

# Media, Technology, and Learning





# Learning

- **Learning** is acquiring new knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. The ability to learn is possessed by humans, animals and some machines. It is also the development of new knowledge, skills, or attitudes as an individual interacts with information and the environment.



# Types of Learning

## Multimedia learning

- Multimedia learning is where a person uses both auditory and visual stimuli to learn information (Mayer 2001).



# Types of Learning

## Rote learning

- Rote learning is a technique which avoids understanding the inner complexities and inferences of the subject that is being learned and instead focuses on memorizing the material so that it can be recalled by the learner exactly the way it was read or heard.



# Types of Learning

## Informal learning

- Informal learning occurs through the experience of day-to-day situations.



# Types of Learning

## Formal learning

- Formal learning is learning that takes place within a teacher-student relationship, such as in a school system.



# Types of Learning

## Non-formal learning

- Non-formal learning is organized learning outside the formal learning system.





## The Domains of Learning:

Benjamin Bloom has suggested three domains of learning:

- **Cognitive** – To recall, calculate, discuss, analyze, problem solve, etc.
- **Psychomotor** – To dance, swim, ski, dive, drive a car, ride a bike, etc.
- **Affective** – To like something or someone, love, appreciate, fear, hate, worship, etc.





Media





# Media

Media refers to all modes of communication, including print and audio- visual forms and their accompanying technology.



## Types of Media

- **35 mm. slides.** 35 mm. still camera permits the production of slide transparencies from actual objects. Properly equipped with macro-lens attachments can also produce visuals from flat pictures of standard book.
- **Overhead transparencies.** The medium uses the overhead equipment by which 8x10 transparency materials are enlarged onto a screen through projection.
- **Moving films.** Come in three gauges, namely in 35, 16, and 18 mm. sizes. 35 mm. films are more practical for educational purposes.



# Types of Media

- **Televisions or the beta-video system.** The TV beta-video facility should not be seen merely as a boon to the families in the households.
- **Charts.** Self- made charts and posters serve as a basic and universal aid for bringing fascinating and exciting experiences in the classroom.
- **Multimedia Presentation.** Multimedia can mean either the use of media on a sequential arrangement or the use of various media presented simultaneously, as in the projection of several images, utilizing slides and moving films, on multiple screen.

# Technology





# Technology

The word technology does not necessarily imply the use of machines but refers to any practical art using scientific knowledge. Technology can make an ordinary person capable of superior performance and a means, either printed or electronic, to distribute that instruction.





# Types of Technology

## 1. Assertive Technology

It includes mechanical, electronic micro-processor based equipment, non-mechanical and non-electronic aids, specialized instructional materials services and strategies that people with disabilities can use either:

- Assist them in learning
- Make the environment
- Enable them to complete in workplace
- Enhance their independence
- Otherwise improve their quality





# Types of Technology

## **2. Information Technology**

Provides access to knowledge and resources on a wide web component is the most prominent example of information.

## **3. Technology of Teaching**

Refers to instructional approaches that are very systematically designed and applied in very precise ways.



# Roles of Technology in Learning



# Roles of Technology in Learning

## Technology as tools to support knowledge construction

- For representing learning ideas, understanding, and belief.
- For producing organized multimedia knowledge bases by learners.



# Roles of Technology in Learning

**Technology as information vehicles for exploring knowledge to support learning by constructing**

- For accessing needed information.
- For comparing perspectives, beliefs, and world views.



# Roles of Technology in Learning

## Technology as content to support learning by doing

- For representing and stimulating meaningful real-world problems, situation and contexts.
- For representing beliefs, perspectives, arguments, and stories of others.
- For defining a safe, controllable problem space for student thinking.



# Roles of Technology in Learning

**Technology as a social medium to support learning by conversing**

- For collaborating with others.
- For discussing, arguing, and building consensus among members for a community.
- For supporting discourse among knowledge-building communities.





# Roles of Technology in Learning

**Technology as intellectual partner to support learning by reflecting**

- For helping learners to articulate and represent what they know.
- For reflecting on what they have learned and how they come to know it.
- For supporting learners internal negotiations and meaning making.
- For constructing personal representations of meaning for supporting mindful thinking.





Education



# Education

**Education** in the largest sense is any act or experience that has a formative effect on the mind, character or physical ability of an individual. In its technical sense, education is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another.



**Education** is the process by which people learn:

- ❑ **Instruction** refers to the facilitating of learning, usually by a teacher.
- ❑ **Teaching** refers to the actions of a real live instructor to impart learning to the student.
- ❑ **Learning** refers to learning with a view toward preparing learners with specific knowledge, skills, or abilities that can be applied immediately upon completion.



# Educational Technology



# Educational Technology

**Educational Technology** is the development application and evaluation on systems, techniques and aids to improve the process of human learning. It is also a systematic way, a process or an application of the scientific knowledge to improve the efficiency of the process of learning.



# Roles of Educational Technology in Learning





# Roles of Educational Technology in Learning

Essentially, educational technology helps to improve the overall efficiency of the teaching learning process. This is done through the following ways:

1. Increasing the quality of learning or the degree of mastery.





# Roles of Educational Technology in Learning

2. Decreasing the time taken for learners to obtain desired learning objectives.
3. Increasing the efficiency of teachers in terms of numbers of learning taught without reducing the quality of learning.
4. Reducing educational cost without affecting educational quality.