Student Engagement Techniques

A Handbook for College Faculty

Elizabeth F. Barkley

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This book is dedicated to K. Patricia Cross—
my inspiration, teacher, and mentor for over thirty years.

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Preface

IN MY EARLY YEARS as a teacher, "engaging students" wasn't even on my radar screen. I lectured, they listened; they studied, I tested—and that was that. Then I took a decade off to be an administrator, and when I returned to the classroom in the mid-1990s, things had changed. The handful of students sitting in front of me seemed mostly not to want to be there. Despite my enthusiastic efforts to engage them in a stimulating discussion, they stared at me with looks that ranged from utter apathy to outright hostility. It got worse. Three weeks into the term, the dean who had been hired as my replacement called me into his office. Stunned, I listened as he read from a legal-size pad a seemingly endless list of complaints from two particularly cranky students. This was my eagerly anticipated return to teaching. Although I had been a successful and popular teacher just ten years earlier, it was clear the old ways were no longer working. Because I was too young to retire, engaging students became my central concern.

I am not alone. Teachers in institutions across the country tell me that teaching today can be tough. The "twitchspeed" pace and multilayered delivery of modern media can make a lecture feel incredibly slow and boring; one student reported all the blood had left his head and he feared he'd pass out (El-Shamy, 2004, p. 24). Globalization and open door access have filled our classrooms with learners reflecting such a dizzying array of backgrounds and academic preparedness that teachers are often hard-pressed to find a collective starting point or the commonalities that create a sense of community. Abundant information at split-second access has redefined what students should be learning and created unprecedented opportunities for academic dishonesty. A panoply of pressures makes some classrooms a crucible of tensions that can erupt in incivility ranging from simple lack of consideration to overt aggression. For many of us teaching today,

competing for the attention of our students and engaging them in meaningful learning is a profound and ongoing challenge.

But there is a flip side. Even if college teachers *did* have the performance skills and production support to put on a show that matches the level of sensory stimulation supplied by today's video and computer games, music videos, films, and television shows, it wouldn't matter—engaging students doesn't mean they're being entertained. It means they are thinking. Although the diversity of today's students can be a challenge, it also means students are bringing a rich array of experiences, insights, and ideas into the classroom. The information and communication revolution that places such demands on us can also transform our teaching role into something much more interesting than being a dispenser of information (and we even have tools that make it easier to catch plagiarism!). And finally, the stress we sense and the occasional outbursts in our classrooms also offer us opportunities to teach students how to resolve conflicts in ways that can contribute to a collectively safer, saner future.

This handbook was written for teachers like me who work in the trenches of academe. My primary purpose is to offer my teaching colleagues, current and aspiring, a wide variety of tips, strategies, and techniques that can help them transform what could be a daunting task into one that is stimulating and rewarding. To do that, I pulled from the literature on good teaching as well as the expertise of teachers in colleges and universities around the country. I have tried to create a compendium of useful, practical ideas that readers will find enhances the classroom experience for teachers and students alike. Very little in this handbook is new. My contribution is to pull it together into a single resource and cast it in a format accessible to busy, discipline-oriented faculty. I hope it will also be useful to faculty developers, instructional designers, department chairs, and other academic administrators interested in promoting teaching and improving learning.

Book Overview

This handbook is divided into three parts. In **Part One: A Conceptual Framework for Understanding Student Engagement,** I discuss a theoretical model for defining student engagement in the college classroom as the synergistic interaction between motivation and active learning. I also explore what student engagement looks like in practice, drawing from interviews with six college teachers with reputations among students for being effective, engaging teachers.

Part Two: Tips and Strategies offers practical advice on how to increase motivation, promote active learning, build community, help students learn holistically, and ensure students are appropriately challenged. This part contains fifty specific suggestions on topics such as how to learn student names, how to help students value what you are teaching, and how to use rubrics to grade effectively and efficiently.

Part Three: Student Engagement Techniques (SETs) includes step-by-step directions for fifty learning activities that can be used across many disciplines. The techniques are organized into categories based on learning goals ranging from acquiring basic knowledge, skills, and understanding to developing attitudes, values, and self-awareness. Each technique includes purpose and description, step-by-step directions, examples of the implementation of that technique in specific academic disciplines, online implementation, variations and extensions, observations and advice, and key resources. Rather than reading this book in a linear fashion, readers should thumb through it or start at the point that is most useful and appealing to them.

Sources

Student Engagement Techniques is really about effective teaching, and the literature on how to teach well is huge. I am not an educational psychologist, so especially in the conceptual framework that constitutes Part One, I relied heavily on Brophy's (2004), Svinicki's (2004b), and Wlodkowski's (2008) excellent syntheses of the research and literature on student motivation and on Sousa's (2006) informative and accessible work on how the brain learns. Readers who are interested in learning more about motivation or the brain are encouraged to go to these original sources.

For Parts Two and Three, I pulled from any source that had a good idea: books, journals, teaching and learning newsletters, corporate training manuals, Web sites, and even workshop handouts. Some ideas come from my own experience in the classroom; others from manuscript reviewers, colleagues, and students. I have tried to attribute accurately, preferably to published sources, but teaching ideas and techniques are often disseminated by word of mouth and become part of general lore and practice. If I failed to cite anything appropriately or misrepresented someone's ideas, please let me know at barkleyelizabeth@foothill.edu so that I can post a correction on my Web site and fix the error in a future edition.

Acknowledgments

I am deeply indebted to Thomas A. Angelo and K. Patricia Cross for their seminal work creating the prototype for this handbook with *Classroom Assessment Techniques: A Handbook for College Teachers* (1993). I worked with K. Patricia Cross and Claire Howell Major using the same structure for our book *Collaborative Learning Techniques: A Handbook for College Teachers* (2005). Pat Cross and I had continuing, lively conversations on student engagement as I worked on this book, and her writing and thinking have left an indelible imprint throughout its pages. My decision to dedicate the book to her is rooted in my immense gratitude for her inspirational guidance.

It was in a meeting with David Brightman and Jessica Egbert at Jossey-Bass that Jessica suggested writing a third handbook, this time focusing on student engagement. David, Jessica, and Aneesa Davenport have been incredibly supportive throughout the conceptualization, writing, and production of the book. I also want to express special thanks to James Rhem, who gave me encouragement at a critical point when the project had become overwhelming as well as substantive advice on the intellectual plot and structure of the book. For their support, insightful comments, and critical feedback, I want to express my tremendous appreciation to Jillian Kinzie, Kay McClenney, L. Dee Fink, Judith Ouimet, and Robert Smallwood, who read and commented on draft material at various stages. And for using her own excellent teaching skills both in providing constructive criticism as well as urging me to use my own voice in the writing, I am deeply grateful to Maryellen Weimer.

Thank you, too, to my faculty colleagues Judy Baker, Dolores Davison, Nicole Gray, Carolyn Holcroft, Scott Lankford, and Natalia Menendez, who shared their classroom-based experiences with me during interviews. I am also indebted to the members of my Instructional Team—Robert Hartwell, Milissa Carey, and Baomi Watson—for their collegiality and the ideas and insights on good teaching they offer on a daily basis. Additionally, I want to acknowledge my gratitude to Chris Garrett, Norman Vaughan, and the many educators who gathered at the first meeting of the Special Interest Group on Student Engagement at the International Society for the Scholarship of Teaching and Learning (ISSOTL) 2008 conference in Edmonton, Canada. They offered their ideas and, in several cases, went back to their campuses to gather feedback from students and colleagues on what "student engagement" meant to them. Finally, to my husband, I offer my deepest, heartfelt gratitude. Without his ongoing support and understanding, I would never have started this project, much less finished it.

The Author

ELIZABETH BARKLEY is a nationally known scholar, educator, and consultant. With over thirty years experience as an innovative and reflective teacher, her areas of interest include engaging students through active and collaborative learning; transforming face-to-face and online curriculum to meet the needs of diverse learners; and connecting learning goals with outcomes and assessment. She is author of *Collaborative Learning Techniques: A Handbook for College Faculty* (coauthored with K. Patricia Cross and Claire Howell Major, Jossey-Bass, 2004), *Crossroads: The Multicultural Roots of America's Popular Music* (Prentice Hall, 2006), and *Crossroads: Popular Music in America* (Prentice Hall, 2003).

Dr. Barkley has been the recipient of several honors, including the Carnegie Foundation for the Advancement of Teaching's California's Higher Education Professor of the Year, the Chair Academy's Outstanding Leadership Award for work with learning outcomes assessment, the Foothill-De Anza Community College District's Innovator of the Year in conjunction with the National League for Innovation in the Community Colleges, the Gerald Hayward Award for Educational Excellence, the Center for Diversity in Teaching and Learning in Higher Education's Faculty Award, and the California Community College League's Out-of-the-Box Thinker Award. She has also served as a leadership fellow through the American Council on Education and has been named a Carnegie scholar in the discipline of music by the Pew Charitable Trusts in conjunction with the Carnegie Foundation. Additionally, her course *Music of Multicultural America* was selected as the best online course by the California Virtual Campus.

Barkley holds a B.A. and M.A. from the University of California at Riverside and a Ph.D. from UC Berkeley. She has worked at Foothill College since 1977, including nine years as Dean of Fine Arts and Communications.

Part One

A Conceptual Framework for Understanding Student Engagement

Chapter 1

What Does *Student Engagement* Mean?

MOST OF US chose our field of scholarly endeavor because somewhere along the line we developed a passion for it. Part of the attraction of a career in academia is the opportunity to share our enthusiasm with others and possibly even recruit new disciples to the discipline. It is therefore very disheartening to look out into a classroom and see disengaged students who make little effort to hide their apathy. They stare at us vacantly or perhaps even hostilely when we attempt to pull them into class discussion, and then bolt for the door like freed prisoners the moment it seems safe to do so. Equally distressing are students who are obsessively focused on their grade but seem to care little about the learning the grades are supposed to represent. Why do some students bother to register for the course if they are not interested in learning what we are teaching? Why do some students go to such great efforts to cheat when they'd learn so much if they invested even half the effort in studying? Why is it sometimes so hard to get students to think . . . to care . . . to engage? These and similarly troubling questions are part of a national—even international—dialogue on student engagement.

The elements of the dialogue vary, largely because higher education today is astonishingly diverse. Although attention on student engagement at the moment seems to be focused on classes with hundreds of students, engagement can also be a challenge in courses with an average class size of twelve. While some teachers are looking for ways to challenge their students' higher-order thinking, others struggle to get students to show up—and then to take the earbuds out of their ears so that they can focus sufficiently to develop basic academic success skills. Today, teachers must find ways to engage students not only in traditional face-to-face courses but also in courses taught partially or wholly online.

The unifying thread is "engagement," but what *is* "student engagement"? Well, the answer is that it means different things to different people. Bowen, in an article appropriately titled "Engaged Learning: Are We All on the Same Page?"(2005), observes that—despite the number of recent vision statements, strategic plans, learning outcomes, and agendas of national reform movements that strive to create engaged learning and engaged learners—"an explicit consensus about what we actually mean by engagement or why it is important is lacking" (p. 3). My purpose in Part One is to construct a conceptual framework for understanding student engagement by first exploring the background of the phrase and then proposing a teaching-based model for what it means within the context of a college classroom.

Background

One of the earliest pairings of the term *engagement* with learning occurs in Pascarella and Terenzini's (1991) treatise on the impact of college on students: "Perhaps the strongest conclusion that can be made is the least surprising. Simply put, the greater the student's involvement or engagement in academic work or in the academic experience of college, the greater his or her level of knowledge acquisition and general cognitive development." A decade later, Russ Edgerton, in his influential *Higher Education White Paper* (1997, p. 32), pointed to the need for students to "engage in the tasks" that discipline specialists perform in order to really understand the concepts of the discipline. In this same paper, Edgerton coined the phrase *pedagogies of engagement*: "Learning 'about things' does not enable students to acquire the abilities and understanding they will need for the twenty-first century. We need new pedagogies of engagement that will turn out the kinds of resourceful, engaged workers and citizens that America now requires" (p. 38). Building on Edgerton's and others' work, Shulman (2002) placed engagement at the foundation of his learning taxonomy: "Learning begins with student engagement" (p. 37).

The National Survey on Student Engagement (NSSE) and associated efforts such as the Community College Survey on Student Engagement (CCSSE) aim to *measure* student engagement. They define *engagement* as the frequency with which students participate in activities that represent effective educational practices, and conceive of it as a pattern of involvement in a variety of activities and interactions both in and out of the classroom and throughout a student's college career. "Student engagement has two key components," explains NSSE's associate director, Jillian Kinzie (personal

communication, 2008). "[T]he first is the amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success. The second is the ways the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities."

All of these usages of the term *engagement* work well when one is looking at general trends at the national and institutional level, but they aren't very helpful to college teachers who are trying to engage students on a daily basis "in the trenches." Many books and articles have been written on student engagement, and the discussions are rich and complex. Our understanding of student engagement continues to evolve and deepen as the dialogue continues. My purpose here is to contribute to this conversation by offering a closer look at what constitutes student engagement within the context of a single college class.

Toward a Classroom-Based Model for Understanding Student Engagement

College teachers tend to describe student engagement in one of two ways. The first is with statements like "Engaged students really care about what they're learning; they *want* to learn" or "When students are engaged, they exceed expectations and go beyond what is required" or "The words that describe student engagement to me are *passion* and *excitement*" (Barkley, 2009). These phrases reflect a view of engagement rooted in motivation. The etymological roots of the word *engagement* offer clues to this perspective. "Engage" comes from Middle English and its multiple meanings include pledging one's life and honor and charming or fascinating someone so that he or she becomes an ally. Both meanings resonate with teachers' motivation-based view of student engagement: we want students to share our enthusiasm for our academic discipline and find our courses so compelling that they willingly, in fact enthusiastically, devote their hearts and minds to the learning process.

The second way many college teachers describe student engagement is with statements like "Engaged students are trying to make meaning of what they are learning" or "Engaged students are involved in the academic task at hand and are using higher-order thinking skills such as analyzing information or solving problems" (Barkley, 2009). These teachers are relating engagement to active learning. They recognize that learning is a dynamic process that consists of making sense and meaning out of new information by connecting it to what is already known. Bonwell and Eison (1991) neatly

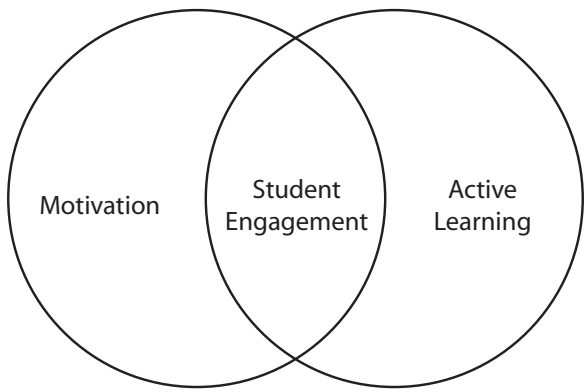
define active learning as "doing what we think and thinking about what we are doing." Edgerton (1997) observes that "to really understand an idea . . . a student must be able to carry out a variety of performances involving the idea. . . . Students know about chemistry by reading and listening to lectures, but to really understand chemistry, students need to engage in the tasks that chemists perform." He adds that some teaching approaches (such as problem-based learning, collaborative learning, and undergraduate research) are "pedagogies of engagement" because they require students to be actively learning as they "do" the tasks of the discipline (p. 32). Bowen (2005) points out that the NSSE, "which assesses the extent to which these pedagogies are used, has become one de facto operational definition of engagement" (p. 4).

Whether teachers think primarily of the motivational or active learning elements of student engagement, they are quick to point out that both are required. A classroom filled with enthusiastic, motivated students is great, but it is educationally meaningless if the enthusiasm does not result in learning. Conversely, students who are actively learning but doing so reluctantly and resentfully are not engaged. Student engagement is the product of motivation *and* active learning. It is a product rather than a sum because it will not occur if either element is missing. It does not result from one or the other alone, but rather is generated in the space that resides in the overlap of motivation and active learning, as illustrated in Figure 1.1.

While combined motivation and active learning promote basic student engagement, some teachers are pushing for more: they want students to be truly transformed by their educational experiences. Although any learning, by definition, results in some level of change, transformative learning is deep

FIGURE 1.1.

Venn Diagram Model of Student Engagement



and thorough change. Cranton (2006) defines *transformative learning* as "a process by which previously uncritically assimilated assumptions, beliefs, values, and perspectives are questioned and thereby become more open, permeable, and better justified" (p. vi). It requires learners "to examine problematic frames of reference to make them more inclusive, discriminating, open, reflective, and able to change," and it can be "provoked by a single event . . . or it can take place gradually and cumulatively over time" (p. 36).

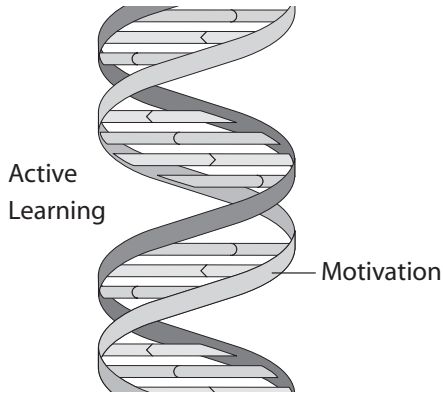
Transformative learning occurs when students are challenged intensely, creating the kind of growth described by Perry's upper levels of intellectual and ethical development ("Perry model," n.d.). In Perry's observations, most freshmen enter college as dualists, believing that there are clear, objective, right-or-wrong answers. One of the goals of a college education is to help students move beyond dualistic thinking to more complex stages as they learn to deal with uncertainty and relativism. As experiences challenge their thinking, students begin to see that truth is contextual and relative, and since there is not a single correct answer, everyone has a right to his or her own opinion. Eventually students recognize that there may be multiple answers to a question but not all answers are equal, and specific criteria such as empirical evidence and logical consistency can help them evaluate the usefulness and validity of knowledge claims.

In Perry's fourth and final stage, students come to recognize that they must make individual choices that require both objective analysis *and* personal values (Perry, 1998). As students' thinking matures to this level of sophistication, it is truly transformative. Interestingly, Bowen (2005) observes that students often resist teachers' attempts to promote transformative learning precisely because it "necessarily threatens the student's current identity and world view" and cites a study by Trosset at an elite liberal arts college that revealed that the majority of students did not want to participate in a discussion until they felt well prepared to defend their already firmly held views (Bowen, 2005). Some teachers consider transformative learning to be an element of engaged learning, but it may not be so much a required element as much as the result of sustained engagement or engagement that has achieved a higher level of personal intensity.

Motivation and active learning work together synergistically, and as they interact, they contribute incrementally to increase engagement. Rather than a Venn diagram where engagement is the overlap of active learning and motivation, thereby limiting the influence of each, engagement may be better described as a double helix in which active learning and motivation are spirals working together synergistically, building in intensity, and creating a fluid and dynamic phenomenon that is greater than the sum of their individual effects. (See Figure 1.2.)

FIGURE 1.2.

Double Helix Model of Student Engagement



Source: U.S. National Library of Medicine, DNA diagram (http://ghr.nlm.nih.gov/handbook/basics/dna)

Thus engagement occurs on a continuum: it starts at the intersection of motivation and active learning, but these two work synergistically and build in intensity. At the far end of the continuum are the transformative, peak experiences that constitute the treasured milestones of an education. As attractive and appealing as these experiences are, they are not sustainable on a constant basis—they'd be too exhausting. As college teachers, we can strive to increase experiences of deep engagement, reduce the incidence of indifference and apathy that characterize lack of engagement, and attend to the many ways we can adapt our teaching methods to enhance engaged learning throughout the range in between.

Within the context of a college classroom, I propose this definition: *Student engagement is a process and a product that is experienced on a continuum and results from the synergistic interaction between motivation and active learning.* Understanding basic principles drawn from the research and theory on motivation and active learning can offer insights into how to promote student engagement. Let us therefore begin by exploring the first element in our double helix model: student motivation.

Chapter 2

Engagement and Motivation

MOTIVATION IS a theoretical construct to explain the reason or reasons we engage in a particular behavior. It is the feeling of interest or enthusiasm that makes somebody want to do something. In the classroom, we want students to *want to learn.* So how do we accomplish that? Brophy (2004) proposes that motivation to learn is an acquired competence developed through an individual's cumulative experience with learning situations. It is a web of connected insights, skills, values, and dispositions that is developed over time. Some students come to our institutions and our classes with a high motivation to learn. Others are more motivated by the economic opportunities associated with the professions and careers they hope to have once they graduate. Regardless of a student's general disposition, motivation can be activated or suppressed in specific situations. Even a student who is generally motivated to learn may be less enthusiastic in a course that she feels coerced to take because it is a required element of the general education pattern. Conversely, a student who seems generally unmotivated to learn may become quite enthusiastic about the learning in a specific course.

Brophy defines motivation in the classroom as "the level of enthusiasm and the degree to which students invest attention and effort in learning" (2004, p. 4). This definition implies an internal state, a concept that differs considerably from the external manipulation of rewards and punishment that was emphasized in early, behaviorist studies of motivation. In the behaviorist approach, motivation was studied as a response to incentives and rewards, factors that are largely dictated from sources external to the learner. The behaviorist model suggests that teachers can develop motivated students by reinforcing the desired learning behavior that constitutes excellent work (attentiveness in class, careful and thorough work on assignments, thoughtful and frequent contributions to discussion), thereby

encouraging students to continue these behaviors. If students are not able to engage in these behaviors immediately, they'll gradually improve if the correct behaviors are reinforced and incompatible behaviors are extinguished through nonreinforcement or, if necessary, suppressed through punishment.

Cognitive models of motivation started replacing behaviorist models in the 1960s, emphasizing learners' subjective experiences. Reinforcement was still important, but its effects were mediated through learners' cognitions. Among the cognitive models, needs models developed first. These models, such as Maslow's Hierarchy of Needs, propose that behavior is a response to felt needs, implying that basic physiological needs (such as sleep) must be met before higher-level needs (such as a sense of belonging) can be met. In terms of the classroom, this means that before students can focus on college-level learning, lower-level needs must first be met. In other words, students who are hungry because they're rushing between classes and haven't eaten or are tired because they worked late at their part-time job or studied all night for an exam will be distracted by their fundamental needs for food or sleep and not be able to concentrate on the coursework. Or as another example, the basic need for safety will discourage students from participating in a discussion and saying what they truly think or feel if they are anxious about rejection from their peers or criticism by their professor.

Both behaviorist and needs theories depict motivation as reactive to pressures, either from extrinsic rewards or internal needs. Theorists gradually began to acknowledge that humans are not always just pushed or pulled but are sometimes more proactive in their behavior; this led to "goals" models. Goal theories suggest students are motivated, for example, by performance goals (preserving self-perception or public reputation as capable individuals), learning goals (trying to learn whatever the instructor's task is designed to teach them), and even work-avoidant goals (refusing to accept the challenges inherent in the task and instead focusing on spending as little time and effort as possible in completing it). Studies by goal theorists and other motivational researchers contributed a great deal of information about the situational characteristics that predict students' tendencies to adopt different goals in achievement situations.

To apply goals theory to the college classroom, teachers try to (a) establish supportive relationships and cooperative/collaborative learning arrangements that encourage students to adopt learning goals instead of performance goals and (b) minimize the sorts of pressures that dispose students toward performance goals or work-avoidant goals. According to Brophy (2004), when these conditions are created in a classroom, "students are

able to focus their energies on learning without becoming distracted by fear of embarrassment or failure, or by resentment of tasks that they view as pointless or inappropriate" (p. 9).

In the 1980s, intrinsic motivation theories combined elements of needs and goals models. Self-determination theory (Deci & Ryan, 1985, 2002), for example, suggests that at times we engage in behavior simply because we want to. Settings that promote intrinsic motivation satisfy three innate needs: autonomy (self-determination in deciding what to do and how to do it), competence (developing and exercising skills for manipulating and controlling the environment), and relatedness (affiliation with others through social relationships). Students are likely to be intrinsically motivated in courses that promote these three characteristics.

Today's theories about motivation combine elements of needs and goals models and emphasize the importance of factors within the individual. Brophy (2004) and Cross (2001) observe that much of what researchers have found can be organized within an *expectancy* × *value* model. This model holds that the effort that people are willing to expend on a task is the product of the degree to which they expect to be able to perform the task successfully (*expectancy*) and the degree to which they value the rewards as well as the opportunity to engage in performing the task itself (*value*). As with our model of engagement as a product rather than a sum (Figure 1.1), effort is also viewed as the product rather than the sum: it is assumed that people will expend no effort if either element (expectancy or value) is missing entirely. People will not willingly invest effort in tasks that they do not enjoy and that do not lead to something they value even if they know that they can perform the tasks successfully, nor do they willingly invest effort in even highly valued tasks if they believe that they cannot succeed no matter how hard they try. In short, students' motivations are strongly influenced by what they think is important and what they believe they can accomplish. Let us first explore the construct of expectancy.

Expectancy

Students' expectations are inextricably linked with their self-perceptions. Students must have confidence that, with appropriate effort, they can succeed. If there is no hope, there is no motivation. Cross and Steadman (1996) discuss three motivational theories that address student expectations: self-efficacy theories, attribution theory, and self-worth models. Self-efficacy theories (Bandura, 1977, 1982; Corno & Mandinach, 1983) suggest that students' *belief* about their ability to succeed at a learning task is more important than

their actual skill level or the difficulty of the task. If a student is confident in her ability to perform a task successfully, she will be motivated to engage in it.

Attribution theory (Weiner, 1979, 1985, 1986) suggests that students attribute success or failure to a variety of factors such as ability, effort, luck, fatigue, ease or difficulty of the exam, and so forth, and that their belief is shaped by their perceptions of why they have succeeded or failed in the past. For example, if success depends on attributes over which they have control (effort), students are more likely to have confidence than when success depends on external conditions over which they have no control (difficulty of the exam). Three important dimensions of attributions are *locus* (whether failure or success is attributed to causes internal or external to the learner); *stability* (whether the attributed cause is permanent or temporary); and *controllability* (whether the learner has the power to influence success or failure).

Finally, self-worth models propose that people are strongly motivated to preserve their sense of self-worth. When students don't succeed, they would prefer to question—and have others question—their effort (they're lazy) rather than their ability (they're dumb) (Brown & Weiner, 1984; Cross, 2001). Based on this model, it is easier to understand why some students don't even try to accomplish a task if they believe there is low probability that they will be successful.

Covington (1993) found four typical student patterns that resonate with the experience of many college teachers interacting with students in the classroom. *Success-oriented* students are serious learners who want to perform well, and they usually do. They are predisposed toward engagement, as they enjoy learning for learning's sake. They find personal satisfaction in challenging assignments because they are accustomed to success and are able to preserve their perceptions of self-worth even in the event of an occasional failure. *Overstrivers* are also successful students and will take on challenging tasks, but they are not entirely confident in their ability and consequently worry constantly about their grades and performance. Anxious that each new learning task will be the one that exposes the lower level of ability that they have so far been able to conceal, they compensate by expending a great deal of effort to ensure that they do succeed. *Failure-avoiders* also suffer anxiety, but because they have not always been successful in school, they are afraid that if they fail at a specific learning activity, they will prove to themselves and others that they lack the ability to succeed. In order to preserve their sense of self-worth, they avoid tasks that are too challenging. Finally, *failure-accepting* students have become so accus-