Effective Use of Audiovisual Materials

Audiovisuals have been known to increase retention of information and actively engages the learner by combining what we hear with what we see.

Audio Resources (audiotapes, CDs)

- **How to Use**
  - Have them recorded by those of your target audience
  - Keep tapes 5 minutes or less in length
  - Limit objectives, focus on behaviors, make interactive
  - Use a dialogue or question/answer format with visuals as a supplement
  - Start and finish with key points
  - Audiotape teaching discussions

- **Advantages**
  - Widely available
  - Beneficial for visually impaired and low literate; hold attention more than print
  - Repeatable for reinforcement; can share with family
  - Inexpensive to make; portable
  - Individualized for specific teaching
  - Use alone or with other modalities
  - Serves as short introduction or refresher
  - Equipment is inexpensive and easy to operate
  - Decrease consultation time / phone calls
  - Consultation tape improved understanding of condition/treatment and satisfaction

- **Disadvantages**
  - Only hearing stimulated
  - Lack interaction between teacher-learner
  - Listening requires concentration
  - Need for tape recorder or CD player may be a problem
  - Consultation recordings may lead to malpractice litigation
  - Taping may inhibit open discussion during consultation

Video Resources (tapes, DVDs), Telecommunications (closed circuit TV or satellite, telephone)

- **How to Use**
  - Select tape or DVD most appropriate for content being taught. Make sure it’s culturally appropriate and that is focuses on behavior changes, not just facts. Time is allowed to read any text shown on the screen.
• Preview material before using it and take notes to use later during discussion.
• Check equipment in advance so technical problems do not occur.
• Discuss with viewer the benefits of seeing the tape, what they will see, and how the video relates to other teaching materials. Provide cues as to when key behaviors appear. Explain meaning of uncommon words.
• Encourage viewer to write down questions. Stop tape to get thoughts down and then restart it.
• Write out any lists or texts on the video and use as a handout.
• Use questions as basis for discussion after viewing.
• Add interaction (if none) by making a worksheet that deals with key points / behaviors that patient responds to during or after viewing.
• Follow up tape with answering questions, clarifying and reinforcing information. Help patient apply information to his or her situation, demonstrate / practice a skill, and use other related materials.

➢ Advantages
• Uses auditory and visual senses for more effective learning.
• Effective for role-modeling, demonstration and teaching psychomotor skills.
• Most people like TV medium, as it’s attractive and persuasive.
• Teaching time with patient reduced and actual time spent is more relevant in helping patient apply the information.
• Tapes can stimulate questions.
• Paced appropriately for learner.
• Consistent information provided.
• Need to repeat repetitive, routine information is eliminated.
• Repeated as often as necessary.
• TV program distribution to a wide audience is relatively inexpensive.
• Telephone widely available and relatively inexpensive.

➢ Disadvantages
• Quality of the tape can deteriorate over time.
• Videotapes are time consuming and expensive to make.
• Some commercial tapes are expensive.
• Few vendors are creating updated health education videos.
• Commercial materials may be too long or inappropriate for audiences.
• Requires special equipment to use.
• Content is static over time and becomes out-dated. Updating the materials may be expensive.
• Interactive capabilities of telecommunications complicated to set up.
• Satellite broadcast can be expensive.

Computer Resources (CAI, Interactive Video Disc (IAVD), Computer Assisted Video Instruction (CAVI), CD-ROMs, Internet)

➢ How to Use
• Preview program and make a list of key behaviors presented.
• Make copy of any lists or texts / pictures for the patients as a handout later for discussion or as a worksheet.
• Assess whether or not patient has skills and comfort to use computer.
• Prepare patient for what they will learn using the program. Tell them the purpose, benefits for them, key points in the information, and how the program relates to other teaching materials.
• After completing the program, discuss key points and use handout or worksheet to help patient use the information for their situation.
Advantages
- Instruction can be individualized and actively involves learner in learning process.
- Allows learner to proceed at their own pace with immediate and continuous feedback on their progress.
- Time-efficient; round-the-clock accessibility
- Consistent presentation of material
- Accommodate various types of learners.
- Repetition can occur as often as necessary.
- Includes a variety of approaches, such as drill & practice, tutorial, simulation, and basic problem solving.
- Can be used to evaluate learning.
- Large inventory of resources

Disadvantages
- Both software and hardware is expensive.
- Less accessible to certain populations
- Time consuming to create.
- May be difficult for those with limited computer skills or physical limitations
- Promotes primarily knowledge; difficult to change attitudes and behavior or teach psychomotor skills
- Can depersonalize the learning process if patient educator unavailable for guidance

Demonstration Materials (posters, flip charts, charts, diagrams, drawings, displays, models, real objects or equipment, photographs, bulletin boards)

Demonstration materials, also called non-projected materials, are primarily used to stimulate the senses of sight with touch and sometimes even smell and taste. The purpose of using this type of media is to bring the learner closer to reality and actively engage them in a visual and participatory manner. For this reason, they are useful tools for cognitive and skill development.

Five Basic Teaching Situations for Using a Visual
- The topic is too complex or abstract for printed or verbal instruction alone
- To hold or regain the person’s attention
- A high level of retention is desired
- To summarize the key points
- To make sure the message evokes a consistent visual image

Advantages
- Actively involves the learner, which brings them closer to a real world situation they may face
- Attracts attention and can quickly get ideas across
- Use of images may result in influencing a person’s attitudes
- Reinforces cognitive learning and helps develop psychomotor skills; opportunity for repetition
- Relatively inexpensive to make
- Flexible and portable

Disadvantages
- Content can become easily dated
- Time-consuming to make
- May be used as the only way to impart information, rather than as a supplement to teaching
- Not suitable for use with large groups
- Cannot present large amounts of information
- Not useful for those who are visually impaired
Tips on Using Demonstration Materials

• Choose materials where the age, gender, socio-cultural and racial backgrounds reflect your learners so they can better identify with the messages.
• Ask the learner to describe what he or she sees, and use what they say as a basis for teaching.
• Use models or real objects to help make something abstract, like body organs, more visible. They help show size and relationships. Immediate application of knowledge and skills occurs by observing and handling the objects while getting feedback. Use the model to evaluate understanding by asking him or her to describe or show what they learned.
• Use posters to attract attention and to leave a mental image as a cue for later recall. Posters are ideal for showing a sequence of events and for illustrating procedures.
• Use displays and bulletin boards to present information informally in halls or waiting rooms.
• Use flip charts to present simple concepts in order and to summarize key points. A small flip chart made as a stand-up binder of prepared materials can be used for an individual or small groups. Teaching points that you want to emphasize can be written on the reverse side of each chart page. If each sheet is placed in a plastic page protector, you can write or draw specific information.
• Photo albums use photographs, illustrations, small objects, and brief descriptions or captions to help learners relate to an experience, such as preparation for surgery. The photo album is most effective when presenting a visual sequence of what to expect with a procedure or technique, and if it was created by asking those who have been through the process for their input.

References:

© 2006, AHEC Clear Health Communication Program
The Ohio State University