The Lecture Method

Overview

Often the cornerstone of university teaching, a lecture can be an effective method for communicating theories, ideas, and facts to students. Typically a structured presentation, a lecture should be designed to include certain procedures in order to be effective—procedures that research and expert lecturers have identified as essential to assist student learning.

Perhaps you are not totally satisfied with your lecturing skills? Or not satisfied with your students’ learning from the lectures you present? By following the guidelines for lecture design that are based on learning theory, you will use your lecture preparation time most efficiently.

The basic purpose of lecturing is the dissemination of information. As an expert in your field, you identify important information for the learner and transmit this knowledge in the lecture. The lecture method is recommended for high consensus disciplines—those in which there is agreement on the fundamental principles and procedures, such as math and the natural sciences.

Advantages/Disadvantages

The following are the basic advantages of the lecture method:

- It provides an economical and efficient method for delivering substantial amounts of information to large numbers of student.
- It affords a necessary framework or overview for subsequent learning, e.g., reading assignments, small group activities, discussion.
- It offers current information (more up to date than most texts) from many sources.
- It provides a summary or synthesis of information from different sources.
- It creates interest in a subject as lecturers transmit enthusiasm about their discipline.

There are disadvantages to using the lecture method as a primary teaching method. An effective lecture requires both extensive research and preparation and effective delivery skills to maintain students’ attention and motivation. In addition, the lecture has other drawbacks:
• It does not afford the instructor with ways to provide students with individual feedback.
• It is difficult to adapt to individual learning differences.
• It may fail to promote active learning unless other teaching strategies, such as questioning and problem-solving activities, are incorporated into the lecture.
• It does not promote independent learning.

Planning a Lecture

How is a lecture planned and prepared? It is important to recognize that research findings and expert opinion have identified that certain teaching procedures should be included in a lecture. They are essential to an effective lecture—one that helps students to learn most easily and effectively. Based on learning theory, these procedures provide guidelines for preparing a lecture.

An effective lecture is composed of three components, an **Introduction, Body and Conclusion**, designed to promote and support learning. In the following sections, you will see how to develop these components to produce an effective lecture.

The Introduction

The introduction usually is the first three to five minutes of the lecture. This time is crucial in determining how well students learn and retain the information to be presented. The main purpose is to provide a framework for students’ learning, providing the structure for the lecture’s content information. It is also necessary to gain students’ attention. If we fail to capture students’ attention during the introduction, it is unlikely that we will retain it during the rest of the lecture. The introduction should do the following:

• Establish a **relationship** with the audience. Make warm-up comments and initiate rapport to set the tone of the class. Establish friendly **communication** to provide a positive learning environment in which students feel comfortable. Use an "ice breaker" to introduce yourself during your first meeting with students and maintain an approachable **relationship** with students in subsequent classes.
• Gain **attention** and foster **motivation**. Relate to students’ goals and interests. You might present a meaningful problem to students and describe the lecture as a solution to the problem. In a constitutional law class, for example, the instructor could begin a lecture by discussing popular efforts to place warning labels on rock music and then suggest that a closer examination of the First Amendment and freedom of speech will help students to decide if warning labels are a form of censorship. You might also introduce the lecture by describing how it will help students to be successful in their education and careers or by relating it to your students’ inherent curiosity (as in the previous example where rock music was used to address censorship).
• Prompt awareness of relevant **pre-existing knowledge**. Students need to see how the "new" lecture information relates to their existing knowledge or experience. This not only promotes interest and motivation, but also is a first step in cognitive information processing. The instructor of a biology class, for example, might begin a lecture on DNA: "Three weeks ago we spoke about hereditary traits and how certain physical traits are passed to the next generation. Today we are going to make those abstract laws concrete by looking at how DNA works."

• Clarify the purpose of the lecture and describe how it is organized. Research supports a correlation between **clarity of objectives** and student achievement; students will achieve at higher levels if they know what knowledge and skills they should gain from this instruction. This can be accomplished by doing the following:

• Announce the lecture topic as a title.

• Make a statement about the topic and how it will be developed. Make a generalization about the topic or simply list the objectives. For example: A literature class could begin: "The Romantic Poets were perhaps the beatniks and hippies of their generation. Today I’m going to show you how literary giants like Shelley and Keats can be compared to Jack Kerouac and Shel Silverstein. The objectives for today’s class are . . . ."

**The Body of the Lecture**

The **body** of the lecture covers the content in an organized way. Since this component is allotted the greatest amount of class time, it includes many more teaching procedures than the introduction and conclusion. This is where you must consult your lecture notes while at the same time maintaining rapport with your students.

Lecture **material** is a combination of facts, concepts, principles, and generalizations. Concepts represent a class of terms (an idea usually expressed in a word), and principles communicate relationships among concepts. Generalizations are relationships between or among concepts expressed at a higher level of abstraction than a principle. In a lecture, the tendency might be to present one fact after another. This type of information giving is ineffective because students cannot see the relationship or organization of the new ideas. Instead, it is best to present a concept (one idea) by first defining it and then giving many concrete examples of the concept. As you introduce new concepts, link them together into principles, and then into generalizations, each time adding concrete examples as you develop these relationships.

**Concepts:** Revolution, Economics

**Principles:** If wages are cut, then the likelihood of disgruntled labor supporting a revolution will increase.

**Generalization:** Economic instability can lead to political revolution.

**Fact:** Membership in American communist parties increased substantially during the Great Depression of the 1930s.
In addition, a lecture should be **organized** based on the relationship of the ideas presented. Examples of relationships that can be used to organize lecture information include the following:

**Component (part to whole)**—shows how a larger idea is composed of several smaller ones. "Before we can begin to talk about how urban planners tackle traffic congestion, we need to look at how psychology, economics and tradition contribute to the present-day layout of cities."

**Sequential**—deals with chronological or cause/effect relationships. "Although the causes are quite complex, let’s look at how mass unionization in the 1930s contributed to prosperity in the 1950s."

**Material to purpose**—information or a procedure is presented followed by its purpose or use (the "what" followed by the "why"). "Now that we know what Marxism is, let’s look at how Marxist theory can be used to address inequality between men and women."

**Comparison**—comparing two or more things using an explicit basis for comparison. "The recent reintroduction of the gray wolf into Yellowstone National Park once again demonstrates the inherent conflict between environmentalists and business, in this case ranchers. In the next twenty minutes, let us compare the Yellowstone controversy to efforts twenty years ago to clean up Love Canal and see if we can use this comparison to look for ways in which environmental and business interests can learn to work together."

**Use transition words as you present.** Using transitions or links ("therefore," "because," "as a result") show how pieces of lecture information relate to each other. Verbal or oral **cues** also alert students to more significant information.

- It is especially important to remember...
- Please note the following...
- You will need to memorize...
- I will ask you to recognize...
- You should be able to apply...

Remember to include **audiovisual aids** while delivering your lecture. Using Power Point slides, transparencies, or even the chalkboard will enliven and strengthen the presentation of ideas and, thus, assist students’ learning.

**Include active learning**

It is crucial to provide opportunities for active learning during any instruction, including a lecture. Active learning allows students opportunity to **practice using the lecture information and obtain feedback on the accuracy of their responses.** For example, during the lecture, ask questions or give students problem-solving activities that encourage them to use the information they should gain from the lecture. You could...
encourage students to think actively during a lecture by announcing at the beginning of the class period that you will interrupt your lecture midway so that students may write a one-minute paper on a topic derived from the lecture.

At the end of the lecture, you can use the "minute paper" by asking students to respond in one or two sentences to the following questions:

- What stood out as most important in today’s lecture?
- What ideas from today’s lecture are still unclear?

Capture Attention

**Maintain attention** throughout your lecture by employing techniques such as the following:

- Vary student activities—lecture for 15 minutes and then provide an active learning activity.
- Change the mode of presentation (for example, oral to visual).
- Employ concept-related humor.
- Demonstrate enthusiasm about your subject.
- Encourage note taking by speaking slowly and repeating important information.
- Provide motivational cues ("On the next exam you will be asked to . . .").

The Conclusion

The conclusion, the most frequently neglected component of the lecture, should be used to reinforce students’ learning of the information as well as to clarify any misconceptions regarding their understanding of the concepts presented. Try to do the following in your lecture conclusion:

- **Repeat and emphasize** main points. Signal students that you are going to summarize and reemphasize main points. Or, even better, have several students summarize your main points. This procedure will help you to get feedback as to whether or not students identified the important information. It is also helpful to rephrase information in order to clarify key ideas.
- **Encourage questions** from students. To allow students time to review their notes and thoughts, pause for a few moments after asking for questions. Remember, however, that it is often difficult for students to respond to the vague "Any questions?" Instead, ask specific, leading questions. By doing so, you will encourage your students to review their notes and formulate questions of their own. In this way, any misconceptions can be clarified, and understanding can be reinforced.
- **Relate** content to previous and subsequent topics. The last few statements in the conclusion should provide a connection between this lecture and previous lectures (as well as those to follow). As students see the relationship among major concepts presented in different lectures, they gain a sense of
Lecture Delivery

Nonverbal behaviors play a significant role in effective public speaking: they can enrich or elaborate the spoken message. There are basically two aspects to nonverbal behavior: body language and voice.

The following four elements make up body language:

- **Speaker-audience distance.** The more objects and distance—psychological as well as physical—between speaker and audience, the more formal the atmosphere. If you desire to create a more informal atmosphere, you should reduce these barriers. Move from behind the lectern from time to time and walk in the aisles as you present information or carry on discussions with students.

- **Body movement and stance.** To communicate, you must compensate for distance by employing larger gestures and more volume. Body movement and posture can convey messages to your audience. For example, slouching communicates disinterest or boredom, pacing aimlessly with head down indicates nervousness, and standing stiffly indicates tenseness. Being animated during your lecture helps convey your own enthusiasm and interest to students; they recognize that you are not bored, nervous or tense.

- **Facial expressions.** A significant portion of the emotional impact of a speaker’s message is conveyed by facial expressions. Facial expressions tell students how you feel about them and yourself and give students cues to help them interpret the content of the message. Regular eye contact helps you establish credibility. Look directly at different individuals as though you were carrying on a conversation with them.

- **Gestures.** Purposeful movements of the head, arms, hands and shoulders accentuate or dramatize ideas. Three characteristics of effective gestures include relaxation, vigor, and timing. Use your body to indicate a change of topic or transition.

- **Voice** variables allow the speaker to make a message clear and interesting. Some of the vocal characteristics of good speaking are as follows:
  - **Strength.** Speak loudly enough so that the audience does not have to strain to hear.
  - **Enunciation.** Make an effort to speak crisply, avoiding slurring or skipping parts of words in order to limit the possibility of misunderstanding.
  - **Pronunciation.** Meet your audience’s expectations in regard to acceptable pronunciation.
  - **Rate of speech.** In a large lecture, with students concentrating on note taking, a rate of 120-130 words per minute is comfortable.
  - **Variety.** Vary the characteristics of your voice in terms of
rate, pitch, stress, pauses, volume and inflection.

- **Pauses.** Pauses can provide emphasis and allow students time to think and take notes. Furthermore, pausing indicates that you are a conscientious speaker who thinks about what you are going to say. However, filling in pauses with sounds like "um," "ah," "well-uh" make a presentation seem disconnected and can be distracting.

**Additional hints for a successful lecture include the following:**

- Present an outline of the lecture (use the blackboard, overhead transparency or handout) and refer to it as you move from point to point.
- Repeat points in several different ways. Include examples and concrete ideas.
- Use short sentences.
- Stress important points (through your tone or explicit comments).
- Pause to give listeners time to think and write.
- Use lectures to complement, not simply repeat, the text.
- Learn students’ names and make contact with them during the lecture.
- Avoid racing through the last part of the lecture. This is a common error made by instructors wishing to cram too much information into the allotted time.
- Schedule time for discussion in the same or separate class periods as the lecture.
- PREPARE. Preparation reduces stress, frustration, insecurity and consequent ineffectiveness.