

# ACTIVE LEARNING STRATEGIES

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## WRITING STRATEGIES

### Minute Essay (Microtheme)

At the beginning, middle, or end of the class, ask students to write down what is unclear, what questions they have, what the main point of the lecture was, what objections they may have to the ideas being presented, or what was the most beneficial or insightful part of class. Limit the writing to a short period of time and/or have the students write their responses on a 3X5 card. In large classes, sample the responses and provide feedback during the next class period.

### Brain Dump

A short write in which students write down everything they know about an announced topic. Stimulates student attention and provides feedback to the instructor about the students' knowledge base.

### Directed Reading

Create a set of questions for students to answer after they have completed a reading assignment so that they are prepared for a discussion of the subject matter in class. This allows class to be focused on analysis and synthesis of information rather than communication of facts. As an alternative, ask students to write three questions they formulated from the reading assignment.

### Admission Ticket

Require submission of a previously assigned writing project (such as a directed reading) to get into class.

### Summary of Summaries

Students write a 2-3 page summary of an assigned reading and exchange summaries. Each student then writes a 1 paragraph summary of the other person's 2-3 page summary. This works even better when the summaries are saved to computer disk.

## Journals

Require students to keep course journals in which they record chapter summaries, homework questions, and individual insights and questions about course material. Provide feedback at least three times a semester. In large classes, be selective in the reading of journal entries. Ask students to mark their three best entries; read those and three others at random.

## Question Box

Students have the opportunity to drop off written questions to which the instructor can respond in class or privately.

## Writing Assignments to Simulate Future Activities

Create and model writing assignments which will prepare students in the practice of pharmacy, e.g., patient counseling, defense of papers/presentations, analysis of journal articles, abstracts of articles, analysis of current newspaper/magazine articles, preparation of research proposals, summaries of current drug information, letters of application.

## COLLABORATIVE LEARNING

### Team Activities

In large classes, create teams of four or five students. Periodically stop the lecture to ask the students to perform group tasks, such as solve a problem, pose a question, make cognitive maps, create outlines, paraphrase the lecture to each other, create test sample questions, identify basic principles of the day's topic, etc.

### Think/Pair/Share

Ask students to write for a few minutes on an assigned topic or question. Then they spend another few minutes discussing with a partner, comparing and testing their ideas. Finally, the groups report their ideas to the entire class. Students thus have time to think their thoughts through and to get private feedback before responding to the entire class.

### Pyramid

Version of think-pair-share in which students begin to tackle a problem individually, then in two's, then four's, and so on until the whole class shares their ideas.

## Notes Exchange

In the middle of a lecture, pause to allow students to exchange and compare class notes so that students can see another perspective or another way of arranging material.

## Peer Teaching

Have students master different parts of an assignment and *then* teach one another the sections they have learned.

## One-on-One

In groups of two, one student presents a sustained *explanation* of point, question, or difficulty to another student whose role it is to keep the other student focused. After the assigned amount of time, the students exchange roles.

## Paraphrase to Different Audiences

To encourage students to develop perspective and to improve their interpersonal and communications skills, ask them to explain the same topic or process to two different audiences. The assignment can be written, performed in groups, or performed in front of the class.

## Collaborative Writing

In large classes form teams of four and assign four essays to each team. One person takes responsibility for writing the essay and the other three take responsibility for providing feedback to the writer about content, style, and mechanics. Each person has a turn as writer. Students evaluate the essay and the group performance of each individual.

## ASSESSMENT AS LEARNING

### Self-assessment Check-sheets

Along with an assignment, hand out the criteria by which the assignments will be judged and ask they students to evaluate how well they met the criteria.

### Peer Assessments

Students evaluate one another's work according to explicit criteria. Requires students to identify the elements which make the work successful or not.

## Construct Evaluation Criteria

Ask students as individuals or as groups to formulate the criteria by which to evaluate a topic or an assignment they have been given.

## Grading as a Learning Exercise

Grade the tests and quizzes in class so that students can get feedback on criteria, reasons for mistakes.

## LECTURE ALTERNATIVES

### Socratic Questioning

Rather than tell students solutions, ask leading questions which require them to work through the solutions themselves. In the process students learn how to evaluate evidence.

### Simulations

Students act out social or professional situations, demonstrating the knowledge, skills, attitudes, and values required to perform well in those situations.

### Role Playing

Students assume an identity and try to reconstruct how that person would act in a particular situation.

### "Physical" Education

Involve students by having them use their bodies. Force position taking by votes with raised hands or by movement to one side of the room or the other. Ask students to act out complex or abstract ideas such as molecular bonding.

### Intentional Errors

Make an intentional error in class. Continue into absurdity until students question and correct you.

### Pause

Stop the lecture for three minutes so students can review their notes and formulate questions or ideas.

## Fishbowl

Four to eight students conduct a discussion while the remaining students outside the "fishbowl" can listen but not comment. One chair is left vacant for an outside to become a participant if he or she feels compelled.

## Case Studies

Create scenarios that require integrating their skills to solve problems that relate to course material.

## Evaluation Grids

Ask the students to create tables in which they list the positive and negative features of an idea, action, or thing.

## Defining Features Grids

Ask the students to create tables in which they compare and contrast ideas and objects by identifying the presence or absence of features.

## Student Presentations

As individuals or groups, have students research, organize, and communicate their ideas on an assigned topic to the class. For sophisticated presentations, require multi-media and computer components.

## Computers

Ask students to create solutions to problems through the use of computer applications.

## Debates

For controversial topics, ask students to defend a position using arguments that are logical, developed, complete, and convincing.

## Field Trips/Experiential Learning

Provide opportunities to do something with their knowledge in a real-life situation.

## Games

Design friendly competitions to promote *learning* of material that is mostly facts or terminology. *Jeopardy* is a popular format.

*Additional information about many of these and other acting learning strategies can be found in:*

Thomas Angelo and R. Patricia Cross, *Classroom Assessment Techniques: A Handbook for College Teachers, 2nd ed.* (San Francisco: Jossey-Base, 1993); Charles Bonwell and James Eison, *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report No. 1. (Washington, D.C.: The George Washington University, 1991); Graham Gibbs, *Discussion with More Students*. Developing Teaching: Teaching More Students (Oxford: The Polytechnics and Colleges Funding Council, 1992); Idalynn Karre, *Busy, Noisy and Powerfully Effective: Cooperative Learning in the College Classroom* (Stillwater, OR: New Forums Press, 1993); Chet Meyers and Thomas B. Jones, *Promoting Active Learning: Strategies for the College Classroom* (San Francisco: Jossey-Base, 1993).