

Evaluation of Educational Technology and its Current Application

INTRODUCTION

DEFINITION of TERMS

**CLASSIFICATION of
ED. TECH**

**PROCEDURE IN USING SPECIFIC
TECHNOLOGY FOR TEACHING**

**CRITERIA IN EVALUATING
EDUCATIONAL TECHNOLOGY**



Strong Impact of New Technologies

- Affected the way people live, work, play and learn
- Challenged the time tested method and approaches in teaching and way of education is managed.
- Administrators of schools keep abreast with the fast changing mode of teaching



Strong Impact of New Technologies

- Massive retooling of teachers and employees
- Roles of teacher from purveyor to that of the facilitator or guide in the quest of knowledge
- IT continues to have a strong impact on the access to worldwide and information that enriches teaching and learning.



Definition of terms

Evaluation

Technology

ICT

Educational Technology



Evaluation

- Evaluation is a holistic approach; all the phases of learning must be seen because all of them contribute to the total development of the child.
- Evaluation therefore must judge the strength of the content selected, the strategies employed, and the instructional materials used.



Evaluation

- Is used in Ed Tech and its means considering the merits of the material used. its strength and weaknesses as a tool for learning.
- It includes mainly aspects of consideration like size, attractiveness, relevance, and economy, ease of handling, novelty and practicality.



Technology

- Is the science of the application of knowledge to practical purposes in a particular field.
- means the totality of the means employed by a group of people to provide itself with the objects of material culture.



Information and Communications Technology

- Refers to the use of electronic communication system which has made the sharing of information faster and more effective.
- The system also provides the students easier and faster access to adequate materials which were formerly supplied by teachers.
- ICT tools refer to the computer and its various applications like word processing, power point, excel, publisher, particularly the internet and E-mail



Educational Technology

Author	Definition
Council for ED. TECh for the United Kingdom (1997)	Development, application and evaluation of systems, techniques and ideas aids to improve the process of human learning
Commision on Instructional Technology in the United States	Contended that educational Technology is a systematic way of designing, implementing and evaluating the total learning and teaching process in terms of specific objectives based on research on human learning and communication
Lucido, 1997	Employing a combination of human and non-human resources to bring about more effective instruction

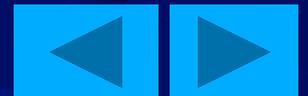


Author	Definition
Garo (2004)	Application of the of the results of researches or scientific studies, which may be material or non-material to improve teaching and learning
URL:http:// www.hawaii.edu/ etec/dept/ etec_programat.pdf	Define as field of study of human learning and deals with complex, integrated process involving people, procedures ideas, devices and strategies for analyzing problems and devising solutions to those problems
URL: http:// webinstituteforteachers.o rg/ Talks/jones/1.htm	Educational technology os the use of tools by teachers to improve their capacity to educate students



Synthesizing the Definition

→ Common line would be the use of tools or devices to improve human learning. The definitions reflects the interrelationships of the elements of teaching and learning with instructional tools or with technology tools to be able to promote quality instruction.



Classifications of Educational Technology

Educational Technology

Material Technology

 Lo-tech → Paper Technology

 Hi-Tech → Mediated Technology

Non-Material Tech



Theories, Laws, Principles
of Learning
Methods and Strategies
of Learning



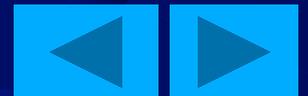
Traditional or low-Technology

- The Traditional or low-Tech instructional materials are the indigenous materials usually real objects or those that are made of paper and cardboards. Pictures or photographs, charts flashcards and maps done in paper are examples of these.

Realia or real objects and their edited versions like models and mock-ups, specimens and objects are also included as such.



- Through they are traditional in nature, their merits as tools for learning have been proven in the decades that past. They are still here to stay because not all schools are equipped with technology tools and not all teachers are ready to embrace modern technology.



Hi-Technology

- Hi-tech materials or the mediated technology include those which are presented using media equipment or hardware. This includes the educational television, motion pictures, overhead projector, opaque projector, slide projector and more importantly the computer and its peripherals like the LCD, printer and scanner,



- computer and its various applications
 - most pervasive modern technology for teaching and learning is.
 - In fact all educational efforts are being geared toward its used.
 - Its effectiveness in teaching and learning has been widely recognized



Non-Material Educational Technology

- The non-material educational technology on the other hand includes the theories, laws, principles, methods and strategies of teaching. They evolved as results of results of researches and studies in order to facilitate teaching and learning. In all the years, their contributions to the practice to teaching and learning have been recognized; their effectiveness as bases for educational decisions has been proven.



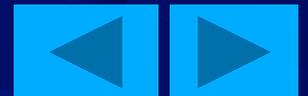
APPLICATIONS OF EDUCATIONAL TECHNOLOGY

- All learning is based on sense perception, claimed by Pestalozzi.
- Research finding show proper application of educational technology can result to improved sensation and perception leading to quality learning.
- ED. Tech transcends geographical barriers, expose students to experiences beyond classroom, disseminate instruction across large areas and make education more accessible to more people (Ed,. Tech: Microsoft Encarta 2002



APPLICATIONS OF EDUCATIONAL TECHNOLOGY

- With the advent of computers and the linking of several computers in the super highways, and the internet the world has shrunk making it very possible for everybody to access information and to disseminate the same all over the world as fresh and as fast as can be.



USES OF EDUCATIONAL TECHNOLOGY in THE CLASSROOM

- Arouse and sustain the interest and attention of the students
- Concretize concepts and ideas to promote meaningful learning
- Make learning more permanent by providing rich experiences
- Make learning more permanent by proving rich experiences



USES OF EDUCATIONAL TECHNOLOGY in THE CLASSROOM

- Provide-self activities for independent learning
- Increase one's vocabulary by eliminating verbalism (A wordy phrase or sentence that has little meaning.)
- Promote continuity of thought.



Choosing and Applying Educational Technology

Helpful Questions:

- What instructional material is suited to my objectives and subject matter?
- What instructional material is available for my specific lesson? If there is none, shall I develop one?



Choosing and Applying Educational Technology

- Shall I use the traditional technology or shall I use computer-based technology? Am I ready and are my students ready?
- Shall I use multi-media presentation? Is there a technology-enabled environment to meet my needs?
- Shall I use the overhead projector to dramatize my lessons?
- Shall I use film? If yes, what film? Is it really necessary to use film?



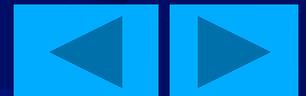
Choosing and Applying Educational Technology

- Shall I use recording or audio-video clip? Why this recording? Why this audio-video clip?
- Why should I bring my class to the rice terraces In Banawe when it is very far, very expensive and very risky? Can I not contrive the experience in one of the corners of the school ground? Or can I not let them view still pictures of the rice terraces and then ask them to write a description?



Planning

- Is important in choosing materials for teaching so that achievement of both the general and specific will be assured. It is because planning provides the direction at which the teacher is bringing his class. The students must also be informed as to why a specific material is being used, and they must be guided as to what to look for and what to listen to in the material that is shown.
- The principle in the application of educational technology should cater to the general and specific objectives of the lesson



Procedure in Using Specific Technology for teaching

● Previewing

this step requires that the teacher should be very familiar with the technology of the material he has chosen. The teacher should have a rich background of experiences or adequate knowledge about the devices he has chosen.



Procedure in Using Specific Technology for teaching

● Effective Timing

- refers to the phase of the lesson where the technology can be used.

● Tying experiences together

- refers to the connection or relatedness that should be built between and among experiences provided by various educational technologies.
- Re-view or follow up



CRITERIA IN EVALUATING EDUCATIONAL TECHNOLOGY

- **Size**

relative sizes of pictures must be observed so as not to confuse pupils and students

- **Relevance**

content of the educational technology must be related to the learning task on hand and the maturity level experiences of the learner

- **Color**

materials can be more effective if its colorful.

Color used should depict should approximate the real-life colors (Montessori Approach).



CRITERIA IN EVALUATING EDUCATIONAL TECHNOLOGY

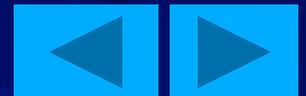
● Economy

- the price of the material does not guarantee its effectiveness. Cheap but properly chosen educational technology can be effective also as long as the teacher utilizes them alongside with pedagogical practices.

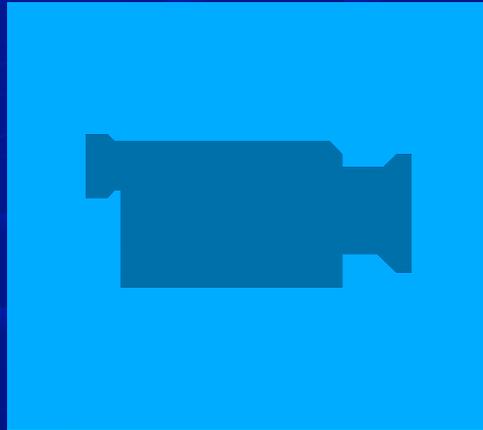
● Durability

● Easy to handle

● Novelty



Why we need Technology in School?



References:

Garo, Candelaria. Theories and Principles of Educational Technology. National Bookstore.2008