Understanding Active Learning

Active Learning: "A process in which students are given opportunities to 'personally' pursue the content of a subject."

The nature of those opportunities is important. Students can be active without pursuing content. For example, if an instructor tells a class to copy vocabulary words into a notebook while working in small groups, that would not constitute active learning because students are not actively pursuing the content of the course. Even if they worked in small groups and found the definition of words, they would be active, but would they be learning?

Activities can be designed that will enhance the likelihood that learning will indeed take place.

Exercise: Based on the definition of active learning, select the six best methods to encourage active learning.

Analyze
Experiment
Copy
Compare
Listen
Observe
Criticize
Memorize
Sit
Organize
Wait
Watch
Prioritize

The "Pure" Lecture Method

The lecture method has long been the primary method by which educators conduct classes in postsecondary education. Why?

Pros: It's the most efficient method of preparation.

It's the most efficient method of delivering information.

Cons: It's not the most effective method of learning.

It is instructor-centered rather than student-centered.

Now this can be deceiving. Is an instructor who is lecturing actually teaching? Maybe. Maybe not. The fact is, if there's no learning taking place, then there's no teaching
taking place. The process of teaching may be facilitated by lecturing, but the outcome of teaching the learning objectives may or may not be realized. Lecturing is particularly risky because students are passive and may often be bored. In fact, some research has shown that attention spans begin to decrease drastically after the first 10 minutes of a lecture.

Learning is never a passive process so teaching shouldn't be passive either. There are times when lecturing is an effective and productive method of teaching.

What is the nature of active learning and what makes it distinctive?

In order to be actively learning, students must be:
- Personally involved, and
- Thinking about the significance and implications of what they are doing

Students are usually engaged in critical or analytical thinking.

Critical thinking can be defined as rationally deciding what to believe or not to believe. It is that process through which a person determines the authenticity, value, or accuracy of something. We often employ critical thinking when we decide which political candidate to support after hearing their campaign promises. An appraiser makes use of critical thinking when determining the value of a house, a car, or an antique.

Exercise – Welding Inspector

Exercise – Miss Jones’ Driving Route

Analytical thinking is a process in which we divide a problem into its parts. Then, we study the parts to determine how they can be arranged or resolved in an order that will solve the problem as a whole.

Exercise – Penny Pyramid

Exercise – The Lunch Line Order

Students may often use both critical and analytical thinking when they participate in discussions and laboratory activities or when they take tests.

Exercises – Active Learning Activities
Benefits of Active Learning

During active learning, there is less emphasis on receiving information from the instructor. Students are expected to obtain information from a variety of sources including the Internet, the library, references books and materials, and other students. Since active learning presents more opportunities for students to personally interact with the instructor, both the students and the instructor are able to share comments and questions more often. The instructor is better able to keep track of each student's progress.

When using passive methods of instruction, the learner is often unsure about what kind of performance or response is expected. During active learning, the student is given specific expectations and knows what kind of response the instructor wants. This is a part of the nature of active learning. As a result, the learner knows what is expected of him or her. This is frequently not the case with passive methods of instruction.

Strategic Uses of "Pure" Lectures

Pure lecture is an effective and efficient method when the objective is to provide students with content material such as: (1) dates of events; (2) important terms; (3) names of people, places, and similar kinds of information.

The Lecture/Discussion Format

Since many lessons involve both factual and conceptual information, the strategy often employed may best be described as lecture/discussion.

Many experienced instructors will insist that they teach very successfully using what they call "the lecture method." However, chances are that they succeed because they actually deliver lecture that includes lots of interaction with their students. Mixing discussion into lecture is a valid active learning strategy. The discussion of new information often includes implications, applications, importance, or related concepts.

For many instructors, the lecture/discussion format is a frequently used strategy, and it's often a good choice.

Active learning is superior to passive methods when students are attempting to master skills including writing and thinking. To use a sports analogy, we would not expect one to master the game of golf by just watching others play or by listening to them describe how to swing a club. Eventually, the golf student will need to get out on the course and begin to try it out.
In the same way, active learning's goal is to find ways for the student to interact with what they are learning. A key conclusion is that active learning strategies are even more important in career schools than in other types of educational institutions.

Studies reveal that adult students prefer active learning strategies to traditional lectures. Because of their life experiences, adults are used to being in control of much of their daily activity. Allowing them to be doers and thinkers in the classroom provides them with a sense of control over the learning process.