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# Student Motivation

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Imagine you have the opportunity to observe two professors as they start teaching a unit on engine operating principles. Professor X comes into the classroom and says, "Today I'm going to teach you about the internal combustion engine. The internal combustion engine generates power by utilizing the force created by burning a fuel and air mixture. This force is confined to a cylinder. The expanding gasses force the piston downward in the cylinder and turn a crank that powers the drive train." Professor X continues to give an explanation in this manner for the rest of the class period.

In a neighboring college, Professor Y drives a small gasoline powered garden tractor into the classroom as the period begins. The tractor engine is obviously not hitting on every cycle and is emitting a dark blue smoke from the exhaust pipe. The professor turns off the engine and gets off the tractor as class begins. Professor Y begins class in this manner. "This is my neighbor's tractor and the engine obviously needs some attention. Our job will be to identify the problems in each of the four systems of this type of internal combustion engine and repair the engine. After we complete this process, we will develop a routine maintenance list for my neighbor to use to help avoid future down-time. Let's begin today by studying this type of

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engine and try to understand the four systems that work together to make it run." Professor Y then asks what are the systems within the engine that work together to produce needed power. He records student discussion about the systems of the internal combustion engine on the chalk board and discusses each for the remainder of the period.

If you were one of the students, which class would you prefer to be in? Undoubtedly you want to be taught by Professor Y instead of Professor X. You would probably learn more about engines and remember it longer. Students in Professor X's class will soon be looking out the window, writing notes to others, sleeping, or causing discipline problems. The primary difference in the two classes was Professor Y's attempt to motivate the students to learn. The ability to motivate students is a skill that can be learned but requires thought, effort, and planning. However, the improved interest in class and increased learning on the part of the students is well worth the effort.

## Concise But True

Land grant colleges and universities are knowledge centers that integrate the three functions of teaching, research, and service. They should gleam with a different light from the earlier tradition centered institutions because of their common man philosophy developed by the Morrill Act. This act was based on a philosophy of practicability and democracy. This philosophy was intended to save these institutions from self-serving and elitist pursuits and focus on needs of the people (Vines and Anderson, 1976). Most of the non-land grant universities with agriculture programs abide by the same philosophy.

Instruction at these institutions should also reflect the practicability and democracy philosophy. However, often the information giving approach is taken without adding the practicability that was intended in the earlier legislation. Our responsibility is not only to provide information but to cause learning (Brown, 1981). This statement is concise, but true. Both Professor X and Y in the introductory example would accomplish the responsibility of providing information. Yet, Professor Y's procedure would best reflect the Morrill Act philosophy.

## Incorporating The Philosophy

A common assumption of many college instructors is that students are internally motivated to learn. These students, especially those in agriculture, usually have a handy set of experiences in their background that allow the generalization of information presented in class. Yet, seldom do students have the same set of classroom experiences and need to be helped in generalizing the information. We, as instructors, need to take some responsibility in getting our students motivated or prepared to learn. The old saying "You can lead a horse

to water but can't make him drink" is an excuse many university professors use to rationalize their uninspiring teaching performance. However, we know that if you give the horse plenty of salt first, he will probably drink. Our challenge then is to salt our students so they will be thirsty for our teaching.

The process of preparing students to learn is identified by different names including the term motivation. Other names for motivating students include: **establishing set**, **establishing learning set** and **learning readiness**. A more recent term being used in education is **advance organizer**. In some educational circles the synonymous terms are **developing interest** or **interest approach**. Technically, there are differences in these terms but all relate directly to motivation. So to simplify terms, the definition of motivation as it relates to teaching is **something which causes a student to learn**.

Motivational strategies help the student generalize or apply the information given in the class. Many psychologists argue that one person cannot motivate another, but experience has told teachers that one can make the students want to learn. Even dry course material can be made interesting with the incorporation of motivational strategies.

### Self Evaluation

How many of these types of motivational strategies do you use in your classes? Below is a list of some of these strategies for your use in evaluating your motivational effectiveness. Review this list of tried strategies and evaluate yourself and your classes.

**Get to know your students.** Try to understand their expectations for the course, interest in the subject, career goals, family background, and peer pressure. If you know about your students' background you can then relate your teaching to their background.

**Arouse a feeling of need in students.** Relate the course material to real life situations and uses. Explain how mastering the course content will improve operating efficiency, increase farm income, and save money.

**Explain your expectations.** Explain to the students what they need to learn. Don't play hide and seek. Let your students know what is important to learn. It is difficult to motivate students to learn if they don't know what they are to learn.

**Be enthusiastic.** Prepare yourself mentally for each class session. The class tone will be set by your enthusiasm and attitude. If you are not enthusiastic about what you are teaching, how can you expect your students to be enthusiastic.

**Use illustrations and personal examples.** Relate materials to experiences you have had. Have students relate their experiences.

**Use visuals, realla, actual objects, and demonstrations.** Students remember more of what they see and do versus what they only hear.

**Use problem solving.** Create or locate problems to solve. This encourages higher level learning and keeps students thinking about the subject of study. If students can see how the information they are being taught can be applied, they will be more willing to learn.

**Involve students.** There is nothing wrong with asking students questions as you teach. This helps keep students alert in anticipation of being asked a question and also causes them to think.

**Be organized.** Organize your course into instructional units and daily lessons so students can see a logical, organized process. It is much easier for students to learn if the teacher is organized.

**Provide a satisfactory environment.** Create a good physical learning environment and minimize distractions.

**Use competition.** Simple competition like the old spelling bee can increase class participation and study.

**Use curiosity and suspense.** Leave out key words on transparencies and ask for student completion. Bring a sack of realia to class on the topic of discussion and at different times in the class period reach in and bring out items for discussion.

**Gimmicks and the novel are interesting.** Use games, panels, or novel ideas in class for a change of pace.

**Provide positive reinforcement.** Verbally reward a job well done. A pat on the back will make students work even harder.

**Use humor.** Tell occasional jokes or show cartoons that relate to the subject of study. They lighten the class atmosphere, but maintain the student's thought on the subject.

**Use pretests.** Pretests or daily extra point quizzes alert students to key points.

**Use a variety of techniques.** Mix up techniques like slide sets, demonstrations, small group discussions, and laboratory projects to make class interesting. Even the most exciting teaching technique gets old after a while if it is the only one used.

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