

USING INSTRUCTIONAL MATERIALS OR AUDIO-VISUAL AIDS IN TEACHING





CHINESE PROVERB (THE
EDGE DAILY, 13 Dec 2004, 1)



I hear and I forget.

I see and I remember.

I do and I understand.

USING AUDIO-VISUAL AIDS IN TEACHING

- At the end of this module, students should be able to:
 - Name the various types of audio-visual aids (AVAs)
 - Give reasons for the use of audio-visual aids
 - Designing visual aids
 - Identify the advantages & disadvantages of using AVAs
 - Describe the Usefulness & Dangers of the internet
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TYPES OF AVAs

■ **PROJECTED**

- *OHP transparencies, power point, computer software, CD-ROMs, videodiscs, films, filmstrips, videotapes, gramophone records, slides, video conferencing, radio*

■ **NON-PROJECTED**

- *Anthologies, classroom periodicals, realia, dictionaries, pamphlets, encyclopaedias, games, globes,*
 - *manipulatives,*
 - *newspapers, text/supplementary/reference/work books, journals & magazines, pictures, photographs*
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WHY USE AUDIO-VISUAL AIDS?

- 1. Students' attention is focused
 - 2. More persuasive
 - 3. Students retain message better
 - 4. Message is transmitted more efficiently as 2 sense modalities are stimulated
 - 5. Students expect audio-visuals
 - 6. Help to organize presentation
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WHY USE VISUAL AIDS ?(contd)

- 7. Add variety and emphasis
- 8. Message is presented both aurally and visually
- 9. Help you to be concise



GUIDELINES IN USING VISUAL AIDS

- 1. Show visual aids only when you are speaking about them
- 2. Talk about the visual aid while you are showing it
- 3. Talk to the students, not to the visual aid
- 4. Make sure that every student can see the visual aid



GUIDELINES IN USING VISUAL AIDS (contd)

- 5. Do not pass materials to the students while you are speaking
- 6. Practise using the visual aid
- 7. Do not over use visual aids
- 8. Coordinate audio and visual
- 9. Reveal the information bit by bit

DESIGNING VISUAL AIDS

- 1. Simplicity – omit unnecessary elements
 - 2. Harmony – avoid distracting elements
 - 3. Emphasis – use colours, arrows, underlining, and bolding
 - 4. Readability – legible letters and numbers
 - 5. Organization – easy pattern for students to understand
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DESIGNING VISUALS (contd)

- 6. Balance – interesting
- 7. Unity – single unit?
- 8. Clarity – clear purpose of visual



GUIDELINES FOR USING THE WHITE OR BLACK BOARD

- *1. Begin & end with a clean board.*
 - *2. Use coloured chalk or marking pens.*
 - *3. Print or write neatly & clearly.*
 - *4. Indicate content relationships.*
 - *5. Use the board to record student contributions.*
 - *6. Print instructions for an activity rather than present them orally.*
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GUIDELINES FOR USING THE WHITE OR BLACK BOARD(contd.)

- *7. Keep clips or magnets for hanging posters or charts.*
 - *8. Have a personal supply of chalk or marking pens.*
 - *9. Write without turning your back completely & blocking the students' view.*
 - *10. If you have a lot of content material, use transparencies or powerpoint slides.*
 - *11. Don't write too much information.*
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THE BULLETIN BOARD IN THE CLASSROOM OR COLLEGE CORRIDOR

■ C A S E

■ Colourful Construtions & Captions

■ Atttractive arrangements

■ Simple & Student prepared

■ Enrichment & Extensions of learning

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EDUCATION BEYOND BORDERS

ADVANTAGES & DISADVANTAGES OF USING AVAs: flip chart/poster

■ *ADVANTAGES*

- *1. Easy to make*
- *2. Inexpensive*
- *3. Left in view of students*
- *4. Good for interaction with students*

■ *DISADVANTAGES*

- *1. Unsuitable for large groups*
- *2. Unsuitable for teachers with poor handwriting*
- *3. Takes classroom time in writing & drawing*

ADVANTAGES & DISADVANTAGES OF USING AVAs: power-point

■ *ADVANTAGES*

- *1. Professional in appearance*
- *2. Evidence of preparation*
- *3. Good for large or small groups*
- *4. Easy to integrate with class discussion*
- *5. Easy to update*

■ *DISADVANTAGES*

- *1. Requires expensive special equipment*
- *2. Requires initial training to create*
- *3. Requires time to create*
- *4. Can't be used in an electricity breakdown*



ADVANTAGES & DISADVANTAGES OF USING AVAs: OHP transparencies

■ *ADVANTAGES*

- *1. Evidence of preparation*
- *2. Saves class time*
- *3. Good for large or small groups*
- *4. Easy to create*

■ *DISADVANTAGES*

- *1. Requires an OHP*
- *2. Requires time to create*
- *3. Not usable in an electricity breakdown*



ADVANTAGES & DISADVANTAGES OF USING AVAs: films & TV

■ DISADVANTAGES

1. Expensive.
2. Teacher has to find time to preview the film/programme & to prepare & guide students to achieve maximum benefits.

■ ADVANTAGES

1. They provide students with more of a 'you are there' feeling.
2. They enable students to view demonstrations, experiments & natural phenomena that might be too difficult or dangerous to view.
3. ETV, closed-circuit TV & video-tape recording.

ADVANTAGES & DISADVANTAGES OF USING AVAs: opaque projector

ADVANTAGES

1. It projects & enlarges any flat picture on a single sheet or book page.
2. Images can be projected on a board to be traced.

■ DISADVANTAGES

1. Classroom has to be reasonably dark.
 2. Students maybe unable to take notes.
 3. It cannot be used for extended periods of time.
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USEFULNESS OF THE INTERNET (Wong, 1998,2)

- 1. Email – cheap & fast
- 2. Newsgroup
- 3. Chatting
- 4. Downloading programs (latest software)
- 5. Browsing
- 6. Shopping /banking
- 7. Resources sharing



DANGERS OF THE INTERNET

1. Beware of plagiarism. Acknowledge sources.
 2. Internet scams.
 3. Availability of information unsuitable for children, e.g. pornography.
 4. Not all internet sources are well written and factually accurate.
 5. Spam mail ('Nearly 95% of e-mail is junk', US web security firm Barracuda Networks Inc, THE SUN, 14th Dec 07,20)
 6. Potential attack by viruses and worms.
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USING ICT TO SUPPORT TEACHING & LEARNING (SEDL,n.d.)

- Students can:
 - 1. gather information from the internet, becoming self-directed & independent.
 - 2. work at their own pace.
 - 3. use multimedia software to enrich their work by mixing text, pictures, sound & motion.



USING ICT TO SUPPORT TEACHING & LEARNING (contd.)

- 4. use PCs as resource tools for individual or shared group learning.
- 5. have active & reflective application through ICT.
- 6. participate in collaborative work.
- 7. learn to manipulate & analyze raw data, critically evaluate information, & operate hardware & software, as a part of vocational skills.
- 8. use assistive technology, e.g. speech synthesizers & voice-to-print system if they are blind or deaf respectively.



CAI

- COMPUTER–ASSISTED INSTRUCTION
- 1. It makes use of a PC & a computer program to help students in the acquisition of skills & information.
- 2. Exercises can be designed specifically to cater for individual needs & ability levels & to present new information at a rate & degree of complexity compatible with the student's ability.



CAI

- 3. It provides students with practice in responding to lifelike situations without presenting real danger & automatically keeps accurate records of the students' performance.
 - 4. Unlike some teachers, it has infinite patience.
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EXAMPLES OF CAI METHODS

- 1. Drill-and-Practice – vocabulary building
 - 2. Tutorial – science
 - 3. Gaming – spelling games
 - 4. Simulation – lab experiment
 - 5. Discovery – career choices
 - 6. Problem Solving – creativity
- (Refer to CITC handout)
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CHECKLIST FOR EVALUATING COMPUTER SOFTWARE(adapted from Callahan et al.,1995, 393)

Title:

Disk size:

Source:

Length in minutes:

Designed for what system:

Memory required:

Subject area:

Intended audience:



CHECKLIST FOR EVALUATING COMPUTER SOFTWARE(contd.)

Objectives (stated or implied):

Brief description:

Rating:



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EDUCATION BEYOND BORDERS

5 4 3 2 1 Comments

1.Relevance to
objectives:

2.Accuracy of infor-
mation

CHECKLIST FOR EVALUATING COMPUTER SOFTWARE(contd.)

Rating (contd.) 5 4 3 2 1 Comments

3.Likely to arouse/
Maintain interest:



4.User friendly

5.Appropriate colour,
sound, graphics:

6.Active participation:

CHECKLIST FOR EVALUATING COMPUTER SOFTWARE(contd.)

Rating (contd.)	5	4	3	2	1	Comments
7.Feedback provides remediation:						
8.Free of technical flaws(dead ends):						
9.Clear & complete documentation:						
10.Evidence of effectiveness(field-test results):						



CHECKLIST FOR EVALUATING COMPUTER SOFTWARE(contd.)

Strong points:

Weak points:



Reviewer:

Position:

Date:

Recommended Action:

CHECKLIST FOR EVALUATING EDUCATION WEBSITES

1. LAYOUT & DESIGN

- (1) Is the site well organized & easy to navigate?
 - (2) Do all of the hypertext links work?
 - (3) Are the graphics informative & not too flashy or overpowering?
 - (4) Is additional documentation about the site, or help in using it, available?
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CHECKLIST FOR EVALUATING EDUCATION WEBSITES(contd.)

2. AUTHENTICITY

- (1) Is contact information available for the designer & the development team?
 - (2) Can the potential user tell if it is a university, a government body, a commercial business, or a private individual?
 - (3) Is there excessive advertisement?
 - (4) Does it contain references or links to other sources?
-

CHECKLIST FOR EVALUATING EDUCATION WEBSITES(contd.)

3. CONTENT

- (1) Are the objectives of the site stated clearly and objectively?
 - (2) Is the content appropriate for the intended audience?
 - (3) How comprehensive is the content?
 - (4) Can the potential user distinguish between fact & opinion ?
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CHECKLIST FOR EVALUATING EDUCATION WEBSITES(contd.)

- (5) If there are media objects on the page, e.g. audio or video clips, will the content be strongly affected if the site is viewed as text-only?
 - (6) Can the site be used to support a constructivist learning style?
 - (7) Can the information from the site be used to supplement other sources of information, e.g. books, magazines & videotapes?
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CONSTRUCTIVIST LEARNING(Woolfolk,2001,334-5)

1. Learning of complex real-life tasks with possible multiple solutions
 2. Involvement of collaboration with others & respect for different perspectives
 3. Multiple representations of content using examples & metaphors
 4. Student-centred instruction
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EVALUATING FREE MATERIALS

1. Name of free material:
2. Source of free material
3. Will the material enhance your educational objectives?
4. Is the material free from objectional advertising, propaganda, etc.?



EVALUATING FREE MATERIALS (contd.)

5. Is the material accurate, honest, & free from bias?
6. Is it interesting?
7. Is it colourful?
8. Is it exciting?
9. Does it lend itself to school use?
10. Is it well made?



PROFESSIONAL MATERIALS RESOURCE FILE

1. Articles from journals, magazines, newspapers & periodicals
 2. Compact-disc sources
 3. Computer-software sources
 4. Exam question papers
 5. Games & games sources
 6. Guest speakers
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EBSCO E-LIBRARY AT SC

- URL: <http://search.epnet.com>
- User ID: Stamford
- Password: college
- Click on 'Computer Source'
- For further training to use EBSCO, ring SC Library at 03-79688066 or email library@stamford.edu.my



PROFESSIONAL MATERIALS RESOURCE FILE (contd.)

7. Media catalogues
 8. Motivational ideas
 9. Multimedia-program sources
 10. Pictures & posters
 11. Resources to order
 12. Sources of free items
 13. Student work/assignments
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PROFESSIONAL MATERIALS RESOURCE FILE (contd.)

- 14. Supply catalogues
 - 15. Thematic unit ideas
 - 16. Unit & Lesson Plan ideas
 - 17. Video-cassette titles & sources
 - 18. Video-disc titles & sources
 - 19. Other or miscellaneous sources
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