

*Theories of motivation suggest that appropriate attention to students' needs and expectations for success will enhance their involvement and learning.*

## What Theories of Motivation Say About Why Learners Learn

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As college professors, we have often wondered why some students are more involved in class, better prepared for discussions, ask more questions, and, in general, simply try harder than other students with equal or better ability. Why do some students learn more than others? Is it something about them or us? More important, what can we do differently to enhance learning? By trying to understand why students act as they do, we are struggling with what psychologists and educators term *motivation*—a somewhat mysterious dispositional quality that facilitates learning. This construct has played a key role in researchers' attempts to understand all forms of learning. In this chapter, we will concentrate on recent theories of motivation that have particular relevance for college teaching and learning. In the following chapter, we will summarize practical implications of the theories for improving teaching and learning. More detailed perspectives on theories of motivation can be found in Ames and Ames (1984, 1985, 1989), and Weiner (1980).

### What Is Motivation?

Motivation is defined in a general way by educators and psychologists as the processes that initiate and sustain behavior. Motivation can be defined more specifically for learning in college courses as purposeful engagement in classroom tasks and study, to master concepts or skills. It is not simply a matter of performing a task, getting a good grade, or accumulating units for graduation. We believe, as suggested by Ames (1990) and Brophy (1983), that motivation is a process in which students value learning and involve



themselves in classroom assignments and activities. Motivated students, from our perspective, take learning seriously and try to get maximum benefits, rather than merely getting by or doing the minimum amount of work necessary. The question is "What do current theories of motivation offer to college professors who want to enhance the purposeful engagement of their students?" Before we answer this question, some assumptions need to be clarified, so that we can effectively apply the theories to practice.

First, students can be motivated to greater involvement and higher achievement. Theoretical perspectives have been translated into applied research to show that appropriate instructional behaviors and course structures will enhance students' motivation.

Second, motivation concerns three fundamental questions: What originates or initiates students' arousal or activity? What causes a student to move toward a goal? What causes a student to persist in striving toward a goal? Theories of motivation may be concerned with one or all three questions. Early research in motivation emphasized the first question, seeking to identify biological influences, such as physiological deficits, instincts, appetite, and chemical controls. Much of the research was conducted in laboratories, with rats and other animals, to see what moved a resting organism to activity (Weiner, 1990). These theories, along with others, such as psychoanalytical theory and Hullian theory, emphasize innate needs that seem far removed from the college classroom.

Third, motivational theories tend to emphasize factors within individuals or factors in the environment. Factors within individuals are traits that students bring to the classroom, such as fear of failure and its accompanying anxiety or the strong need to achieve high grades and get into graduate school. Other theories are concerned with environmental factors, such as the manner in which lectures are given, the competitiveness of the grading system, or the rapport the instructor establishes with students.

Fourth, while questions concerning motivation are simple, the answers are complex, involving a multitude of factors in both the students and the environment. Consequently, no one theory or perspective can be applied to every situation. Each one is insufficient by itself, and thus many theories must be considered simultaneously, in order to take action that will increase students' involvement in learning. (The model of motivation that we have developed is a heuristic one that helps organize these theories.)

Fifth, most theories of classroom motivation focus on needs or cognitions of students. Needs are deficiencies within students but can be influenced significantly from external sources. Cognitive theories, which maintain that thoughts and mental processes are crucial in determining motivation, currently dominate the motivational literature. (Significant need- and cognitive-based theories will be summarized in the context of the model.)

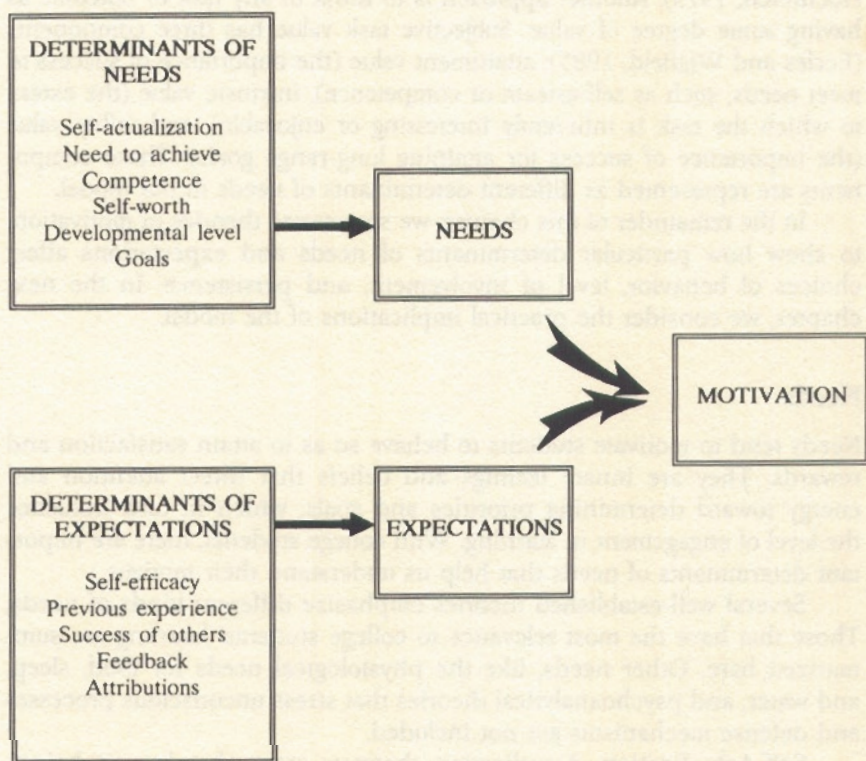


## A Heuristic Model of Motivation

On the basis of social learning theory (Rotter, 1966), the expectancy theories of Atkinson (1964) and Vroom (1964), and earlier work by McMillan (1980), we have developed a model to organize what we believe are, theoretically, the most important influences of motivation for learning (see Figure 1).

The model is based on the premises that academic learning is primarily a cognitive activity and that students' motivation is heavily influenced by their thinking about what they perceive as important and what they believe they can accomplish. According to this model, two crucial categories of factors determine motivation: needs and expectations. Needs, which have dominated much of the earlier literature on motivation, initiate action to satisfy them. The term *expectations* refers to the student's belief about the probability that a need will be met as the result of a particular behavior. Simply stated, motivation is a function of both needs and expectations. If

Figure 1. A Heuristic Model of College Students' Motivation





needs are present, and if students believe they are able to satisfy the needs, then they will be motivated to behave in ways that will meet the needs. If students perceive that there is little chance for high achievement and that it is not important to do well, then they will not be motivated to learn. Both needs and expectations are necessary because it is unlikely for students to be motivated at all if there is either no need or no expectation for success.

What factors influence the motivational strength of any given need? This model, taking a cognitive behavioral approach (Rotter, 1966; Bandura, 1977), stresses the value of meeting the need. Rotter (1966), for example, argues that "reinforcement value" combines with expectancies to determine achievement behavior. Reinforcement value is the importance or preference given to the probable result of the behavior. For instance, high achievement in one's major may have greater value than high achievement in electives, suggesting greater motivation to learn in major courses. Rotter integrates reinforcement value with needs, postulating that behaviors will have greater value if they satisfy needs, such as recognition or status, dominance, independence, protection or dependency, and love or affection (Rotter and Hochreich, 1975). Another approach is to think of any task or outcome as having some degree of value. Subjective task value has three components (Eccles and Wigfield, 1985): attainment value (the importance of success to meet needs, such as self-esteem or competence), intrinsic value (the extent to which the task is inherently interesting or enjoyable), and utility value (the importance of success for attaining long-range goals). These components are represented as different determinants of needs in our model.

In the remainder of this chapter, we summarize theories of motivation, to show how particular determinants of needs and expectations affect choices of behavior, level of involvement, and persistence. In the next chapter, we consider the practical implications of the model.

## Needs

Needs tend to motivate students to behave so as to attain satisfaction and rewards. They are innate feelings and beliefs that direct attention and energy toward determining priorities and goals, which in turn influence the level of engagement in learning. With college students, there are important determinants of needs that help us understand their motives.

Several well-established theories emphasize different kinds of needs. Those that have the most relevance to college students' learning are summarized here. Other needs, like the physiological needs for food, sleep, and water, and psychoanalytical theories that stress unconscious processes and defense mechanisms are not included.

**Self-Actualization.** Actualization theorists argue that human beings constantly strive to maximize their human potential—that we seek to be as

competent, creative, and effective as possible. Often the terms *self-actualization* and *fulfillment* are used to describe this need. The theories emphasize that persons are motivated to act in ways that will most enhance self-actualization and fulfillment.

Rogers (1961) maintains that progress toward personal fulfillment is the single and primary source of motivation. He uses the term *actualizing tendency* to describe this motive and believes that enhancement is defined uniquely for each individual. It is what is meaningful from the perspective of the student, for example, that is important, not what the professor thinks should be fulfilling. Because students are motivated by what they believe will move them toward what they believe will enhance self-actualization, motivation varies from one student to another. For one student, maximizing potential may mean high achievement in a course; for another, it may mean social approval. Developmental theories, as will be pointed out, provide some general guidelines for how college students define full realization of potential and self-actualization.

Rogers also emphasizes the needs of positive regard from others and positive self-regard. The need for positive regard from others is met as the individual attains acceptance from others. Acceptance is perceived as others relate in a manner that shows the positive value and worth of the person. Self-regard concerns the need for self-approval, the need to be satisfied with one's perceptions of oneself. According to Rogers, positive regard from others is necessary for self-regard; thus fulfillment is highly dependent on one's social environment and interpersonal relationships. With respect to college students, this suggests that as professors offer approval and support for what students see as important for their self-actualization, their motivation will be enhanced. If assignments, discussions, and out-of-class interactions are related to ideas, topics, and themes connected with personal fulfillment, students will be more likely to be motivated to learn. Even when the content of a course is difficult to relate to what is actualizing for students, positive regard from the professor will probably increase motivation to learn.

Self-actualization is at the top of Maslow's (1954) well-known hierarchy of needs. At the bottom of the hierarchy are physiological and safety needs, which must be met before a person will be motivated to satisfy belonging, love, and esteem needs. These in turn must be satisfied before self-actualization. A higher need generally emerges only after lower needs have been met; thus students may be ideally motivated for achievement when love and belonging needs (such as for friendship and acceptance of others) have been met. Maslow's hierarchy suggests that classes in which students have positive regard for one another and feel a sense of caring from the professor will be more motivated to be creative and achieve.

**Need to Achieve.** One of the most fully developed and relevant need models for teaching and learning is achievement motivation theory (Atkin-

son and Feather, 1966; McClelland, 1961). This theory is based on the premise that a stable personality characteristic, termed the *need to achieve*, is an important determinant of achievement-related behaviors in any learning situation. Depending on childhood environment (especially parenting) and other experiences, some people develop a strong need to achieve success, while others develop a need to avoid failure. Individuals with a strong need to achieve success strive for excellence and are motivated by a sense of accomplishment and pride in achievement, not by rewards. They possess an intrinsic desire not only to do well but also to invest themselves independently in learning. They tend to be motivated by tasks with moderate risks of success or failure, and they perceive failure as feedback necessary for improving their performance. Persons with a strong need to avoid failure are not naturally drawn to achievement situations, especially if there is a chance of failure. These individuals have learned that failure is bad and leads to shame and humiliation. Rather than pursuing tasks with moderate risks, they prefer tasks that are either so easy that success is certain or so hard that success is impossible. In some cases, any feeling of failure is avoided by overachieving: trying too hard, and never being content with anything but top-notch performance (Covington and Beery, 1976).

Students with a high need for achievement will be attracted to challenging and moderately difficult learning tasks. Students with a need to avoid failure may exhibit anxiety and fear. They will need more structure and more positive feedback.

**Competence.** A primary need motive for most college students is to become competent—to affect one's environment. This need involves achieving mastery and accomplishment, feeling a sense of control. Individuals tend to seek out situations in which such feelings of competence are possible. Deci (1975) suggests that students seek out stimulation and challenges in order to feel competent, and that, by resolving moderately discrepant inputs and inconsistency, students fulfill a need for self-determination. Chickering (1969, 1981) points out that the development of competence is a primary growth area of college students. Students are in need of experiences that build their confidence in their ability to handle college-level work. They need opportunities to engage in meaningful intellectual tasks, and they need specific feedback in order to know they have been successful.

**Self-Worth.** A fundamental need that pervades achievement situations is for individuals to maintain a positive view of themselves. Covington (1984) and Covington and Beery (1976) theorize that much of students' behavior is designed to enhance their self-worth. Self-worth needs affect both the choice to be involved in achievement situations and interpretations of performance that affect subsequent motivation. In competitive situations, two conditions affect behavior to enhance self-worth—scarcity of rewards, and the tendency to equate the ability to achieve with self-worth. The emphasis on ability, which is prevalent among college



students, coupled with grading on the curve and other competitive practices, tends to promote the notion that grades are evidence of ability; that is, when one student out of a class of thirty receives an A, that achievement suggests strong ability. Conversely, students who fail may interpret their achievement as an indication of low ability, particularly if high effort was exerted. When students believe that an upcoming situation holds little hope for obtaining scarce rewards, behaviors are adopted to avoid the feelings of negative self-worth that would accompany low achievement. Such students may be motivated to avoid failure or the implications of failure. Strategies are employed to shift the causes of failure away from personal ability and toward factors beyond individual control or responsibility. In this way, poor achievement is blamed on things other than ability, which in turn protects (or at least does not damage) self-worth. Thus students may be motivated to engage in such behaviors as not trying or procrastination. They may wait until the last minute to study for tests: if they fail, little information about their ability is communicated; if they succeed, it must be because they have high ability. Other behaviors include doing as little as possible, absenteeism, inattention, and cheating. All are contrary to what has been suggested as desirable—to be involved and try as much as possible. While some failure-avoiding behavior is related to fear of failure (achievement motivation), classes that offer sufficient rewards and encourage an emphasis on effort, rather than on ability, increase task involvement (Covington, 1984).

**Developmental Level.** College students are motivated by what interests them, what challenges them, and what competencies or abilities they feel a need to improve. During the past three decades, a number of developmental theories of college students have been articulated that help us understand where students are and how students change during college (Knefelkamp, Widick, and Parker, 1978). These theories are not motivational per se, but they do identify sequences, or stages—systematic changes over time, which elucidate concerns, goals, and areas of need. To illustrate the contribution of developmental principles to motivation, we will focus on two well-known theories: Chickering's model of student development, and Perry's theory of intellectual and ethical development.

Chickering (1969, 1981) has postulated a psychosocial model in which traditional-age college students have particular developmental tasks or concerns. He refers to seven "vectors" of development to categorize these tasks: developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, and developing integrity. These vectors represent primary areas of concerns, or needs, for students. For example, development of autonomy involves independence from one's parents, gradually looking to peers for cues to know how to act in various situations, and finally relying more on one's own thoughts and values. Autonomy also involves recognition of

interdependence with others, to balance the constant concern to establish identity. Developing integrity involves defining a set of values.

The more students can be engaged in these issues, the more likely they are to be motivated. Chickering believes that in each area students need to be challenged and stimulated, to encourage new behaviors and thinking. Students who do not experience analytical and critical thinking in classrooms are unlikely to feel competent as adult problem solvers. To foster developmental change and thus promote motivation, Chickering recommends environments that engage students in choices, diversity of interactions, direct and diverse experiences, and complex contemporary problems and that provide feedback and self-evaluation (Widick, Parker, and Knefelkamp, 1978).

Perry's scheme of intellectual and ethical development provides a basis for understanding how students think about and take responsibility for what they know, believe, and value (Perry, 1970). From the motivational standpoint, students are most likely to be engaged and interested when they are challenged by thinking that is beyond their current viewpoints. Students who use dualistic thinking—in which knowledge and the world exist in absolute categories, "rights" and "wrongs"—will be challenged by professors who introduce multiplicity and relativism, showing students that there are multiple perspectives on problems and that authorities may be wrong. Similarly, relativistic students who are challenged by their instructors' commitment to certain basic ideas will be motivated to move from relativism toward commitment (King, 1978). Students will be least likely to be motivated by the classroom activities, assignments, and discussions that are consistent with their current positions.

**Goals.** Students' needs are also determined by the goals they set for themselves. Goals can be short-term, such as a goal to achieve a certain grade on a test, or long-term, involving career decisions. We have already seen how one's need for achievement can affect goals—those with a high need for success select goals demonstrating excellence and tend to be most motivated when there is feedback of results and some risk of failing (Atkinson, 1964). Thus there is a preference for moderately difficult yet reachable, meaningful goals (Deci, 1975). The challenge for us is to know when students perceive goals (assignments, tests) as moderately difficult. Clearly, according to this theory, students in easy classes are unlikely to be motivated. It is also important to select goals and objectives that are worth learning. Often, to increase students' perceptions of task value, we need to explicitly indicate why learning is worthwhile. When we set goals and make a commitment to reaching them, motivation is increased (Bandura and Schunk, 1981). It has also been demonstrated that when students focus on learning goals (concerned with increasing their competence) rather than on performance goals (concerned with favorable evaluations of competence), they are more likely to select challenging tasks, with the intent to acquire new skills and competencies (Dweck and Leggett, 1988).