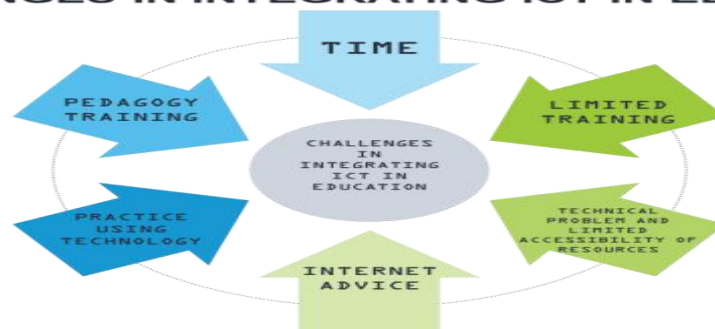


## Challenges in Integrating Ict in Education

One of method that enhancing classroom teaching and learning ICT use in the classroom

is important in 21st century, today we would like to discuss few challenges from teacher perception in teaching and learning when using ICT tools.

## CHALLENGES IN INTEGRATING ICT IN EDUCATION



1. **TIME:** The first issue which is time, one of the common problem that teacher face is not having enough time to plan or have limited time, it is one thing to be able to spend several hours planning a class and then you realize that you have got four or five classes to plan for tomorrow there simply isn't enough time to you to spend hours planning each class and when using technology or ICT tools it required more time when you have more class, you need to plan the lesson, they don't have time to explore what is the best platform or sources that can be used for the student and of course as a teacher we need to know what is the best platform and the best sources that can be used for the student at home because not all students have the same facilities. The platform that teacher uses is like google classroom and palette and then teacher will stick to one or only two internet site says they don't have time to explore more or different internet sites. In this case actually student can get more information about the certain thing but with this issue we limit them to get it same goes to education software like SlideShare pc will not explore the software widely so the student can get more information lesson when with using technology not going so smooth and student will get less information.
2. **LIMITED TRAINING:** Second obstacle for teachers in using ICT in their teaching and learning activities is lack of ICT knowledge and training. There are limited training opportunities provided to the teachers in the school, hence they cannot increase their knowledge and they cannot increase their skills in handling any technology even if there is there is facilities provided in the school. So when there is lack of training it means that there is a shortage of teachers who are qualified to use the technology confidently teachers. Even teachers who consider themselves to be fully or partially skilled in using ICT will feel anxious and unconfident to use the technologies in front of the class they, may have perceptions that their students are more advanced than they do. Thus this will affect the learning content, the lesson plan and also will affect the teaching and learning process in the classroom.
3. **TECHNICAL PROBLEM AND LIMITED ACCESSIBILITY OF RESOURCES:** Third is deal with technical problem faced by teachers and having limited accessibility of resources at schools. The technical problem with the ICT used in the classroom can be awful for the teacher. As we know when we use technology or ICT tools in the classroom there is a lot of issue associated that may be happen in the classroom so this limit teacher from using technology or ICT Tools in the classroom because do you think that you have time to deal with the problem and at the same time they need to teach so there is actually a lot of technical issue so the issue with the ICT and course objective is clashing. The limited accessibility of resources at school and at home is also a major issue. Nowadays our education implemented ICT which is a new phenomenon for educators parents and students especially in elementary and secondary school. Along with that this the ICT tools such as computer laptop smartphone and software are a basic necessities, unluckily not every one of us have it at home.
4. **PEDAGOGY TRAINING:** Forth is lack of pedagogy training

researches/surveys shows that even though some teachers have received and attending training on ICT skills the teachers are not optimizing on what ICT can offers them in their teaching and learning activities. So, the issue is that they have attended their training programs but they but the training programs is focus mainly to develop their ICT skill and not linked the ICT skill to teaching and learning aspect or pedagogical aspect. So, there's still an issue on how to deliver their content. furthermore, some of the teachers are reluctant to attend any training in ICT this is because they have to travel either their city or other city to complete the training program this take more time more energy and more money besides they do not want to attend the training program because they may learn the new skills at youtube or ask their colleague or friends that is the reasons why they do not want to attend any training program. On the other hand, some senior teachers are comfortable with their old teaching style which not acquire much new technology they feel that they still can teach effectively to the student without the new technology there's another reason why they not want to attend any training program in the use of ICT.

#### 5. PRACTICE USING TECHNOLOGY: Fifth is a teacher have

limited time to explore and practice using their technology, teacher must have knowledge in many different fields this obviously also applies to teaching the subject technology but with the limited time to access with the ICT tools is difficult for teachers to explore and practice using the technology usually teacher only access the ICT tools and technology only at school because as i said just now when at home they have their own responsibility so not all teachers will practice using all the stuff at home so they're on they have limited access actually so they're on the asset at school so there's no more things that they might be learned

6. **INTERNET ADVICE** : last is locate internet advice, locate internet advice actually is very important to be aware since as we know internet is a great source of information but there is a lot of information that is out of date unreliable and incorrect so when teachers have limited time to locate internet advice the student will get the wrong information or the information will not fulfill what is the student needs so as a teacher with must avoid the situation happen because we don't want our student get the wrong information from us.

## NATIONAL POLICY ON ICT IN SCHOOL EDUCATION

### Aims and objectives on National Policy on ICT in school education



#### TO PROMOTE

- Evaluation, Rresearch, Experimentations in information and communication technology tools.
- ICT enabled practices in order to guide, inform and utilize the potential of ICT in school education.
- A critical understanding of ICT, its advantages, limitations and challenges.
- ICT enabled tools and resources to students and teachers.

#### To create

- An environment of cooperation, collaboration for utilization of ICT in education.
- An environment to enhance the knowledge of ICT.

#### To promote

- ICT enabled tools and resources to students and teachers.

## National Policy on ICT in School Education has stressed the use of ICT

1

### ICT Enabled Teaching-Learning Process

National policy on ICT in school education has stressed on ICT enabled teaching-learning process. It aimed at improving the quality and efficiency of teaching learning process.

2

### ICT for Skill Development

National policy on ICT in school education has laid stress on ICT for skill development. Job oriented courses in ICT will be developed for students at higher secondary school level.

3

### ICT for Children with Special Needs

National policy on ICT in school education has stressed to achieve the goals of inclusive education in school. ICT software and tools to facilitate access to children with special needs will be part of ICT information in all schools. Special care will be taken to ensure appropriate ICT access to children with special needs.

4

### ICT for Open and Distance Learning:

The students who have dropped out cannot continue formal education. Such students can get education through open and distance learning mode. Present open schooling system will be strengthened by the use of ICT. Access to e-books, digital learning resources will be developed as per student support services. All open and distance learning system will provide all services Online.

5

### ICT for School Management

E-Governance and automated school administration programmes will be adopted. School based management information system will be deployed. ICT will be used for school as per need of the schools.

6

### ICT Infrastructural

The state will establish appropriate and adequate ICT and other information for all secondary schools based on the size of the school, needs of ICT programme and time sharing possibilities.

7

### Digital Resources:

The state will endeavor to provide equitable universal, open and free access to ICT and ICT enabled tools and resources to all students and teachers.

**To overcome this problem, we should work on the competency level of our self and our fellow teachers.** What is teacher competency? This competency can be described as a set of knowledge skill attitudes value or motivation needed in a in order to be successful in a job while ICT competency can be referring as a set of technology standards that define proficiency in using computer technology in the classroom, we can say that the issue of lack of teacher competency can be seen through different sub points here there are **skill readiness knowledge** and also **attitude**

- **SKILL:** The competency of the teachers should be developed for using the available ICT in an excellent way, the training sessions should be a continual process till the time the satisfactory level is achieved. These sessions can also be provided to the teacher in a recorded form or a manual form so that a teacher can refer to it whenever required.
- **READINESS:** The teachers should be mentored and motivated to conduct the online learning or ICT in classroom. A buddy system can be implemented where a teacher having good command on ICT can handhold other teacher to gain knowledge and confidence in using the available ICT in school.
- **KNOWLEDGE:** The teachers should be made familiarized with the available ICT

and how they can use the same according to the plan of teaching. In order to be a good teacher, one should improve their pedagogical knowledge, instructional skill and should constantly adapt to new technologies. A good faculty should also refine their skill and competency in order to integrate ICT effectively.

- **ATTITUDE:** Attitude is referring to the teacher acceptance to the changes from traditional teaching approach to involving ICT in the teaching Learning process. Teacher's positive attitude toward ICT is the key factor for enhancing teacher acceptance and to use the use of ICT. The quantity or the quality of technology available in the classroom the key to how ICT are used therefore teacher must have the competence and right attitude towards the technology.

So, in my opinion skill, knowledge, readiness and attitude is the key to determine the teacher competency. All these factors or characteristics are vital in order for the teacher to create a better learning environment for the students. If you as a teacher wanted to conduct a fully online learning or using ICT in your lessons, imagine how if you don't have the skill in operating the web or no idea to choose which platform that's suitable or meet your requirement of your lessons what do you think the circumstances will be. To deduce that

teaches awareness working in 21st century and the school lack of encouragement to teachers on the use of technology in teaching in the classroom environment is the main issues that need to be solved immediately to avoid teacher and student from left behind. So the conclusion in a nutshell teachers are central to the effectiveness technology infrastructures and self-education how did you acquire the skill they need to use technologies and how the technology is actually used and what to end are critical policy domains that must be carefully explored so lastly i have some quotes here technology will never place a great teacher but in the hands of a great teacher technology can be transformational.

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