**What Is Active Learning?**

**Center for Teaching and Learning**
University of Minnesota - http://www1.umn.edu/ohr/teachlearn/tutorials/active/what/index.html

Defining "active learning" is a bit problematic. The term means different thing to different people, while for some the very concept is redundant since it is impossible to learn anything passively. Certainly this is true, but it doesn't get us very far toward understanding active learning and how it can be applied in college classrooms.

We might think of active learning as an approach to instruction in which students engage the material they study through reading, writing, talking, listening, and reflecting. Active learning stands in contrast to "standard" modes of instruction in which teachers do most of the talking and students are passive.

Think of the difference between a jar that's filled and a lamp that's lit. In the former case, liquid is poured into an empty vessel–an apt metaphor for the traditional educational paradigm in which students sit passively in a classroom and absorb the knowledge transmitted by an expert. A growing body of research has made it clear, however, that the overall quality of teaching and learning is improved when students have ample opportunities to clarify, question, apply, and consolidate new knowledge. In this case, instructors create opportunities for students to engage new material, serving as guides to help them understand and apply information. They help "light the lamp" of student learning.

Students and their learning needs are at the center of active learning. There are any number of teaching strategies that can be employed to actively engage students in the learning process, including group discussions, problem solving, case studies, role plays, journal writing, and structured learning groups. The benefits to using such activities are many. They include improved critical thinking skills, increased retention and transfer of new information, increased motivation, and improved interpersonal skills.

Using active learning does not mean abandoning the lecture format, but it does take class time. Lecturers who use active learning pause frequently during the period–once every fifteen minutes or so–to give students a few minutes to work with the information they're providing. They may ask students to respond to a question, to summarize important concepts in writing, or compare notes with a partner. For some lecture-based classes, using active learning may be a bit more challenging because of class size or room limitations such as fixed seating. Breaking students into groups under these circumstances may not be possible, but other strategies such as individual writing or paired activities are quite possible and lead to good results.

What follows is a description of some of the basic elements of active learning followed by guidelines for using them in your classroom.

**Basic Elements of Active Learning**

There are four basic activities through which all students learn, and specific active learning strategies use one or more of these elements.

**Talking and Listening**

When students talk about a topic, whether answering a teacher's question or explaining a point to another student, they organize and reinforce what they've learned. When they listen, we want to ensure that it's meaningful listening, relating what they hear to what they already know. In a lecture class, students need periodic time away from passive listening in order to absorb what they've heard. And they need reasons to listen, reasons perhaps more immediate than a good grade at the end of the semester. Did the teacher ask a question before the lecture segment that was thought-provoking enough to cause the students to search for the answer in the words that followed? Were they told beforehand that they would have to explain the points in the lecture to a fellow student?

**Writing**

Like talking and active listening, writing provides a means for students to process new information in their own words. It is particularly effective in large classrooms where breaking students into pairs or groups may be prohibitive. It also appeals to individuals who prefer to learn independently.

**Reading**

Students do a great deal of their learning through reading, but they often receive little instruction in how to read effectively. Active learning exercises such as summary and note checks can help students process what they've read and help them develop the ability to focus on important information.

**Reflecting**

In the all-too-typical lecture class, the lecturer stops talking at the very end of the period. Students gather up their notes and books and run for their next class. One can almost see the knowledge evaporating from their brains. They've had no time to reflect, to connect what they've just learned with what they already know, or to use the knowledge they've gained in any way. Allowing students to pause for thought, to use their new knowledge to teach each other, or to answer questions on the day's topics is one of the simplest ways to increase retention.

**Categories of Active Learning Strategies**

There are four broad categories of learning strategies that one might use in an active learning classroom:

* individual activities
* paired activities
* informal small groups
* cooperative student projects

You choice of these will depend on the size of your class, your physical space, your objectives, the amount of time you have to devote to the activity, and your comfort level with the strategy. Many of the [Active Learning Strategies](http://www1.umn.edu/ohr/teachlearn/tutorials/active/strategies/index.html) listed in our workshop can be adapted to individuals, pairs, or groups.

**Planning an Active Learning Activity**

When planning an active learning activity, answering the following questions will help you clarify your goals and structure.

* What are your objectives for the activity?
* Who will be interacting? Will students pair up with someone beside them or someone sitting behind/in front of them? Should they pair up with someone with a different background? Someone they don't know yet?
* When does the activity occur during the class? Beginning? Middle? End? How much time are you willing to spend on it?
* Will students write down their answers/ideas/questions or just discuss them?
* Will students turn in the responses or not? If they are asked to turn them in, should they put their names on them?
* Will you give individuals a minute or so to reflect on the answer before discussing it or will they just jump right into a discussion?
* Will you grade their responses or not?
* How will students share the paired work with the whole class? Will you call on individuals randomly or will you solicit volunteers?
* If students are responding to a question you pose, how are you going to ensure that they leave with confidence in their understanding? (Often, if various student answers are discussed without the instructor explicitly indicating which ones are "right," students become frustrated. Even with a question that has no absolute "right" answer, students want to know what the instructor's stand on the question is.)
* What preparation do you need to use the activity? What preparation do the students need in order to participate fully?

**Keys to Success**

* Be creative! Invent new strategies and adapt existing ones to your needs.
* Start small and be brief.
* Develop a plan for an active learning activity, try it out, collect feedback, then modify and try it again.
* Start from the first day of class and stick with it. Students will come to expect active learning and perform better.
* Be explicit with students about why you are doing this and what you know about the learning process.
* Request students vary their seating arrangements to increase their chances to work with different people. Have students occasionally pair up with the student behind them, since friends often sit side by side.
* Use questions from in class activities on tests. For example, include a short essay question that was used in a think/pair/share.
* Negotiate a signal for students to stop talking.
* Randomly call on pairs to share.
* Find a colleague or two to plan with (and perhaps teach with) while you're implementing active learning activities.
* Continue learning through workshops, reading, and practice.