



NEW TRENDS IN ICT AND ROLE OF THE TEACHER IN POST COVID ERA

G.K. Petkar

Janata College of Education, Chandrapur.
*Corresponding Author: gkpetkar@gmail.com

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Abstract :-

The role of the teacher in the classroom is being transformed from that of the font of knowledge to an instructional manager helping to guide students through individualized learning pathways, identifying relevant learning resources, creating collaborative learning opportunities, and providing insight and support both during formal class time and outside of the designated 40 minute instruction period. This shift is easier said than done and ultimately the success or failure of technology projects in the classroom hinge on the human factor and the willingness of a teacher to step into uncharted territory. These trends are expected to continue and to challenge many of the delivery models fundamental to formal education as it is practiced in most countries after COVID pandemic situation. The top 10 Global Trends in ICT and Education are (1) Mobile learning, (2) Cloud computing, (3) One to One computing, (4) Ubiquitous learning, (5) Gaming, (6) Personalized learning, (7) Redefinition of learning spaces, (8) Teacher-generated open content, (9) Smart portfolio assessment, (10) Teacher managers/mentors. One way to improve the quality of education is to make use of efficient technology in an institution. This will open up more opportunities for the teachers and students as well.

Key Words:- Cloud computing, Mobile Learning, Ubiquitous learning, Virtual Classroom

INTRODUCTION :

Quality education is an essential requisite in today's competitive environment. Technology has affected us in every aspect. The smart classes is a modernized method of education in Indian education scenario which provides quality education to students by helping them in better concept formation, concept elaboration, improvement in reading skills and academic achievement

However, it is the responsibility of the education system to employ a variety of opportunities for the students to gain interests, orchestrating academic growth and progression throughout childhood and adolescence. ICT has turned from being a technology of communication and information to a curriculum creation and delivery system for teachers and learners.

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New Trends in Education after COVID 19 :

The top 10 Global Trends in ICT and Education are (1) Mobile learning, (2) Cloud computing, (3) One to One computing, (4) Ubiquitous learning, (5) Gaming, (6) Personalized learning, (7) Redefinition of learning spaces, (8) Teacher-generated open content, (9) Smart portfolio assessment, (10) Teacher managers/mentors.

(1) Mobile Learning : New advances in hardware and software are making mobile “smart phones” indispensable tools, Just as cell phones have leapfrogged fixed line technology in the telecommunications industry, it is likely that mobile devices with internet access and computing capabilities will soon overtake personal computers as the information appliance of choice in the classroom.

(2) Cloud computing : Applications are increasingly moving off of the stand alone desktop computer and increasingly onto server farms accessible through the Internet. The implications of this trend for education systems are huge; they will make cheaper information appliances available which do not require the processing power or size of the PC. The challenge will be providing the ubiquitous connectivity to access information sitting in the “cloud”.

(3) One-to-One computing : The trend in classrooms around the world is to provide an information appliance to every learner and create learning environments that assume universal access to the technology. Whether the hardware involved is one laptop per child (OLPC), or-increasingly—a net computer, smart phone, or the re-emergence of the tablet, classrooms should prepare for the universal availability of personal learning devices.

(4) Ubiquitous learning : With the emergence of increasingly robust connectivity infrastructure and cheaper computers, school systems around the world are developing the ability to provide learning opportunities to students “anytime, anywhere”. This trend requires a rethinking of the traditional 40 minute lesson. In addition to hardware and Internet access, it requires the availability of virtual mentors or teachers, and/or opportunities for peer to peer and self-paced, deeper learning.

(5) Gaming : A recent survey by the Pew Internet and American Life Project per the

Horizon Report found that massively multiplayer and other online game experience is extremely common among young people and that games offer an opportunity for increased social interaction and civic engagement among youth. The phenomenal success of games with a focus on active participation, built in incentives and interaction suggests that current educational methods are not falling short and that educational games could more effectively attract the interest and attention of learners.

(6) Personalized learning : Education systems are increasingly investigating the use of technology to better understand a student’s knowledge base from prior learning and to tailor teaching to both address learning gaps as well as learning styles. This focus transforms a classroom from one that teaches to the middle to one that adjusts content and pedagogy based on individual student needs – both strong and weak.

(7) Redefinition of learning spaces: The ordered classroom of 30 desks in rows of 5 may quickly become a relic of the industrial age as schools around the world are re-thinking the most appropriate learning environments to foster collaborative, cross-disciplinary, students centered learning. Concepts such as greater use of light, colors, circular tables, individual spaces for students and teachers, and smaller open learning spaces for project-based learning are increasingly emphasized.

(8) Teacher-generated open content : OECD school systems are increasingly empowering teachers and networks of teachers to both identify and create the learning resources that they find most effective in the classroom. Many online texts allow teachers to edit, add to, or otherwise customize material for their own purposes, so that their students receive a tailored copy that exactly suits the style and pace of the course. These resources in many cases complement the official textbook and may,

in the years to come, supplant the textbook as the primary learning source for students. Such activities often challenge traditional notions of intellectual property and copyright.

(9) Smart portfolio assessment: The collection, management, sorting, and retrieving of data related to learning will help teachers to better understand learning gaps and customize content and pedagogical approaches. Also, assessment is increasingly moving toward frequent formative assessments which lend itself to real-time data and less on high-pressure exams as the mark of excellence. Tools are increasingly available to students to gather their work together in a kind of online portfolio; whenever they add a tweet, blog post, or photo to any online service, it will appear in their personal portfolio which can be both peer and teacher assessed.

(10) Teacher managers/mentors : The role of the teacher in the classroom is being transformed from that of the font of knowledge to an instructional manager helping to guide students through individualized learning pathways, identifying relevant learning resources, creating collaborative learning opportunities, and providing insight and support both during formal class time and outside of the designated 40 minute instruction period. This shift is easier said than done and ultimately the success or failure of technology projects in the classroom hinge on the human factor and the willingness of a teacher to step into uncharted territory.

These trends are expected to continue and to challenge many of the delivery models fundamental to formal education as it is practiced in most countries before and after COVID Pandemic.

Virtual Classroom –

A collaborative web conferencing tool with an online white board, breakout rooms, and screen sharing capabilities for teachers and tutors who

want to conduct highly interactive live online teaching sessions.

A virtual classroom is an online learning environment that allows for live interaction between the tutor and the learners as they are participating in learning activities.

Virtual classroom is a shared online space where the learners and the tutor work together simultaneously. Usually, these interactions take place through videoconferencing. The participants have tools to present learning content in different formats, as well as to implement collaborative and individual activities. In this type of interaction, the teacher has the particularly important role of the moderator who guides the learning process and supports group activities and discussions.

The most common tools you can find in a virtual classroom are:

- Videoconferencing
- Online whiteboard for real-time collaboration
- Instant massaging tool
- Participation controls
- Breakout rooms

Although teaching and learning in a virtual classroom provide an experience similar to the physical one, it requires new pedagogical approaches and a redesign of the instructional model that includes the following characteristics:

- Virtual Classroom's high Interactivity
- Collaborative Learning
- Student-Centered Instruction
- Variety of Content Presentation and Learning Activities
- Psychologically Safe Environment
- Positive and Constructive Feedback

A virtual classroom for virtual facilitation.

SCORM management for e-learning – SCORM (Sharable Content Object Reference Model) technical standards help e-learning programs work with other e-learning programs.

Social networking for learners to communicate with one another.

Robust reporting for attendance, completion, assessments and learning.

A cloud-based dLMS is more secure, more streamlined, more device-friendly and generally more cost-effective than traditional installed software. You can often test the program with a free trial, purchase assess through licenses for a set number of users for a defined period of time, and forget all about hardware, installation or upgrade headaches.

Role of Teacher in New Situation :

When a teacher is in a physical classroom they can use physical location, proximity and non-verbal body language to control the class.

A good online classroom typically includes a number of important controls for the teacher: Teacher tools-Text tool, draw tool, eraser, shapes, pen colour, Zoom Specialist teacher tools-Maths tools, instant dictionary, instant verb conjugation tables Save or record the class or save learning materials for the student to later review Group class tools-Raise hand tool, breakout rooms for larger groups Control of the student webcam- Helpful if the student has a poor connection and needs to reduce internet bandwidth requirements Control of the student mic – Yes, that means you can finally “mute” your student when required.

Virtual classroom summary For the same reason that in-person teachers prefer to teach in a physical classroom, a professional online teacher prefers to teach in a virtual classroom.

A virtual classroom has the aspects of web-conferencing needed to communicate effectively from opposite sides of the globe (video/audio conferencing, chat) and also a virtual whiteboard, library of resources and teacher tools.

The online whiteboard enables teachers and students to interact much more collaboratively and not just rely on video/voice.

The saved library of learning resources enables teachers to access relevant, rich or structure lesson materials instantly to create a much more dynamic class.

A virtual classroom has the following advantages:

- Students are not limited to the courses available in their geography.
- Learning is more interactive as its nature forces the student’s attention.
- Personalized learning: Students can learn at their own time and phase
- Long distance learning
- Enhances collaboration and communication
- Real-time teaching and learning
- Effective and efficient time management
- Gives students and teacher a worldwide exposure
- Accessed to everyone equally from anywhere and at anytime
- Affordable
- Introduces students and educators to education technology
- Comprehensive online tutorials
- Encourages digital and smart classrooms
- Improves Visualization
- It has the following disadvantages, however:
- In the case of supervised classes, the schedule may be an issue to some students.
- It is limited by the technological capacity of the student; those with slower hardware or Internet speeds are at a disadvantage.
- No control over the students or classroom.
- No control over the learning atmosphere or environment.
- Virtual Classroom requires computers and internet access, which might not be at hand to everyone.
- Expensive: Enrolling into online live class or courses can be costly.
- Students lack real-time teaching experience.
- The risk to the traditional student-teacher collaboration.

Online learners are sometimes hindered by the use of technology. They are susceptible to technical failures such as the constraints of email and glitches in computer programs. When students encounter these types of problems it can be frustrating and deter from their learning. Also, not all students have accessibility to technology.

CONCLUSION :

The use of ICT after COVID Pandemic is very common in education field. It is a new vision in education. The use of Education technology can

bring a huge change in education. Internet and e learning devices can make class room environment extremely amazing in all the levels of education system. Teaching through computer, internet and multimedia devices will be a common thing in today's era and future too. Now a day's different multimedia lessons are available. By using these multimedia lessons teachers may teach the students very easily.