

Motivating Students to Learn

The students in Cal Lewis's tenth-grade U.S. history class are all in their seats before the bell rings, eagerly awaiting the start of the period. After the bell, in he walks dressed as George Washington, complete with an 18th-century costume and powdered wig and carrying a gavel. He gravely takes his seat, raps the gavel, and says, "I now call to order this meeting of the Constitutional Convention."

The students have been preparing for this day for weeks. Each of them represents one of the 13 original states. In groups of two and three, they have been studying all about their states, the colonial era, the American Revolution, and the United States under the Articles of Confederation. Two days ago, Mr. Lewis gave each group secret instructions from their "governor" on the key interests of their state. For example, the New Jersey and Delaware delegations are to insist that small states be adequately represented in the government, whereas New York and Virginia are to demand strict representation by population.

In preparing for the debate, each delegation had to make certain that any member of the delegation could represent the delegation's views. To ensure this, Mr. Lewis assigned each student a number from one to three at random. When a delegation asks to be recognized, he will call out a number, and the student with that number will respond for the group.

Mr. Lewis, staying in character as George Washington, gives a speech on the importance of the task they are undertaking and then opens the floor for debate. First, he recognizes the delegation from Georgia. He randomly selects the number two, which turns out to be Beth Andrews. Beth is a shy girl, but she has been well prepared by her fellow delegates to represent Georgia, and she knows that they are rooting for her.

"The great state of Georgia wishes to raise the question of a Bill of Rights. We have experienced the tyranny of government, and we demand that the people have a guarantee of their liberties!"

Beth goes on to propose elements of the Bill of Rights that her delegation has drawn up. While she is

talking, Mr. Lewis is rating her presentation on historical accuracy, appropriateness to the real interests of her state, organization, and delivery. He will use these ratings in evaluating each delegation at the end of the class period. The debate goes on. The North Carolina delegates argue in favor of the right of states to expand to the west; the New Jersey delegation wants western territories made into new states. Wealthy Massachusetts wants taxes to remain in the states where they are collected; poor Delaware wants national taxes. Between debates, the delegates have an opportunity to do some "horse trading," promising to vote for proposals important to other states in exchange for votes on issues important to them. At the end of the week, the class votes on 10 key issues. After the votes are taken and the bell rings, the students pour into the hall still arguing about issues of taxation, representation, and powers of the executive.

After school, Rikki Ingram, another social studies teacher, drops into Mr. Lewis's classroom. "I see you're doing your Constitutional Convention again this year. It looks great, but how can you cover all of U.S. history if you spend a month just on the Constitution?"

Cal smiles. "I know I'm sacrificing some coverage to do this unit, but look how motivated these kids are!" He picks up a huge sheaf of notes and position papers written by the South Carolina delegation. "These kids are working their tails off, and they're learning that history is fun and useful. They'll remember this experience for the rest of their lives!"

Motivation is one of the most important ingredients of effective instruction. Students who want to learn can learn just about anything. But how can you ensure that every student wants to learn and will put in the effort needed to master complex material?

Mr. Lewis knows the value of motivation, so he has structured a unit that taps many aspects of motivation. By placing students in groups and evaluating them on the basis of presentations made by randomly selected group members, he has created a situation in which students are encouraging each other to excel. Social motivation of this kind is very powerful, especially for adolescents. Mr. Lewis is rating students' presentations according to clear, comprehensive standards and giving them feedback each day. He is tying an important period in history to students' daily lives by immersing them in active roles of debating and trading votes. These strategies are designed not only to make history fun but also to give students many sources of motivation to learn and re-member the history they have studied. Mr. Lewis is right. The students will probably never forget their experience in his class and are likely to approach new information about the American Revolution, the Constitution, and perhaps history in general with enthusiasm throughout their lives.

This chapter presents many of the ways in which you can enhance students' desire to learn academic material and the theories and research behind each method.

WHAT IS MOTIVATION?

One of the most critical components of learning, motivation is also one of the most difficult to measure. What makes a student want to learn? The willingness to put effort into learning is a product of many factors, ranging from the student's personality and abilities to the characteristics of particular learning tasks, incentives for learning, settings, and teacher behaviors.

All students are motivated. The question is: Motivated to do what? Some students are motivated more to socialize or watch television than to do schoolwork. Your job is not to increase motivation per se but to discover, prompt, and sustain students' motivation to learn the knowledge and skills needed for success in school and in life, and to engage in activities that lead to this learning. Imagine that Cal Lewis had come to class in 18th-century costume but had not structured tasks and evaluations to encourage students to study U.S. history. The students might have been amused and interested, but we cannot assume that they would have been motivated to do the work necessary to learn the material.

Psychologists define **motivation** as an internal process that activates, guides, and maintains behavior over time (Anderman, Gray, & Chang, 2013; Pintrich, 2003; Schunk, Pintrich, & Meece, 2008; Zimmerman & Schunk, 2011). In plain language, motivation is what gets you going, keeps you going, and determines where you're trying to go.

Motivation and Attribution Theory

Teresa usually gets good grades, but she just received a D on her first quiz in a new class. The mark is inconsistent with her self-image and causes her discomfort. To resolve this discomfort, Teresa might decide to work harder to make certain that she never gets such a low grade again. However, she might try to rationalize her low grade: “The questions were tricky. I wasn’t feeling well. The teacher didn’t tell us the quiz was coming. I wasn’t really trying. It was too hot.” These excuses help Teresa account for one D—but suppose she gets several poor grades in a row. Now she might decide that she never did like this subject anyway or that the teacher shows favoritism to the boys in the class or is a hard grader. All of these changes in opinions and excuses are directed at avoiding an unpleasant pairing of inconsistent ideas: “I am a good student” and “I am doing poorly in this class, and it is my own fault.”

Teresa is struggling to find a reason for her poor grades that does not require her to change her perception of herself as a good student. She attributes her poor performance to her teacher, to the subject matter, or to other students—external factors over which she has no control. Or, if she acknowledges that her poor performance is her own fault, she decides that it must be a short-term lapse based on a momentary (but reversible) lack of motivation or attention regarding this unit of instruction.

Attribution theory (see Hareli & Weiner, 2002; Weiner, 2000, 2010) seeks to understand just such explanations and excuses, particularly when applied to success or failure (wherein lies the theory’s greatest importance for education, in which success and failure are recurrent themes). Weiner (2000) suggests that most explanations for success or failure have three characteristics. The first is whether the cause is seen as internal (within the person) or external. The second is whether it is seen as stable or unstable. The third is whether it is perceived as controllable. A central assumption of attribution theory is that people will attempt to maintain a positive self-image. Therefore, when they do well in an activity, they are likely to attribute their success to their own efforts or abilities; but when they do poorly, they will believe that their failure is based on factors over which they had no control (Weiner, 2010). In particular, students who experience failure will try to find an explanation that enables them to save face with their peers (Juvonen, 2000). It has been demonstrated that if groups of people are given a task and then told that they either failed or succeeded (even though all, in fact, were equally successful), those who are told that they failed will say their failure was because of bad luck, whereas those told that they succeeded will attribute their success to skill and intelligence (Weiner, 2000).

Attributions for others’ behavior are also important. For example, students are more likely to respond to a classmate’s request for help if they believe that the classmate needs help because of a temporary uncontrollable factor (such as getting hurt in a basketball game) than if they believe that help is needed because of a controllable factor (such as failure to study) (Weiner, 2010).

LOCUS OF CONTROL AND SELF-EFFICACY One concept central to attribution theory is **locus of control** (Rotter, 1954). The word *locus* means “location.” A person with an internal locus of control believes that success or failure is the result of his or her own efforts or abilities. Someone with an external locus of control is more likely to believe that other factors, such as luck, task difficulty, or other people’s actions, cause success or failure. Internal locus of control is often called *self-efficacy*, the belief that one’s behavior makes a difference (Bandura, 1997; Goddard, Hoy, & Woolfolk Hoy, 2004; Schunk & Pajares, 2004; Skinner & Greene, 2008). Locus of control or self-efficacy can be very important in explaining a student’s school performance. For example, several researchers have found that students who are high in internal locus of control have better grades and test scores than students of the same intelligence who are low in internal locus of control (Cappella & Weinstein, 2001; Caprara et al., 2008; Zimmerman, 2013). Studies have found locus of control to be the second most important predictor (after ability) of a student’s academic achievement (e.g., Dweck, 2007; Pietsch, Walker, & Chapman, 2003). The reason is easy to comprehend. Students who believe that success in school is due to luck, the teacher’s whims, or other external factors are unlikely to work hard. They tend to procrastinate or avoid difficult tasks (Steel, 2007). In contrast, students who believe that success and failure are primarily due to their own efforts can be expected to work hard (Bandura, 2012; Joët, Usher, & Bressoux, 2011; Pressley et al., 2003). In reality, success in a particular class is a product of both students’ efforts and abilities (internal factors) and luck, task difficulty, and teacher behaviors (external factors). But the most successful students will tend to overestimate the degree to which their own behavior produces success and failure. Some experiments have shown that even in situations in which success and failure are in fact completely based on luck, students who are high in internal locus of control will believe that it was their efforts that made them succeed or fail (see Weiner, 2010).

HOW CAN TEACHERS INCREASE STUDENTS' MOTIVATION TO LEARN?

Learning takes work. Euclid, a Greek mathematician who lived around 300 B.c. and wrote the first geometry text, was asked by his king whether there were any shortcuts he could use to learn geometry, as he was a very busy man. "I'm sorry," Euclid replied, "but there is no royal road to geometry." The same is true of every other subject: Students get out of any course of study only what they put into it.

Researchers have evaluated numerous strategies to improve motivation to learn based on the theories discussed above, such as methods to help students see that success is due to effort rather than intelligence (Dweck, 2006). Methods of this kind have generally been successful in increasing motivation and achievement (Lazowski & Hulleman, 2016).

The remainder of this chapter discusses the means by which students can be motivated to exert the effort that learning requires.

Intrinsic and Extrinsic Motivation

Sometimes a course of study is so fascinating and useful to students that they are willing to do the work required to learn the material with no incentive other than the interest level of the material itself. For example, many students would gladly take auto mechanics or photography courses and work hard in them, even if the courses offered no credit or grades. For these students the favorite subject itself has enough **intrinsic incentive** value to motivate them to learn. Other students love to learn about particular topics such as sports, insects, dinosaurs, or famous people in history and need little encouragement or reward to do so (Gottfried & Fleming, 2001; Schraw, Flowerday, & Lehman, 2001). Students who have a strong "future time perspective" (i.e., are willing to do things today that may benefit them in the future) are often particularly motivated to learn, even without immediate incentives (Husman & Lens, 1999).

However, much of what must be learned in school is not inherently interesting or useful to most students in the short run. Students receive about 900 hours of instruction every year, and intrinsic interest alone will not keep them enthusiastically working day in and day out. In particular, students' intrinsic motivation generally declines from early elementary school through secondary school (Gottfried & Fleming, 2001; Sethi, Drake, Dialdin, & Lepper, 1995). It also declines over the course of each school year (Corpus, McClintic-Gilbert, & Hayenga, 2009). For this reason, schools apply a variety of **extrinsic incentives**, rewards for learning that are not inherent in the material being learned (Wentzel & Brophy, 2014). Extrinsic rewards range from praise to grades to recognition to prizes or other rewards.

In the vignette at the beginning of this chapter, Cal Lewis tried to enhance both intrinsic and extrinsic motivation. His simulation of the Constitutional Convention was intended to arouse students' intrinsic interest in the subject, and his ratings of students' presentations and his feedback at the end of each period were intended to provide extrinsic motivation.

Enhancing Intrinsic Motivation

Classroom instruction should enhance intrinsic motivation as much as possible. Increasing intrinsic motivation is always helpful for learning, regardless of whether extrinsic incentives are also in use (Kafele, 2013; Vansteenkiste, Lens, & Deci, 2006). This means that you must try to get your students interested in the material you are presenting and then present it in an appealing way that both satisfies and increases students' curiosity about the material itself. A discussion of some means of doing this follows (see Wentzel & Brophy, 2014; Stipek, 2002).

CREATING A SUPPORTIVE CLASSROOM CLIMATE One way to build intrinsic motivation to learn is to create a classroom climate that is warm, accepting, and positive (Jackson & Zmuda, 2014; Marzano, 2011; Wentzel, 2010; Wormeli, 2014). In such classrooms, students work hard because they want to please a valued teacher, and they feel safe in trying out their ideas and taking intellectual risks.

AROUSING INTEREST It is important to convince students of the importance and interest level of the material that is about to be presented and to show (if possible) how the knowledge to be gained will be useful to students (Renninger & Hidi, 2011; Wentzel & Brophy, 2014).

MAINTAINING CURIOSITY A skillful teacher uses a variety of means to further arouse or maintain curiosity in the course of the lesson (Goodwin, 2014; Wormeli, 2014).

SETTING CHALLENGING TASKS AND AMBITIOUS GOALS No one is excited about doing routine or easy tasks, or attaining modest goals. Students can be highly motivated by scary-looking tasks, as long as you believe in them and guarantee that you and their peers will help when problems arise. They can be excited by impossible-looking goals, as long as they can see a step-by-step path to attaining them (Jackson & Zmuda, 2014; Kafele, 2013; Pink, 2009).

USING A VARIETY OF INTERESTING PRESENTATION MODES The intrinsic motivation to learn something is enhanced by the use of interesting materials, as well as by variety in mode of presentation. For example, you can maintain student interest in a subject by alternating use of videos, guest speakers, demonstrations, and so on, although the use of each resource must be carefully planned to be sure it focuses on the course objectives and complements the other activities.

HELPING STUDENTS MAKE CHOICES AND SET THEIR OWN GOALS One fundamental principle of motivation is that people work harder for goals that they themselves set than for goals set for them by others (Anderman et al., 2013; Azzam, 2014; Ryan & Deci, 2000).

CAREER RELEVANCE Students are likely to work harder if they see a connection between course content and desirable careers, or other important life achievements (Fisher & Frey, 2014a). An evaluation of a program called CareerStart, an approach that emphasizes the career relevance of course content in middle school, found positive effects on math performance (Woolley et al., 2013).

Principles for Providing Extrinsic Incentives to Learn

Teachers should always try to enhance students' intrinsic motivation to learn academic materials, but at the same time, they should not hesitate to also use extrinsic incentives if these are needed (Borich, 2014; Levitt et al., 2012; Schunk, 2016; Wentzel & Brophy, 2014). Not every subject is intrinsically interesting to all students, and students must be motivated to do the hard work necessary to master difficult subjects. The following sections discuss a variety of incentives that can help motivate students to learn academic material.

EXPRESSING CLEAR EXPECTATIONS Students need to know exactly what they are supposed to do, how they will be evaluated, and what the consequences of success will be. Often, students' failures on particular tasks stem from confusion about what they are being asked to do (Jackson & Zmuda, 2014; Wentzel & Brophy, 2014). Communicating clear expectations is important.

PROVIDING CLEAR FEEDBACK The word feedback means information on the results of one's efforts. Research on feedback has found that provision of information on the results of one's actions can be an adequate reward in many circumstances. However, to be an effective motivator, feedback must be clear, must be specific, and must be provided soon after performance (Schunk, 2016; Wentzel & Brophy, 2014). This is important for all students, but especially for young ones.

PROVIDING IMMEDIATE FEEDBACK Immediacy of feedback is also very important (Curwin, 2014; Sparks, 2012; Zimmerman & Schunk, 2011). If students complete a project on Monday and don't receive any feedback on it until Friday, the informational and motivational value of the feedback will be diminished. First, if they made errors, they might continue all week making similar errors on related material, which might have been averted by feedback on the performance. Second, a long delay between behavior and consequence confuses the relationship between the two.

PROVIDING FREQUENT FEEDBACK Feedback should be delivered frequently to students to maintain their best efforts.

INCREASING THE VALUE AND AVAILABILITY OF EXTRINSIC MOTIVATORS Students must value incentives if they are to be effective motivators. Some students are not particularly interested in teacher praise or grades but might value notes sent home to their parents, a little extra recess time, or a special privilege in the classroom.

