

MPT 1113 Foundation to Educational Technology

Technology in Teaching & Learning

Lecturer:

Prof. Dr. Baharuddin Aris



Prof. Dr. Baharuddin Aris Universiti Teknologi Malaysia



Listed in the directory of world experts,

"Who's Who In Instructional Technology" on the World Wide Web:

http://hagar.up.ac.za/catts/learner/m1g1/who_a.html#Aris

Field: Computer Science Education - Learning Computer Science,

Information and Multimedia Technology Using ICT

Included as one of the top 20 e-learning academics on e-business website, "E-business: Who's Who", researchers in the field of E-business:

<u>http://www.ebusiness-newcastle.com/resources/whoiswho/profile.php?id=12</u> *Field: Human-Computer Interaction (HCI); Web Design, Development & Evaluation.*

Listed as one of notable instructional designers: http://www.instructionaldesign.org/instructio



ocw.utm.my



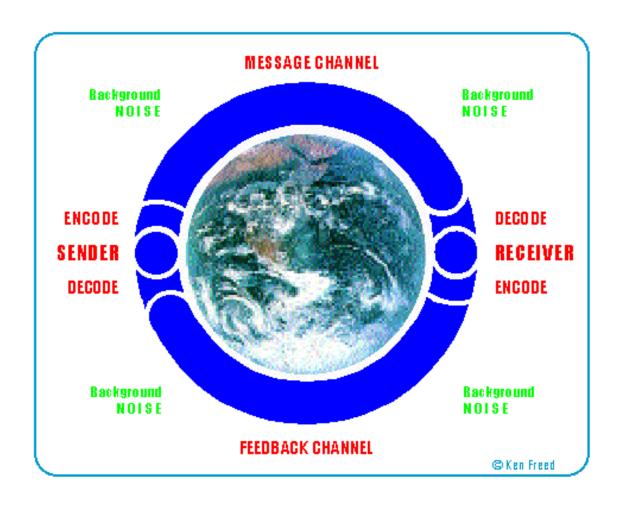
Why and why not teaching with technology

Why did lecturers use technology for teaching and learning?

Why did lecturers avoid using technology for teaching and learning?



Communication Model



www.media-visions.com/talk-ies2000.html



Development of Teaching and Learning Technology





Slide and audio tape

Audio tape

Software(CD-ROM stand-alone) e.g. Storyboard, Microsoft PowerPoint & Macromedia Authorware

Software (e-learning) e.g. Microsoft FrontPage,
Macromedia Dreamweaver, WebCT, Blackboard & Moodle



Slide-based Multimedia (texts and graphic produced using a computer);

Video-based Multimedia (texts, graphics & animation produced using a computer);

Computer-based Multimedia (texts, graphics, animation and video produced using a computer);



CD-ROM *MuSiK* (based on pedagogy) for Learning Mathematics (Multiplication Tables):
Assoc. Prof. Dr. Baharuddin Aris et al.

CD-ROM CERDIk IT (based on andragogy) for Learning Computer Science/IT: Assoc. Prof. Dr. Baharuddin Aris

CD-ROM *MIMCO* (based on multiple intelligences) for Learning Mathematics (Statistics):
Assoc. Prof. Dr. Zaidatun Tasir



e-learning based on problem-based learning) for Learning Computer Science/IT:

Dr. Jamalludin Hj. Harun

e-learning for learning biology: http://www.froguts.com

e-learning for learning subjects such as engineering, history, medicine etc.

World Lecture Hall -

http://web.austin.utexas.edu/wlh/



Educational Technologyproduct and process





According to Heinich, the focus of educational technology among educators has been more on the 'products of technology' e.g. video & computer than on 'technology as a process'.



Kemp supported Heinich that "the process approach to instructional planning – reflected the new thrust of technology in education. This requires a new way of looking at the total instructional process."



According to the Commission of Instructional Technology, USA:

"Instructional Technology is a systematic way of designing, implementing and evaluating the total process of learning and teaching in term of specific objectives, based on research in human learning and communication and employing a combination of human and non-human resources to bring about more effective instruction."