Editor: Jan McDaniel, Extension communications specialist, The Texas A&M University System.
Teaching effectiveness using an interactive audio system will depend on four components:

- presentation style,
- interactive participation from locations,
- humanizing the experience,
- feedback.

Presentation style

Organization — Organize the material to make learning easier.

- Provide advance organizers through mailings of materials to participants.
- Assign questions and readings (thought-provokers) before the session.
- Color code materials for easy reference during a session.
- Use session outlines to help participants focus on central ideas.
- Summarize the important ideas presented.
- Pace complex material in a way that aids retention.
- Use verbal clues to help listener know which points are most important during a presentation.
- Use mental imagery to facilitate learning through descriptive language.

Variety — Use variety in teaching and remember that spontaneity results from using a natural delivery style.

- Vary the presenter's style in pitch, volume, pacing and emphasis.
- Vary the voices by using different persons to present material.
- Use short learning segments and alternate straight lecture with discussion or question and answer periods.
- Use a variety of teaching methods:
  - lecture,
  - question and answer,
  - celebrity/guest speaker (can be local or long-distance; live or prerecorded),
  - interview,
  - reports by participants at various locations,
  - small group discussion,
  - panels and reactor panels,
  - case studies,
  - group work sessions,
  - brainstorming,
  - role playing.

*Extension communications specialist — ETN, The Texas A&M University System.*
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<tr>
<th>Method</th>
<th>When and How to Use</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>• To deliver large amounts of factual information when audience motivation is no problem.</td>
<td>• Efficient method for transferring information in short amount of time.</td>
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<td>• Best interspersed at frequent intervals (10 to 15 minutes) with interactive periods.</td>
<td>• If uninterrupted, allows no feedback, clarification.</td>
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<td>• Enhanced with printed back-up materials, organizers and visuals.</td>
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<tr>
<td>Question and Answer</td>
<td>• Build into any other format to allow audience participation.</td>
<td>• Good way for instructor to get feedback; participants to get clarification.</td>
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<td>• Mention in advance so questions or discussion points are ready.</td>
<td>• Can be informal “network opening” or formal, written questions.</td>
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<td>• Give opportunity for everyone if time runs out (answers by mail, and so forth).</td>
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<tr>
<td>Participant Report</td>
<td>• When content areas deal with material which participants have had specific problems or experience with.</td>
<td>• Generates feeling that participants’ experiences are important part of content.</td>
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<td>• “Preview” those selected by calling ahead to assign reports.</td>
<td>• Kicks off discussions.</td>
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<td>• Keep report short (5 minutes is best; 15 minutes is maximum).</td>
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<tr>
<td>Buzz Group at Each Site</td>
<td>• When group is too large at any site for problem-solving or discussion.</td>
<td>• Efficient way to promote discussion in large group.</td>
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<td>• Suggest sites having larger groups divide into discussion groups of 5 to 10 — keeping same format each time.</td>
<td>• Encourages participation of quieter members.</td>
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<td>• Keep the basic task clear and simple.</td>
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<td>• Give groups explicit instructions for the task (“develop one question,” “agree on one disadvantage”).</td>
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<tr>
<td>Panel</td>
<td>• Any content area can be presented via informed representatives.</td>
<td>• Brings in wide range of informed opinion.</td>
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<td>• Select members for their knowledge, enthusiasm.</td>
<td>• Creates an informal atmosphere.</td>
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<td>• Members can be at different locations.</td>
<td>• Variety of voices stimulates attention and interest.</td>
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<td>• Moderator’s summaries bring out central points.</td>
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<td>• Participants should be prepared for discussion by previous assignments.</td>
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**Method**

**Work Group Sessions**

**When and How to Use**
- Allow for individual problem-solving and discussion at local sites.
- Provide practical work sessions in content areas.
- Plan segments where group activity is central goal.
- *Instruct group on how to proceed, then go “off the air” for a few minutes while activity continues.*
- Have some groups “report.”
- Let local leaders supervise.
- Mail “packages” of lab materials ahead of program time.
- Whenever content of program is to be adapted to conditions at sites.
- *When application of material is critical.*
- *Suggest activities that can be carried out locally before and after program, include in printed material sent to each participant.*
- Encourage local group leaders to initiate these activities.

**Characteristics**
- Allows adults to help one another learn.
- Encourages participation.
- *Increases rapport at local sites.*
- Supplements “module” format with local discussion.

**Pre and Post Sessions**

- Give some groups “report.”
- Let local leaders supervise.
- Mail “packages” of lab materials ahead of program time.
- Whenever content of program is to be adapted to conditions at sites.
- *When application of material is critical.*
- *Suggest activities that can be carried out locally before and after program, include in printed material sent to each participant.*
- Encourage local group leaders to initiate these activities.

**Repetition — Use repetition to aid in learning and retention of material. This can be done through:**
- oral repetition,
- printed back-up materials, including study questions,
- using a variety of teaching formats,
- visuals made available to each location,
- summarizing letter or materials sent to each participant.

**Encouraging Interactive Participation from All Locations**

Plan interactive periods so participants know they will have an opportunity to share.

Emphasize group sharing and promote the concept of statewide sharing as a unique opportunity.

Prepare the group for participation through use of printed back-up materials to stimulate discussion.

Structure group participation, if necessary, through:
- “planted questions,” participants are instructed in advance to ask them,
- calling on individuals at specific locations.
Humanize the Experience

Teleconferencing is not the same as face-to-face teaching, so it is important to "humanize" the experience.

• Provide biographical sketches and pictures of instructors and guest speakers so participants will know who will be directing the sessions.
• Let your personality come through by speaking in a conventional style that is natural and spontaneous.
• Use an informal roll call of participants at a few locations across the state to establish a relaxed, informal atmosphere.
• Share the roster of participant names with all locations.
• Use names, and ask speakers to identify themselves and their location when speaking over the system.

Feedback

Feedback helps those teaching as well as those who are learning.

• Use a variety of techniques to evaluate learning:
  — written examinations or self-checks,
  — oral evaluation,
  — written assignments such as logs, special focus papers, responses to study questions and reports.
• Use a variety of techniques to evaluate teaching effectiveness:
  — listing main strengths and suggested improvements,
  — written questionnaire at close of session(s),
  — group discussion of what worked, what did not work and why.

Some of the material in this publication was adapted from information which was printed originally in the Extension Teleconference Network Handbook and prepared by Mary Marshall, Extension program specialist and Nancy Granovsky, Extension family resource management specialist, The Texas A&M University System.
Table 2. Support Materials

- Provided in advance to participants or to sites for distribution.
- Coordinated by instructor or director.
- Handled at sites by program aide.

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<tr>
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<tbody>
<tr>
<td>Printed</td>
<td>• Illustrate almost any material.</td>
<td>• Can tie in verbal messages using outline format.</td>
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<tr>
<td>Materials</td>
<td>• Easy and inexpensive to prepare and distribute.</td>
<td>• Can be “learning packages” including journal articles, pamphlets.</td>
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<td></td>
<td>• Provide participants with a permanent record of charts, graphs.</td>
<td>• Typographical “cueing” can highlight important ideas — underline, capitalize, indent.</td>
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<td>• Aid learning for “print-oriented” participants.</td>
<td>• Agenda listing session objectives aids participant learning.</td>
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<td>• Usually black and white, unless produced commercially.</td>
<td>• Photos of instructors printed on agenda increases visual contact.</td>
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<tr>
<td>Overhead</td>
<td>• Illustrate simple concepts, processes, facts, outlines, summaries.</td>
<td>• Generally use horizontal format.</td>
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<tr>
<td>Transparencies</td>
<td>• Fairly simple to duplicate and send to locations.</td>
<td>• Limit content of one transparency to one concept.</td>
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<td>• Possible to add some color details for emphasis.</td>
<td>• Simplify content converted from books/magazines, or put into several transparencies.</td>
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<td>• Useful as “blackboard” for conveners at sites.</td>
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<td>35mm Slides</td>
<td>• Useful when concepts need color for full comprehension.</td>
<td>• Generally use horizontal format.</td>
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<td>• More expensive, time-consuming to duplicate and distribute.</td>
<td>• Letters should be at least ¼ inch tall on original to retain legibility in final slides.</td>
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<td>• To determine if material will make good slide, “preview” original from 5 feet away. Judge for simplicity, effectiveness in telling the message, design, detail, visual contrast.</td>
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</tbody>
</table>
Educational programs conducted by the Texas Agricultural Extension Service serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin.

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