



# INTRODUCTION TO EDUCATIONAL TECHNOLOGY AND TEACHING METHODS

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# CONCEPT OF EDUCATIONL TECHNOLOGY

- The 21<sup>st</sup> century is regarded as the era of technology. Technology plays a very important role in our lives & is seen as a basis of growing the economy of any given country.
- The word 'Education' is derived from the Latin word 'Educatum', which means 'To bring out'. In the sense, the meaning of Education is to bring out the better qualities of the individual.
- **Education** is a form of learning in which the **knowledge, skills, values, habits & beliefs** of a group of people are transferred one generation to another.





# CONCEPT OF ET CONT'

- Technology is the application of scientific knowledge for practical purposes.
- Educational Technology is a field of study which is concerned with the practice of using educational methods & resources for the ultimate goal of facilitating the learning process (Lucido & Borabo, 1997).
- It is a field which involves the application of a complex, integrated process to analyze & solve problems in human learning (Jonassen, et al. 2002).





# Characteristics of Educational Technology

- ET has contributed in developing various methods e.g. Micro teaching method, Interaction analysis, Audio Visual Aids and Programmed learning method.
- It is based on the application of the scientific knowledge.
- It is helpful in making the teaching process objective, easy, clear, interesting and scientific.
- It is a continuous dynamic technology.





# Characteristics of ET Cont'

- It is an important medium of communication.
- A desired change is possible in the behaviour of teachers and students.
- In the field of ET, Psychology, Science and technology, system, art, AV aids and machines are used.





# Revolution and Development of Educational Technology

- According to Erich Ashley there are four revolutions in Education.
- First Revolution: Revolution of shifting the task of educating the young ones from parents to teacher and from home to schools.
- Second Revolution: Revolution of adoption of the written word as a tool of education.





# Revolution and Development of Educational Technology Cont'

- Third Revolution: Revolution as a result of invention of printing and availability of books and other teaching-learning material.
- Fourth Revolution: Revolution on account of development in electronic, chiefly involving radio, television, cassette recorder and computer, and development of systems concept.





# Technology and Engaged Learning

- Engaging students can be difficult.
- Students are faced with many distractions, and this makes their attention spans shorter..
- Today's students are digital natives. Rather than viewing technology as a distraction, we should be taking advantage of it to increase student engagement.





# Technology and Engaged Learning Cont'

- To make sure that students are getting the most out of every lesson, the content should be presented in a way that the work has a clear meaning and immediate value to your students.
- Technology in the classroom allows students to gain a deeper understanding of topics that interest them, collaborate with each other, and direct their learning.





# Submit assignments as blogs

- **Blogs** are short online articles (less than 3000 words) that are taking the world by storm.
- **Blogs** are a great resource for both the author and the reader: the author can constructively express their thoughts, and the reader learns something new.
- **Posting** written assignments as blogs allow your students to showcase their work and also help each other out by posting comments. Posting the blogs publicly also means that you'll probably receive higher quality work. E.g. , **WordPress, Blogger, and Weebly**. Group familiarity important.





# Submit assignments as podcasts or videos

- **Podcasts** are digital audio files available for download to a computer or portable media player. Both podcasts and videos allow students to showcase their creativity and gain new skills.
- **Podcasts and videos** are engaging ways to submit assignments that remove a lot of the presentation stress felt by students.
- They can create several versions and will not see the people who will be evaluating the assignment.
- You can also create podcasts and videos of your classes for your students to review after class or when preparing for a test.





# Work with a classroom on the other side of the world

- The internet allows instant communication between anyone, at any time. Take advantage of your ability to teach your students about geography or history by talking to students from that country.
- Nothing is more engaging than a room full of students from another continent! Take pen pals to the next level by having your students chat and learn from someone from a completely different culture and background. E.g. Skype, GotoMeeting, Zoom.





# Gamify Problem Solving

- **Gamifying** your classroom occurs anytime you bring competition or levels of achievement to a classroom exercise. Grades can be seen as a form of gamification.
- However, these don't necessarily fully reflect how much the student has learned or their work habits. Adding rewards to other aspects of the classroom allows you to focus on fundamental skills.
- Leveraging gaming mechanics can make learning more fun. Using your students' competitiveness also encourages them to work harder than they normally would. E.g. Improving milk it.





# Create infographics to explain complicated topics

- Infographics are visual representations of information. They are designed to make information easy to understand very quickly. They are typically designed to draw attention to the most important information first..
- Visuals are much more engaging than written text and convey a lot more information. Infographics take that to a whole new level. Infographics are typically used for displaying some sort of data; they could easily be used to compare population statistics in geography or show the history of the Internet. E.g. PowerPoint, Photoshop, GIMP etc.





# Record and playback reading

- Students don't always realize what their voice sounds like when they read. They may be making consistent pronunciation errors without even realizing it.
- Fluency and expression can be hard concepts for your students to grasp. When you record your students reading, they will be able to hear the differences in their voice and learn to recognize what it means to read with expression.
- Record each student reading using voice recording software on your computer, tablet, or smartphone. Then send this audio file to your students through email. You can use SoundCloud to share with others e.g. parents or fellow learners





# Chat Sessions

- Chat sessions are commonly used in online courses to engage students and foster instructor-student interactions.
- Chat sessions are often preferred over discussion boards because they overcome the communication delays that frustrate discussion board users.
- In certain circumstances, online chats encourage spontaneous interactions among students and faculty that may build positive relationships and the foundations for learning communities





# Peer Assessment

- Online learning environments that routinely engage students in learning activities require peer assessments.
- Peer assessment exercises are central to supporting individual learning and engagement because they require students to collaborate on assessment criteria and aid in self assessment and reflection.





# Group Tasks

- Group tasks are concerted efforts to facilitate student interaction with their peers, which encourages engaged learning and is seen by students as an important learning tool.
- Online learners are frequently required to work together on group projects.
- Effectively designed group projects encourage students to develop relationships with other students where they can explore and expand their existing knowledge base together.





## Group Tasks Cont'

- Group assignments promote learning communities and help online students overcome physical separation as well as feelings of disconnection, isolation, and lack of support.
- Instructors need to help teams identify how they will work together and ensure the workload is equitable among all team members.



# Wikis

- Wikis are a technology that can be used in online classes to support simple web pages that groups can edit together.
- The technology promotes student collaboration by providing a space where students can create and edit content online.
- This is useful for engaging students when assignments involve defining or researching selected topics.
- Or when an entire class is required to contribute to the final work product

# Technology to Support Learning

- Student expectation – Easy access, anytime, everywhere – Use of ICT
- Supporting the Net Generation Learner requires Embedding e-learning technologies

