

## Lecturing

A summary of information from Chapter 6 of  
Teaching Tips  
by  
Wilbert J. McKeachie

## Research

- Lectures *are* as effective as other methods, when knowledge is measured.
- Attention increases for the first 10 minutes, then falls off.
- Students who take notes remember material better, even if they hand them in after class.

## Good for...

- Getting current information (vs. textbook)
- Summarizing material scattered over many print sources
- Adapting material to audiences with specific
  - background
  - interests

## Observations

- Lecturer's enthusiasm is important factor in student learning & motivation.
- Practice -- It can be done!
  - motion
  - eye contact
  - gestures
  - vocal variation
- Preparing a lecture also helps the teacher!

## A Theoretical Goal

The learner's mind is not a *tabula rasa*.

The lecture is the bridge

The structures in the student's mind

The structures in the material presented

## How to Get Their Attention

- ⦿ "This will be on the test."
- ⦿ Change the environment
  - ⦿ talking/drawing/mini-assignments/slides
  - ⦿ affect
- ⦿ Let them see your face (& lips)

## How to Make Students be Better Listeners

- ⦿ Write a 1-min. paper on "What do I Hope to Get Out of This Lecture?"
- ⦿ ...

## Note Taking

- ⦿ Try (?) to get students to take fewer notes and listen carefully when the material is new and difficult.
- ⦿ When a new area is presented, students' processing slows down to word-by-word. Adjust pace.
- ⦿ "Better" students benefit more by notetaking, but it's their background, not their IQ.

## Printed Notes

- An outline can be helpful.
- Written notes cause students to "relax into passivity".

## Improving Notetaking Skills

- Collect the notes!
- Evaluate on verbatim copying versus
  - summarization
  - translation
  - showing relationships
- Return them!

## Encouraging Deep Processing

- Point out relationships.
- Ask rhetorical questions.
- Ask questions to be answered by students.
  - Ask for examples of application of concepts from students' own experiences.
- You must convince students that they need to do active learning.

## Planning Lectures

- Don't plan on concisely summarizing knowledge.
- Don't be an abstractor of an encyclopedia.
- Do teach students to learn and think.
- Plan differently for lectures earlier and later in a course (bigger "chunks" later).

## Another Kind of Diversity

- ⇒ background knowledge
- ⇒ motivation
- ⇒ learning skills
- ⇒ beliefs about what learning involves
- ⇒ preferred styles of learning

## Verbatim Prep Notes

- ⇒ Don't do it!
- ⇒ If you must do it, use it to prepare, but don't bring these notes to class!
- ⇒ A lecturer reading extensive notes causes him/her to lose eye contact with the students.
- ⇒ Color code your notes with procedural directions.

## Lecture Organizing Principles

- ⇒ cause to effect
- ⇒ time sequence, e.g., stories
- ⇒ parallel organization:
  - ⇒ phenomenon || theory || evidence
- ⇒ problem to solution
- ⇒ PRO/CON to resolution
- ⇒ familiar to unfamiliar
- ⇒ concept to application

## Spiral Approach

- ⇒ Jump from area to area,
- ⇒ getting detailed each time "around".



## Visual Aids

- tree diagrams
- computer flowcharts
- network models
- arrows and faces
- Venn diagrams
- ...

## Organization Clues

- Use something to give students clues to the lecture's organization:
  - blackboard drawings
  - slides

## Using Examples

- Older faculty have a harder time developing examples that relate to their students' experiences.
- Ask the students for examples.

## Checking Understanding

- Don't ask
  - "Any questions?"
  - "Do you understand?"
  - "OK?"
- Ask students to write down questions, and compare to neighbors. Then ask.
- Ask a student to summarize your lecture!

## Where I Question the Chapter

- "Most students take notes during lecture."
- There are some confusing research results on p. 83.
- Distinguishes "lecture" from "discussion".

- Ask a student to summarize your lecture and compare to neighbors. Then ask:
- Ask students to write down questions:
  - "OK."
  - "Do you understand?"
  - "Any questions?"
- Don't ask

## Checking Understanding

- ...
- Venn diagrams
- arrows and boxes
- network models
- computer flowcharts
- tree diagrams

## Visual Aids

- slides
- blackboard drawings
- the lecture's organization:
- Use something to give students clues to

## Organization Clues