

LECTURE 5a: Learning Resources/Instructional Media

P. Kyalo Mulwa
University of Nairobi
School of Education
Department of Educational Communication and Technology
Email: peter.kyalo@uonbi.ac.ke
Mobile: +254 422 824

07-Aug-18

TCT 102: General Methods of Teaching
by P. Kyalo Mulwa

Objectives

- At the end of this lesson, the learner should be able to;
 - i. Identify types of learning/instruction media
 - ii. Discuss the strengths and weaknesses of selected media
 - iii. Identify factors affecting media selection
 - iv. Select appropriate media for delivery of instruction

07-Aug-18

TCT 102: General Methods of Teaching
by P. Kyalo Mulwa

Teachers of the 21st Century



07-Aug-18



Students of the 21st Century

Today's digital kids think of information and communications technology (ICT) as something akin to oxygen. They expect it. It's what they breathe, and it's how they live. They use ICT to meet, play, date, and learn. It's an integral part of their social life. It's how they acknowledge each other and form their personal identities. (Seely-Brown, 2004)

07-Aug-18

Traditional Learning	21 st Century Learning
Schooling	Lifelong Learning
Knowing (factual knowledge based learning)	Understanding
Broadcast/Teacher centred / Transmission model/passive learning	Constructivist / student centred/ information exchange/ active learning
Single sense stimulation / single media	Multi-sensory stimulation / multimedia
Traditional Content / isolated, artificial context	Contemporary Content/ real world, authentic context
Learning Tech Skills / individual work/	Developing 21 st Century Skills / collaborative work / critical thinking

07-Aug-18

Instructional Media

- Instructional media carry messages with an instructional purpose.
- The design of the message and the quality of teacher-learner interactions, not the medium, are what influences learning effectiveness
- No one medium is capable of presenting all the required learning stimuli, so use a multimedia approach.

07-Aug-18

Instructional Media

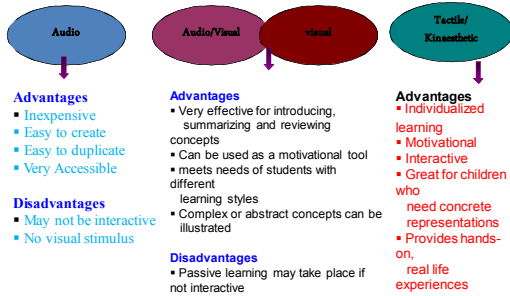
➤ Instruction Media can fall into the following categories;

- Audio
- Visual
- Audio – visual
- Tactile/Kinaesthetic

07-Aug-18



Advantages and Disadvantages of the Media



07-Aug-18



Factors Affecting Media Selection

➤ The basis of media selection are the factors affecting media choice.

➤ These factors include...


07-Aug-18



Factors Affecting Media Selection

- a) Instructional method
- b) Type of learning task (objectives)
- c) Subject matter and required student performance
- d) Learner characteristics (learning style, skills)
- e) Target population – location, size
- f) Teachers' attitudes/preferences, skills etc.
- g) Physical attributes of the media (sensory channels)
- h) Teaching space, lighting, facilities (physical environment)
- i) Practical constraints – economic (money) and administrative issues, time , what's available


07-Aug-18



When Should I Select Audio Media ?

- Examples: Teacher's voice; Audio cassettes; Audio CDs; Radio; etc
- Use when:
 - Improve on learner listening skills
 - You want to stimulate learner imagination
 - Re-telling or reviewing a lesson
- **Caution**
- Risk of misinterpretation
- Difficult for young children


07-Aug-18



When Should I Select Visual/ Audio-visual?

- Examples of visual media include;
 - chalkboards
 - white boards
 - flannel boards
 - magnetic boards e.g. Smart Boards
 - objects / models
 - pictures
 - charts / diagrams
 - photographs
 - text
 - Over head (OH) transparencies
 - slides / silent films
- Examples of audio-visual media include;
 - video
 - television
 - multimedia CDs
 - DVDs
 - PowerPoint
 - Internet

07-Aug-18



When Should I Select Visual/ Audio-visual?

- Use for:
 - Demonstration
 - Problem solving
 - Contrived experiences (realism/practicality and immediacy)
 - To present information

Caution

- Excess stimuli can hinder
- Audio and visual channels should be mutually supportive. They should not compete

07-Aug-18



When Should I Select Tactile/Kinaesthetic Media?

- Such media include:
 - Working models
 - Equipment
 - Simulators
 - Interactive software
 - Social media platforms
- Used to/when;
 - To introduce a lesson or topic
 - When it is convenient to use the real thing
 - Future review of principles taught

07-Aug-18



Convergence of technologies

- Driving this convergence is the powerful discovery that all information – sound, pictures, data – can be converted into digital format (ones and zeroes) and reincarnated intact somewhere else
- Computer technologies facilitate the combination of different media

NB: Media can become effective learning resources if what is selected is **relevant to the task**, and **provides experiences which are different** from other available materials - (Adapted from Bates, 1984).

07-Aug-18



Group Discussion and Presentation

➤ Group 1 (30 minutes)

Discuss the use of the following resources in a computer lesson;

- a) Computers, tablets & PDAs,
- b) printers/scanners
- c) digital camera
- d) Projectors



Group Discussion and Presentation

➤ Group 2 (30 minutes)

Discuss the use of the following resources in a computer lesson;

- a) Books
- b) Magazines
- c) Journals
- d) Newspapers



Group Discussion and Presentation

➤ Group 3 (30 minutes)

Discuss the use of the following resources in a teaching and learning;

- a) Digital content
- b) Simulation software & Videos
- c) Educational portal
- d) Social media platforms e.g. blogs, Skype, Twitter, Facebook



Questions:

- Discuss Seven (7) instructional media appropriate for Computer Studies instruction
- Discuss the criteria for selection of a computer Studies instructional media

07-Aug-18



---END---

07-Aug-18