

IMPACT OF DIGITAL LEARNING IN EDUCATION SECTOR : A PANDEMIC PERSPECTIVE

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Dr.V.Sureshkumar

*Seminar Director and Associate Professor, Department of Commerce
Nallamuthu Gounder Mahalingam College, Pollachi, Tamilnadu*

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*Assistant Professor, Department of Commerce
Nallamuthu Gounder Mahalingam College, Pollachi, Tamilnadu*

INFORMATION AND COMMUNICATION TECHNOLOGY IN 21ST CENTURY TEACHING AND LEARNING

Ms. R.Subha Sangeetha

Assistant Professor,

PG Department of Commerce with Computer Applications.

Ms. P.Priyanka

Student of PG Department of Commerce with Computer Applications.

Abstract:

21st Century is the where we are in now, is a time of freedom and technological advancement. 21st century people are the first ones to experience a whole new digital world. The changing digitalized knowledge based economy a shift and transition from teacher centred instruction to learner-centred mode of instruction. This is desirable to acquire the new 21st century knowledge, skills and attitudes such as communication, critical thinking and problem solving, leadership, teamwork, learning to learn skills etc. So, the role of the teacher will change from knowledge transmitter to that of learning facilitator, collaborator, guide, couch and mentor. Students in the learning process will have greater responsibility for their own learning in this environment as they search for, discover, create and collaborate and communicate the knowledge with others for solving problems. To inculcate required knowledge and skills in students effectively, in all over the world, teachers and educational systems are using ICT integrated teaching and learning process. 21st century teacher must use multi modal content, hands-on training, personal and techno-savvy in an interactive, collaborative and non linear method of teaching. 21st century learners are more infective and get information from various ICT resources. However, the students should utilize and develop higher order cognitive skills. These are vital to find solutions for complex real-world problems. In this regard, ICT is an effective tool for this emerging learning , making the learner in active role of self-directed learning, providing flexibility and interactivity in the teaching and learning process.

Keywords: 21st century Skills, Learning Styles, Smart Classroom.

Introduction:

The changing digitalize knowledge based economy a shift and transition from teacher-centred instruction to learner-centred mode of instruction. This is desirable to acquire the new 21st century knowledge, skills and attitudes such as communication, critical thinking and problem solving, leadership, teamwork, learning to learn skills etc. Information and Communications Technology (ICT) can impact student learning when teachers are digitally literate and understand how to integrate it into curriculum. Schools use a diverse set of ICT tools to communicate, create, disseminate, store, and manage information. In some contexts, ICT has also become integral to the teaching-learning interaction, through such approaches as replacing chalkboards with interactive digital whiteboards, using students' own smartphones or other devices for learning during class time, and the "flipped classroom" model where students watch lectures at home on the computer and use classroom time for more interactive exercises. When teachers are digitally literate and trained to use ICT, these approaches can lead to higher order thinking skills, provide creative and individualized options for students to express their understandings, and leave students better prepared to deal

with ongoing technological change in society and the workplace. ICT issues planners must consider include: considering the total cost-benefit equation, supplying and maintaining the requisite infrastructure, and ensuring investments are matched with teacher support and other policies aimed at effective ICT use.

Characteristics of Teaching:

Teachers have the greatest responsibility when it comes to quality of education. Teaching requires commitment, educational leadership, and the ability of conveying knowledge in a way that enables students to acquire it. However, knowledge, although important, is not the only necessary parameter for successful teaching. Teachers also need to understand students' needs, the way they think, and to be able to maintain their attention in class in order to be successful.

(i). Active learning techniques:

- ❖ **Discussion** – classroom is a place where students are entitled to their own opinion regarding the topic that is being discussed. It is important that students have their own attitude, because that way, they will look at the lesson being covered from their own, personal angle. In addition, discussion yields answers to various questions that may not have been even asked otherwise.
- ❖ **Brainstorming** – creative thinking and sharing ideas on a given topic is a great learning technique, because it encourages students to come up with a solution together. In brainstorming, there are no wrong answers, which relieves students of the anxiety that they have done something wrong.
- ❖ **Note taking** – active note taking means covering a lesson “in one’s own words” (instead of merely copying what the teacher says). Another great example of active note taking is creating one’s own system of explanations and linking terms with certain parts of the text. Notes created in this way improve student comprehension of the teaching material, and encourage them to always seek and write down answers to the questions that interest them.
- ❖ **Teamwork** – joint problem solving during lectures and work on school projects are highly effective teaching methods for student engagement. Instead of passively listening to the teacher’s presentation, students help each other to achieve a common goal.

(ii) Great learning environment:

Environment in which teaching takes place is extremely important for a positive learning experience. To make students feel comfortable, schools strive to create an inspirational learning environment. The classroom is a central place for educational activities, which is why it should be visually appealing. This is why classrooms are usually filled with colorful posters and pictures that send positive messages (respect your classmates, read books, eat healthy, etc.).

(iii)Clear communication:

Clear communication is also important in class when student knowledge is tested during the school year (both orally and in writing). Test questions must be clearly formulated so as to avoid insecurity and confusion in students. The same applies to oral exams, where clear communication is even more important, for example, the teacher's criteria and the level of knowledge needed to get a passing or good grade. In this way, conflict and stressful situations which could ruin a positive classroom atmosphere are avoided.

(iv)Critical thinking:

Critical thinking is also important in education, because it helps one to see the world from a personal angle, thus developing positive qualities in children. This is why various techniques of critical thinking are implemented since elementary education, through high school, and finally in higher education. The higher the level of education, the more important critical thinking becomes because it helps students to obtain significant knowledge and scientific achievements.

(v) Problem solving:

Problem solving helps in the development of important qualities, such as patience, teamwork, diligence, and logical reasoning. In addition, by solving challenges through the application of the knowledge acquired in class, students begin to understand the practical value of learning. All this knowledge improves one's learning in school, but also understanding of everyday challenges.

Types of Learning:

(i) Skill Learning

This involves learning to accomplish a task efficiently. Efficiency is determined in terms of ease, speed, and the accuracy with which a learner can perform a given task. Skill learning starts right from birth, beginning with learning how to walk, talk, read, write, etc.

(ii)Perceptual Learning

This involves learning based on our ability to make sense of what we perceive around us through our sense organs i.e. what we see, hear, smell, taste, or feel. This kind of learning is enhanced by experience, and the changes it brings about in human behaviour are permanent or semi-permanent. Our ability to differentiate between shades of colours, or musical not are examples of perceptual learning.

(iii)Conceptual Learning:

Through conceptual learning, individuals grasp ideas in a way that can be transferred and applied across domains. While performing a particular activity, especially if it's something new, people are most likely to act based on their existing knowledge and understanding of a specific situation. They will make intelligent decisions for which they need to be innovative because they may not be explicitly told how to accomplish the task. Conceptual learning has an important role to play in these circumstances.

(iv) Associative Learning:

This kind of learning happens when the brain links two unrelated things due to conditioning. For instance, if someone consumes a particular food item that leads to discomfort in the stomach, they will learn to associate that food with discomfort and will not want to eat it again. Also, associative learning aids conceptual learning in amassing knowledge. New concepts get linked with past ones through association and improve learning.

(v) Appreciation Learning:

Appreciation learning involves acquiring preferences, ideals, attitudes, and recognising worth and importance, which learners gain from participating in various learning activities. It involves developing a taste or liking towards certain aspects of life such as literature, art, music, etc. Teachers play a valuable role in guiding people towards acceptable values, attitudes, and ideas of the pupils' society.

21st Century Teaching and Learning:

- ✓ The learning is a Natural process.
- ✓ The learning is a Social process.
- ✓ The learning is more Meaningful and develops insight.
- ✓ The learning is an active and not a passive process.
- ✓ The learning may be linear or non-linear

Conclusion:

21st century learners should employ the ICT and develop higher order cognitive skills. These are vital to find solutions for complex real-world problems. In this regard, ICT is an effective tool for this emerging learning paradigm, making the learner in active role of self-directed learning, providing flexibility and interactivity in the teaching and learning process. We need to have interactive teaching and this changing role of education is inevitable with the introduction of 21st century digital trends and producing a technologically-savvy generation of youths. The role and the perspective of teachers have become highly relevant, highlighting them as crucial players in this process. Particularly, teachers use technology depending on their perceptions and their trust in the way it can contribute to the teacher and the learning process. Through knowing what they think, we will be closer to understanding what they do or what they might do with technology in their classrooms and in relation to their work.

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