



Tools for Teaching

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Motivating Students

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Some students seem naturally enthusiastic about learning, but many need-or expect-their instructors to inspire, challenge, and stimulate them: "Effective learning in the classroom depends on the teacher's ability ... to maintain the interest that brought students to the course in the first place" (Ericksen, 1978, p. 3). Whatever level of motivation your students bring to the classroom will be transformed, for better or worse, by what happens in that classroom.

Unfortunately, there is no single magical formula for motivating students. Many factors affect a given student's motivation to work and to learn (Bligh, 1971; Sass, 1989): interest in the subject matter, perception of its usefulness, general desire to achieve, self-confidence and self-esteem, as well as patience and persistence. And, of course, not all students are motivated by the same values, needs, desires, or wants. Some of your students will be motivated by the approval of others, some by overcoming challenges.

Researchers have begun to identify those aspects of the teaching situation that enhance students' self-motivation (Lowman, 1984; Lucas, 1990; Weinert and Kluwe, 1987; Bligh, 1971). To encourage students to become self-motivated independent learners, instructors can do the following:

- Give frequent, early, positive feedback that supports students' beliefs that they can do well.
- Ensure opportunities for students' success by assigning tasks that are neither too easy nor too difficult.
- Help students find personal meaning and value in the material.
- Create an atmosphere that is open and positive.
- Help students feel that they are valued members of a learning community.

Research has also shown that good everyday teaching practices can do more to counter student apathy than special efforts to attack motivation directly (Ericksen, 1978). Most students respond positively to a well-organized course taught by an enthusiastic instructor who has a genuine interest in students and what they learn. Thus activities you undertake to promote learning will also enhance students' motivation.



General Strategies

Capitalize on students' existing needs. Students learn best when incentives for learning in a classroom satisfy their own motives for enrolling in the course. Some of the needs your students may bring to the classroom are the need to learn something in order to complete a particular task or activity, the need to seek new experiences, the need to perfect skills, the need to overcome challenges, the need to become competent, the need to succeed and do well, the need to feel involved and to interact with other people. Satisfying such needs is rewarding in itself, and such rewards sustain learning more effectively than do grades. Design assignments, in-class activities, and discussion questions to address these kinds of needs. (Source: McMillan and Forsyth, 1991)

Make students active participants in learning. Students learn by doing, making, writing, designing, creating, solving. Passivity dampens students' motivation and curiosity. Pose questions. Don't tell students something when you can ask them. Encourage students to suggest approaches to a problem or to guess the results of an experiment. Use small group work. See "Leading a Discussion," "Supplements and Alternatives to Lecturing," and "Collaborative Learning" for methods that stress active participation. (Source: Lucas, 1990)

Ask students to analyze what makes their classes more or less "motivating." Sass (1989) asks his classes to recall two recent class periods, one in which they were highly motivated and one in which their motivation was low. Each student makes a list of specific aspects of the two classes that influenced his or her level of motivation, and students then meet in small groups to reach consensus on characteristics that contribute to high and low motivation. In over twenty courses, Sass reports, the same eight characteristics emerge as major contributors to student motivation:

- Instructor's enthusiasm
- Relevance of the material
- Organization of the course
- Appropriate difficulty level of the material
- Active involvement of students
- Variety
- Rapport between teacher and students

- Use of appropriate, concrete, and understandable examples



Incorporating Instructional Behaviors That Motivate Students

Hold high but realistic expectations for your students. Research has shown that a teacher's expectations have a powerful effect on a student's performance. If you act as though you expect your students to be motivated, hardworking, and interested in the course, they are more likely to be so. Set realistic expectations for students when you make assignments, give presentations, conduct discussions, and grade examinations. "Realistic" in this context means that your standards are high enough to motivate students to do their best work but not so high that students will inevitably be frustrated in trying to meet those expectations. To develop the drive to achieve, students need to believe that achievement is possible -which means that you need to provide early opportunities for success. (Sources: American Psychological Association, 1992; Bligh, 1971; Forsyth and McMillan, 1991 -1 Lowman, 1984)

Help students set achievable goals for themselves. Failure to attain unrealistic goals can disappoint and frustrate students. Encourage students to focus on their continued improvement, not just on their grade on any one test or assignment. Help students evaluate their progress by encouraging them to critique their own work, analyze their strengths, and work on their weaknesses. For example, consider asking students to submit self-evaluation forms with one or two assignments. (Sources: Cashin, 1979; Forsyth and McMillan, 1991)

Tell students what they need to do to succeed in your course. Don't let your students struggle to figure out what is expected of them. Reassure students that they can do well in your course, and tell them exactly what they must do to succeed. Say something to the effect that "If you can handle the examples on these problem sheets, you can pass the exam. People who have trouble with these examples can ask me for extra help." Or instead of saying, "You're way behind," tell the student, "Here is one way you could go about learning the material. How can I help you?" (Sources: Cashin, 1979; Tiberius, 1990)

Strengthen students' self-motivation. Avoid messages that reinforce your power as an instructor or that emphasize extrinsic rewards. Instead of saying, "I require," "you must," or "you should," stress "I think you will find. . ." or "I will be interested in your reaction." (Source: Lowman, 1990)

Avoid creating intense competition among students. Competition produces anxiety, which can interfere with learning. Reduce students' tendencies to compare themselves to one another. Bligh (1971) reports that students are more attentive, display better comprehension, produce more work, and are more favorable to the teaching method when they work cooperatively in groups rather than compete as individuals. Refrain from public criticisms of students' performance and from comments or activities that pit students against each other. (Sources: Eble, 1988; Forsyth and McMillan, 1991)

Be enthusiastic about your subject. An instructor's enthusiasm is a crucial factor in student motivation. If you become bored or apathetic, students will too. Typically, an instructor's enthusiasm comes from confidence, excitement about the content, and genuine pleasure in teaching. If you find yourself uninterested in the material, think back to what attracted you to the field and bring those aspects of the subject matter to life for your students. Or challenge yourself to devise the most exciting way to present the material, however dull the material itself may seem to you.



Structuring the Course to Motivate Students

Work from students' strengths and interests. Find out why students are enrolled in your course, how they feel about the subject matter, and what their expectations are. Then try to devise examples, case studies, or assignments that relate the course content to students' interests and experiences. For instance, a chemistry professor might devote some lecture time to examining the contributions of chemistry to resolving environmental problems. Explain how the content and objectives of your course will help students achieve their educational, professional, or personal goals. (Sources: Brock, 1976; Cashin, 1979; Lucas, 1990)

When possible, let students have some say in choosing what will be studied. Give students options on term papers or other assignments (but not on tests). Let students decide between two locations for the field

trip, or have them select which topics to explore in greater depth. If possible, include optional or alternative units in the course. (Sources: Ames and Ames, 1990; Cashin, 1979; Forsyth and McMillan, 1991; Lowman, 1984)

Increase the difficulty of the material as the semester progresses.

Give students opportunities to succeed at the beginning of the semester. Once students feel they can succeed, you can gradually increase the difficulty level. If assignments and exams include easier and harder questions, every student will have a chance to experience success as well as challenge. (Source: Cashin, 1979)

Vary your teaching methods. Variety reawakens students' involvement in the course and their motivation. Break the routine by incorporating a variety of teaching activities and methods in your course: role playing, debates, brainstorming, discussion, demonstrations, case studies, audiovisual presentations, guest speakers, or small group work. (Source: Forsyth and McMillan, 1991)



De-emphasizing Grades

Emphasize mastery and learning rather than grades. Ames and Ames (1990) report on two secondary school math teachers. One teacher graded every homework assignment and counted homework as 30 percent of a student's final grade. The second teacher told students to spend a fixed amount of time on their homework (thirty minutes a night) and to bring questions to class about problems they could not complete. This teacher graded homework as satisfactory or unsatisfactory, gave students the opportunity to redo their assignments, and counted homework as 10 percent of the final grade. Although homework was a smaller part of the course grade, this second teacher was more successful in motivating students to turn in their homework. In the first class, some students gave up rather than risk low evaluations of their abilities. In the second class, students were not risking their self-worth each time they did their homework but rather were attempting to learn. Mistakes were viewed as acceptable and something to learn from.

Researchers recommend de-emphasizing grading by eliminating complex systems of credit points; they also advise against trying to use grades to control nonacademic behavior (for example, lowering grades for missed classes) (Forsyth and McMillan, 1991; Lowman 1990). Instead, assign ungraded written work, stress the personal satisfaction of doing assignments, and help students measure their progress.

Design tests that encourage the kind of learning you want students to achieve. Many students will learn whatever is necessary to get the grades they desire. If you base your tests on memorizing details, students will focus on memorizing facts. If your tests stress the synthesis and evaluation of information, students will be motivated to practice those skills when they study. (Source: McKeachie, 1986)

Avoid using grades as threats. As McKeachie (1986) points out, the threat of low grades may prompt some students to work hard, but other students may resort to academic dishonesty, excuses for late work, and other counterproductive behavior.



Motivating Students by Responding to Their Work

Give students feedback as quickly as possible. Return tests and papers promptly, and reward success publicly and immediately. Give students some indication of how well they have done and how to improve. Rewards can be as simple as saying a student's response was good, with an indication of why it was good, or mentioning the names of contributors: "Cherry's point about pollution really synthesized the ideas we had been discussing." (Source: Cashin, 1979)

Reward success. Both positive and negative comments influence motivation, but research consistently indicates that students are more affected by positive feedback and success. Praise builds students' self-confidence, competence, and self-esteem. Recognize sincere efforts even if the product is less than stellar. If a student's performance is weak, let the student know that you believe he or she can improve and succeed over time. (Sources: Cashin, 1979; Lucas, 1990)

Introduce students to the good work done by their peers. Share the ideas, knowledge, and accomplishments of individual students with the class as a whole:

- Pass out a list of research topics chosen by students so they will know whether others are writing papers of interest to them.
- Make available copies of the best papers and essay exams.
- Provide class time for students to read papers or assignments submitted by classmates.
- Have students write a brief critique of a classmate's paper.
- Schedule a brief talk by a student who has experience or who is doing a research paper on a topic relevant to your lecture.

Be specific when giving negative feedback. Negative feedback is very powerful and can lead to a negative class atmosphere. Whenever you identify a student's weakness, make it clear that your comments relate to a particular task or performance, not to the student as a person. Try to cushion negative comments with a compliment about aspects of the task in which the student succeeded. (Source: Cashin, 1979)

Avoid demeaning comments. Many students in your class may be anxious about their performance and abilities. Be sensitive to how you phrase your comments and avoid offhand remarks that might prick their feelings of inadequacy.

Avoid giving in to students' pleas for "the answer" to homework problems. When you simply give struggling students the solution, you rob them of the chance to think for themselves. Use a more productive approach (adapted from Fiore, 1985):

- Ask the students for one possible approach to the problem.
- Gently brush aside students' anxiety about not getting the answer by refocusing their attention on the problem at hand.
- Ask the students to build on what they do know about the problem.
- Resist answering the question "is this right?" Suggest to the students a way to check the answer for themselves.
- Praise the students for small, independent steps.

If you follow these steps, your students will learn that it is all right not to have an instant answer. They will also learn to develop greater patience and to work at their own pace. And by working through the problem, students will experience a sense of achievement and confidence that will increase their motivation to learn.



Motivating Students to Do the Reading

Assign the reading at least two sessions before it will be discussed. Give students ample time to prepare and try to pique their curiosity about the reading: "This article is one of my favorites, and I'll be

interested to see what you think about it." (Sources: Lowman, 1984; "When They Don't Do the Reading," 1989)

Assign study questions. Hand out study questions that alert students to the key points of the reading assignment. To provide extra incentive for students, tell them you will base exam questions on the study questions. (Source: "When They Don't Do the Reading," 1989)

If your class is small, have students turn in brief notes on the day's reading that they can use during exams. At the start of each class, a professor in the physical sciences asks students to submit a 3" x 5" card with an outline, definitions, key ideas, or other material from the day's assigned reading. After class, he checks the cards and stamps them with his name. He returns the cards to students at a class session prior to the midterm. Students can then add any material they would like to the cards but cannot submit additional cards. The cards are again returned to the faculty member who distributes them to students during the test. This faculty member reports that the number of students completing the reading jumped from 10 percent to 90 percent and that students especially valued these "survival cards." (Source: Daniel, 1988)

Ask students to write a one-word journal or one-word sentence. Angelo (1991) describes the one-word journal as follows: students are asked to choose a single word that best summarizes the reading and then write a page or less explaining or justifying their word choice. This assignment can then be used as a basis for class discussion. A variation reported by Erickson and Strommer (1991) is to ask students to write one complex sentence in answer to a question you pose about the readings and provide three sources of supporting evidence: "In one sentence, identify the type of ethical reasoning Singer uses in his article 'Famine, Affluence, and Morality.' Quote three passages that reveal this type of ethical reasoning" (p. 125).

Ask nonthreatening questions about the reading. Initially pose general questions that do not create tension or feelings of resistance: "Can you give me one or two items from the chapter that seem important?" "What section of the reading do you think we should review?" "What item in the reading surprised you?" "What topics in the chapter can you apply to your own experience?" (Source: "When They Don't Do the Reading," 1989)

Use class time as a reading period. If you are trying to lead a discussion and find that few students have completed the reading assignment, consider asking students to read the material for the remainder of class time. Have them read silently or call on students to read aloud and discuss the key points. Make it clear to students that you are reluctantly taking this unusual step because they have not completed the assignment.

Prepare an exam question on undiscussed readings. One faculty member asks her class whether they have done the reading. If the answer

is no, she says, "You'll have to read the material on your own. Expect a question on the next exam covering the reading." The next time she assigns reading, she reminds the class of what happened the last time, and the students come to class prepared. (Source: "When They Don't Do the Reading," 1989)

Give a written assignment to those students who have not done the reading. Some faculty ask at the beginning of the class who has completed the reading. Students who have not read the material are given a written assignment and dismissed. Those who have read the material stay and participate in class discussion. The written assignment is not graded but merely acknowledged. This technique should not be used more than once a term. (Source: "When They Don't Do the Reading," 1989)



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