# **Motivation: An Updated Analysis**

**IDEA Paper #59 • May 2016** 



# Marilla D. Svinicki

### **Abstract**

Because instructors are very concerned about how to motivate their students, this paper describes some of the most prominent and practically relevant contemporary theories of motivation, specifically expectancy value theory, goal orientation theory, and self-determination theory. After describing each theory and its basic components, suggestions are made about how to incorporate key concepts into teaching practices appropriate for postsecondary education. Where appropriate, suggestions for practice are linked to learning objectives and teaching methods that are part of the IDEA Student Ratings System (SRI). The goal is to provide sufficient basic information about research-based theories and practices that instructors can apply to facilitate student progress on the learning objectives in their classes.

When Bill Cashin wrote the first IDEA Paper ("Motivating Students") in 1979, he began a tradition of scholarly yet comprehensible papers on learning and teaching topics that would provide a strong support base for best practices in postsecondary education. The series has continued to this day, and I'm honored to be the one that, over 40 years later, has the opportunity to update the original suggestions he made. I hope my words will do as much good for the profession as his did in 1979.

The issue of motivating students remains one of the topics of greatest interest to faculty. Teachers still are puzzled about how to motivate students. Fortunately, most of the suggestions Cashin made back then are still applicable to contemporary students; however, now there is more theory and research behind those practical ideas. There are also new perspectives from research that both support Cashin's ideas and add to them. If we learn to use these ideas about motivation, they can be strong tools to employ in the interest of increasing student learning.

## One big principle to ponder

There is one general principle underlying all current theories of motivation that has grown stronger over the years since the first IDEA Paper: it is the learner's beliefs and interpretations of what is happening that make something motivating or not. The very same situation can have different effects depending on each learner's interpretation. One learner could view receiving corrective feedback as demotivating, whereas another learner might see it as a positive impetus for trying again, but harder. As a result, contemporary theories of motivation reflect psychology's current view of learners as agents in charge of their own learning. It is the learner's perspective that results in motivation or lack of it. All the

instructor can do is create an environment that is most likely to support students' development of a positive perspective that lies at the basis of what is now called the "growth mindset" (Dweck, 2006).

The mindset construct has many interpretations and is currently receiving a great deal of research attention. However, its foundation lies in the pioneering work of Carol Dweck and her colleagues on the idea of a mindset as influencing a learner's motivation to work for selfimprovement. An individual's mindset is based on the learner's belief about the nature of intelligence. Individuals may believe that ability and intelligence are fixed and not subject to change even with effort. Or they may believe that ability and intelligence are malleable and can grow with experience and effort. The latter is the "growth mindset" (Dweck, 2006). We can see that if an individual adopts a growth mindset, it colors his or her whole approach to learning. Learning becomes a worthwhile activity deserving of effort and persistence because it can result in change. This change is also related to the construct of resilience the ability to respond to challenges. Thus the efforts of a teacher should be directed toward helping learners adopt a growth mindset when it comes to academic activities. Such a belief can become the touchstone of motivation for learning. Fortunately for teachers, mindset itself is not fixed, but can be changed when learners are taught about the impact of learning on the brain. Even in adult learners the brain is still growing and changing, and exercising the brain can change our ability to solve challenging problems (Yaeger & Dweck, 2012). Much of this work has demonstrated what a difference can be seen when this change occurs and how to help learners make the change.

With this framework in mind, I will summarize contemporary theories and relate them to modern motivational practices that have evolved over the past several decades. I will also connect theory and practice to the learning objectives and teaching methods that underlie so much of The IDEA Center's

work. Table 1 shows how different teaching methods might be successful because they support different types of motivation as laid out in the theories included in this paper.

**Table 1** • Motivational impacts of Teaching Methods According to Expectancy Value, Goal orientation and Self-Determination theories

IDEA teaching methods that support the motivation for learning according to current theories	Value the task	Expect success; self- efficacy; feel competent	Adopt mastery goals	Feel autonomous	Feel that they belong
Displayed personal interest in students and their learning			Х		X
Found ways to help students answer their own questions		X		X	
Helped students interpret subject matter from diverse perspectives	X				Х
Demonstrated the importance and significance of the subject matter	х				
Formed teams or groups to facilitate learning			Х		Х
Encouraged students to reflect on and evaluate what they have learned	Х	Х	Х		
Provided meaningful feedback on students' academic performance		Х	Х		
Stimulated students to intellectual effort beyond that required by most courses	Х				
Encouraged students to use and evaluate multiple resources to improve understanding			Х		
Explained course material clearly and concisely		Х			
Related course material to real life situations	Х				
Gave tests, projects, etc. that covered the most important points of the course	Х	Х			
Introduced stimulating ideas about the subject	Х				
Involved students in "hands on" projects such as research, case studies, or "real life" activities	Х	X			
Inspired students to set and achieve goals which really challenged them			Х		
Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own	Х				Х
Created opportunities for students to apply skills and knowledge to serve others	Х				X
Asked students to help each other understand ideas or concepts					X
Gave projects, tests, or assignments that required original or creative thinking	Х		Х	Х	

# **Student Beliefs and Their Impact on Motivation**

Expectancy Value Theory: Students will be more motivated if they believe they can be successful at learning or executing a task (expectancy) and see value in what they are learning and how they are learning it (value). (A seminal paper on this theory is Eccles & Wigfield, 2002.)

This is perhaps the most widely used motivation theory in education today. Teachers apply the theory when they identify ways to encourage students to believe in their eventual success and design learning tasks students value. The theory is the one best supported by research, past and present. There are two parts to the formula for motivation under this theory: expectancy for success or the belief that you can successfully complete a task or learn new skills, and value of the task or what is being learned—the belief that what you are learning will be of value to you now or in the future.

### "Will I be successful at this task?"

Expectancy for success / Self-efficacy. The expectancy part of this theory is present in many other motivational theories, particularly social cognitive theory, in the form of self-efficacy (Bandura, 1997; 2006). Self-efficacy is the personal belief that in a given situation, one can be successful. It is one of the characteristics of a learner that is most highly related to success. If you believe you can do it, most of the time, you can. You can see how this belief in the self is a powerful motivating force. Self-efficacy differs from self-confidence or self-esteem in that the latter two constructs are more general beliefs about one's capacities, whereas expectancy for success (self-efficacy) is specific to a particular topic or skill. For example, I may believe that I am a warm and welcoming teacher in general, but I might have high self-efficacy with regard to giving students critical but supportive feedback on their writing.

Strategies for enhancing expectancy for success. Since a large percentage of learning objectives in IDEA involve learners making progress on some content or some skill, building students' expectations that they can do so underlies the relative success of various teaching strategies. Here are some ideas about strategies for enhancing student expectations for success.

• Revisit past successes. For example, one of IDEA's learning objectives concerns gaining a basic understanding of the subject. In some cases, such as math, many students automatically believe that anything involving math is too hard for them to learn. "I'm not good at math," they assert. And they may have had some past learning experiences that support that assertion. However, a skillful teacher knows that one way to counter such beliefs is to point out all the ways students already use math successfully in their lives, such as budgeting their cash, making change, or figuring gas mileage or restaurant tips. Recognizing past successes

or current uses of a topic like math (or writing or creative thinking) could change learners' interpretations of what constitutes success in that area and, therefore, help them recognize those aspects of the content they have already mastered. As a result their self-efficacy should increase and they will be more motivated to try a new and related skill.

- Point to others, similar to the learners, who have been successful. Many teachers have other students demonstrate a skill or contribute ideas to the discussion. These can be students from the current class, previous classes, or the public at large. For example, a teacher can invite students who were successful in previous semesters to talk to the current class about how they were able to succeed. Some instructors collect written testimonials along with helpful suggestions from previous classes to distribute throughout the semester to show current students that it can be done. Yaeger and Dweck (2012) used this strategy to change student beliefs and found it successful in helping both current and former students be more confident in their potential success.
- Create early success opportunities. Being successful once is a motivator for continued effort. Some teachers make the first tasks they assign somewhat easier or more obviously related to past work in an effort to facilitate students' early success, thereby increasing their self-efficacy for that area.
- Provide supportive feedback. This does not mean that
  one should give undeserved praise. But it is more helpful
  and encouraging to students to make "feed forward" or
  supportive comments accompanied by suggestions for
  the next round of practice. Inclusion of those suggestions
  provides a subtle message that the teacher believes in
  the students' ability to grow further.

# "Is this worth the effort?" "What will I get out of this?"

Task value. The second part of expectancy value theory focuses on the value the learner puts on the task or the outcome of the task. The learner is essentially asking "Is this worth spending my time on?" This component of expectancy value theory is often the first thing that comes to mind when an instructor wants to increase student motivation. Unfortunately, too many instructors think this can only be done by offering or taking away differential credit points in response to the learner's behavior. It's understandable that this is their first reaction, since sometimes it seems that students will only do things that earn credit, the currency of education. But there are other sources of value besides points.

Task value is also the type of motivation theory that involves intrinsic versus extrinsic motivation. In times past these differences seemed to be innate or almost unlearned, but the switch to a cognitive view of learning has changed our perceptions greatly. Now we believe that all but the most

basic survival needs are subject to interpretation by the learners. What we talk about as intrinsic versus extrinsic is being studied in a more fine-grained way. For example, Deci, Vallerand, Pelletier, and Ryan (1991), in an early version of self-determination theory, attempted to show that many of the things we thought were purely intrinsic in nature, such as pride in our work or fear responses to external stimuli, could have started as extrinsic sources of control that were internalized with development. It's not so easy to say what is intrinsically versus extrinsically motivating any longer. What we can say is that what one person seems to value intrinsically (like being admired) another person sees as extrinsically based. We can also say that learning that is motivated intrinsically tends to be more satisfying, deeper, and more enduring than that which is extrinsically motivated.

One of the controversies over intrinsic versus extrinsic motivation for learning is based on some observation and research which is interpreted to show that extrinsic motivation superimposed on a previously intrinsically motivated task will hurt the intrinsic motivation. So for example, if you enjoy building websites for fun but then go into the field, where you now get paid for the same thing, there is some evidence that you may often lose some of your energy for the task. The drop in behavior that was formerly motivated intrinsically has alternatively been ascribed to not a loss of interest, but rather a loss of control over the situation. As we'll see later, the ability to be in charge of your own time and activities is a highly motivating experience. Losing that agency frequently damages motivation. However, there is much a teacher can do about allowing selfdetermination, despite having to set requirements for some things.

Strategies for enhancing value. Here are some of the strategies that have been shown to enhance motivation through increasing the value of the content or the task, starting with the more extrinsic sources of motivation and finishing with the more intrinsic ones.

#### Examples of extrinsic motivators

Show the students current learning is connected to past and future topics. Several IDEA objectives are focused on placing content into a larger context, for example, developing knowledge of diverse perspectives, gaining a broader understanding and appreciation of intellectual/ cultural activity, and learning to analyze and critically evaluate. Because students are relatively new to their fields of study, many have difficulty making connections across topics. This may make it difficult to find an intrinsic motivation for expending energy on learning them. Some instructors have had success using an organizational visual, such as a concept map or a flow chart, to illustrate how concepts tie together. At the beginning of any new topic, the map or chart can be revisited to show how new concepts are based on things students have already learned.

- Illustrate through activities the utility value of what is being learned. IDEA objectives pertaining to applying course material, developing skills, working with members of a team, using resources, thinking critically, and using numerical information all have a component of eventual usefulness to learning or using the content. In some cases, students are taking courses that provide them the tools to function in the field. This is referred to as the utility value of the content. It is especially potent if the new content or skill can be used immediately in a class activity, such as a case study, a problem-solving task, or in an upcoming assignment.
- Tie content and skills to students' existing personal goals. Three IDEA learning objectives are connected to the larger professional or service goals students might have: developing professional skills, acquiring team skills, and applying subject matter to community service. If students can articulate their goals, the instructor can assemble special interest or work groups that will have the responsibility of making these connections, which can increase motivation to engage with the content and connect it to future goals.

#### Examples of intrinsic motivators

- Involve students by creating interesting content presentations and activities. A number of IDEA learning objectives involve using novelty, questioning, and engagement, many using multimedia for presentation or finding resources. With so much interesting material readily accessible these days, students can often find relevant materials on the Web, allowing them to participate in identifying interesting information. For example, instructors who are not particularly skilled at finding material on the Web can ask students to bring in examples of uses of the content that they found online. Because the students provide the content, they can pitch it to classmates at their level and interests, which should make it more engaging for everyone.
- Challenge students with difficult but solvable puzzles. especially by having them work with others. Four IDEA Learning Objectives specifically target problem solving: applying course material, finding and using resources, developing ethical decision making, and thinking critically. One particularly effective way to engage students at almost any level is the use of case studies, which are based on real situations and can be adjusted to multiple levels of complexity to match the students' level of sophistication and background. Having the students make predictions about how a case will turn out engages their curiosity, particularly when their prediction is not correct. Using an unfolding set of successive situations that begin with simple problems and advance in difficulty with each stage is a good way to help students develop wider perspectives. Also working in smaller groups increases the probability that

everyone will be engaged, which is often very intrinsically motivating and, when successful, builds student selfefficacy for the content.

Goal Orientation Theory: Students can adopt different definitions of success (orientations) when pursuing a goal, and each definition has a different influence on the actions they exhibit in pursuing their goal.

(A seminal article on this theory is Elliot & Harackiewicz, 1996.)

What is so interesting about goal orientation theory is that it derives from earlier theories of motivation that were based on approach and avoidance, two very basic drivers of behavior. There are many versions of this theory, and it is still constantly evolving, but for our purposes, it is most helpful to look at student behavior from the model of goal orientation

theory (Elliot & Harackiewicz, 1996), as illustrated in Table 2. A great deal of research has been done to characterize these three orientations and the impacts they have on student behavior. Here in brief is what has been found.

• When students have adopted a mastery orientation toward their goals, they are focused on learning as much as they can. To do so they will take risks and try new things. They are not worried about making mistakes because they believe that is how they learn. They make good use of learning strategies. They will seek out help from others if it will advance their learning. They are willing to put in the time and effort as long as they are continuing to learn. They also tend to take responsibility for their own learning and their mistakes. This orientation is considered to produce a very high positive motivational state.

Table 2 • Achievement Goal Orientation in the Trichotomous Model

When the orientation students have toward their goal is:	To learn as much as they can.	To appear as competent as they can.	To avoid appearing incompetent at all.
We say they are:	Mastery (or learning) oriented	Performance approach oriented	Performance avoidance oriented
And their behavior is characterized by:	a focus on learning, a willingness to take risks, openness to feedback for improvement, persistence in trying in the face of mistakes, high positive motivation.	a focus on demonstrating competence, being better at the task than others, achieving a result that is considered high for the task, a preference for things they already know how to do, an aversion to risks, high positive motivation at first.	a focus on avoiding appearing incompetent, fear of making mistakes, unwillingness to take risks, not seeking help or showing the work to others, anxiety about learning, low positive motivation.

- When students have adopted a performance approach orientation toward their goals, they are focused on demonstrating competence. This is usually judged in comparison to how others perform on the same task (like getting the highest grade on a test) or in comparison to a high standard that defines success on the task (like making a high GRE score). These students are interested in receiving high grades, preferably the highest grades in the class, so they are very concerned about how others have scored. They will work hard to achieve that status, but they are less likely to try new things because they don't yet know how well they will do. They prefer to stick with what they know or with tried and true tasks. Unfortunately, they often stop improving once they reach that goal. While this is considered to produce a high motivational state initially, sustaining it in the face of difficulties is a problem.
- When students have adopted a performance avoidance orientation toward their goals, they are focused on not making mistakes that will make them appear

incompetent. They are more risk averse than students displaying the other two orientations and do not want anyone to see their work in progress until they are convinced it is correct. While this motivates them to work, it narrows their focus so much that they might miss the point of learning. This is considered to be a negative motivational state in terms of learning.

# "Do I want to learn?" "Do I want to be seen as competent?" "Can I avoid errors?"

These orientations vary based on how the students interpret the situation they are confronting. They can even shift orientations in midstream when they decide they need to focus more intensely for a while. In addition, students can display all of these orientations, sometimes simultaneously, as they go about learning. But when, if at all, should we encourage each of them? From the perspective of teaching, we would like to have the mastery and performance approach orientations exhibited by our students at the appropriate times. When the students are learning new material, a mastery orientation is desirable because then students

are willing to try new things and to get feedback on how to improve their understanding. When further along in the learning cycle, especially at the point of assessment, a performance approach orientation would motivate the students to do their best. There are very few times appropriate to a performance avoidance orientation, except in the case where failure could be dangerous or the stakes for success are very high.

The preference for students who have adopted a mastery orientation is related to the display of resilience in learning. As noted earlier around the concept of self-efficacy, behaviors that help a student recover quickly and learn from errors have been labeled as resilience (Yaeger & Dweck, 2012). Unfortunately, some writers have given resilience a status almost equivalent to a personality trait. It is more useful to think of resilience as a good degree of self-efficacy accompanied by an array of behaviors that can be chosen to cope with failure or frustration. For example, the choice of redefining "failure" as a learning opportunity is very connected to the concept of having a mastery orientation toward learning. The behaviors that would accompany it would be persistence, patience and vigilance, and selfregulation of thinking and emotion, all in the service of lining up resources for a second or third or more tries. Therefore, instructional strategies that help learners practice reflection, self-observation, and patience in the face of frustration would be essentially helping them learn to be resilient.

A related concept, grit, has been proposed and studied by Angela Duckworth and her colleagues (Duckworth, Peterson, Matthews, & Kelly, 2007). However, grit is distinguished by a time and intensity factor: specifically, grit is measured over a long-term stamina (measured in years) rather than the short spurts of action that characterize resilience. Both may be seen in the same individual over time but differ in the continuity of their expression. Grit is also characterized by passionate dedication to the focus.

Encouraging students to adopt a mastery orientation. During the learning phase, it is beneficial for students to be mastery oriented, so here are some suggestions from the literature on encouraging them to do so.

- In general, mastery orientation is most likely to develop
  when students feel they are in a safe environment where
  it is permissible to make mistakes, because that is how
  one learns. Therefore, we should create a supportive
  classroom community that is fostered by peer and
  teacher support, as would be the case with team-building
  learning outcomes.
- Before making a final assessment of students' learning, offer opportunities to practice using new knowledge and skills in a non-evaluative situation. For example, during class, practicing the types of questions that are likely to be found on exams helps lower student anxiety and gets them ready to take a positive attitude toward assessment.

When providing feedback on practice attempts and drafts, include suggestions about ways to improve the work, not just criticisms of what is wrong with it. Such feedback will encourage students to be more reflective and self-regulating about their work.

- In general, skill type objectives such as those addressing problem solving, professional skills, teaming, and communication should focus on personal improvement rather than comparison with others. Having students reflect on how much they've developed since their previous use of the skill and how they were able to improve will encourage a mastery orientation.
- Including learning objectives that are exploratory and assessed by personal preference and reflection, such as understanding diverse perspectives, developing creative capacities, appreciating intellectual/cultural activity, and serving the community gives learners an opportunity to develop competence apart from externally imposed standards. These are good opportunities for students to learn and practice self-regulation skills. This also helps them take greater ownership of their learning and enjoy it more.
- Teachers should be models of a mastery orientation in how they deal with their own mistakes in class and in examples they share with the class of their own experiences as learners. Teachers should also emphasize learning from mistakes through the language they use in order to change the way students view their errors. For example, give them feedback that what they have done is "a start, and really would be improved if they did this approach or that approach rather than the one they have used."

Self-Determination Theory: Students are most motivated to learn when they feel they are competent, they belong to and are supported by a community, and they are in control of their own learning (i.e. autonomous). (A seminal article on self-determination is Ryan & Deci, 2000.)

This theory has an underlying relationship to perhaps the most widely known and cited motivation sources - intrinsic versus extrinsic motivation. The question has long been "what differentiates intrinsic from extrinsic motivation?" One of the differences noted by early theorists was the idea of self-determination: that humans prefer to be the ones who make decisions about what they will and will not do. Edward Deci wrote about this tendency as early as 1975 and subsequently, with others, laid out the motivation theory of self-determination (Deci, Vallerand, Pelletier, & Ryan, 1991).

# "Can I do this?" "Do I belong here?" "Do I have control of my work?"

In self-determination theory there are three basic human needs that support the inherent growth and psychological development of a person. Those three are need for competence, need for relatedness, and need for autonomy.

• Competence. Individuals must believe that they can understand and operate competently in their environment. It is similar to the idea of self-efficacy or expectancy for success mentioned in expectancy value theory. If they are in a situation in which this need for feeling competent is satisfied, they are more motivated to continue to learn and grow in ways that increase their ability to succeed in that situation, an attitude somewhat like having a mastery orientation.

Anything the instructor can build into the environment to make the learners feel they can be successful will increase their motivation. Therefore the suggestions made earlier under the concepts of expectancy for success and supporting a mastery orientation to a goal can be thought to give learners a feeling of competence and enhance their motivation accordingly.

• Belongingness. Individuals also need to feel that they are part of a group, and accepted and supported by it as they continue to develop. This need is similar to the group concept in mastery orientation because the group is there to make the situation safer and more amenable to risk taking. The most common teaching strategies to foster belongingness are having students work in groups (but with the appropriate support to make the groups function well), learning and using the students' names in class and encouraging them to do the same with their peers, and engaging in appropriate self-disclosure as a teacher so that the students see the teacher as a member of the community, not just an outside task master.

Classroom community also can be strengthened by creating unique and memorable experiences in class to give the group a common history, culture, and reference points as a function of sharing and referring to those experiences during the semester. For example, once, in my own class, each group of students had to create a mini tableau that illustrated their interpretation of self-regulation, and then act it out before the whole class. Pictures were taken and served as the slideshow display that was cycling through on the front class screen at the start of the next class while students were arriving. It was something unique to them that they all shared, and the experience became part of that class's communal history even to the point of being used as examples in exam answers.

 Autonomy. Finally individuals need to feel that they are in control of their environment. This is the component that doesn't have a similar concept in the theories discussed earlier. In most classes, the instructor is accustomed (and expected) to be in control of everything that goes on. However, involving students in the conduct of their own learning by empowering them to make decisions about what and how they'll learn can be a significant source of motivation. For example, in every class there are things that the students can decide, such as concepts that need further discussion, or reasonable time limits for an assignment resubmission. Many instructors allow individual students to choose topics or formats for demonstrating their understanding of a unit's concepts.

A more subtle manifestation of autonomy is when the teacher allows the students to work through a problem as they think it should be done without excessive interference so that they can experience the consequences of their decisions. The teacher stands by ready to help, but does not jump in too early and thereby ambush the students' attempts to work independently. This doesn't mean that the teacher is totally hands off, but rather offers insightful questions rather than direct corrections. One example of this type of student autonomy would be not jumping in to help them as they try to answer a question in class. Another common example would be allowing a student to complete his own explanation of a concept before giving him any indication of its quality. Sometimes being quiet provides the instructor much more insight into what the students know and think than is available when the instructor is constantly interrupting the students' attempts to speak. It also says to the students that the instructor respects them as budding scholars and professionals who are beginning to understand and trying to make connections between their world and that of the course.

Intrinsic versus extrinsic motivation. Coming back to the relationship between self-determination theory and intrinsic versus extrinsic motivation, we can see that the idea of student autonomy is related to this distinction, because most intrinsic motivation revolves around motivation coming from within the learner. Extrinsic motivation is more closely aligned with motivation coming from outside the learner. In fact, Deci said that intrinsic motivation is "the human need to be competent and self-determining in relation to the environment" (Deci, 1980, pg. 27). What Deci and his colleagues proposed was that some things that appear to be intrinsically motivating really had their beginnings in an outside expectation subtly placed on the learner by a parent or other authority figure. For example, parents originally externally control many social graces about appropriate behavior. Over the years these beliefs become integrated into our self-system and appear to us as the self-evident nature of things. Therefore, it is very difficult to determine what is intrinsic and what is extrinsic except for very obvious things like affection (intrinsic) versus orders from a superior (extrinsic). In between those two situations, we can use our best judgment and try to allow students to choose for themselves when feasible, because students who exercise self-determination are far more likely to select something that is intrinsically motivating for them and therefore to remain motivated throughout the process of learning.

### Where Does Motivation Stand Now?

Psychology as a body of research and theory is beginning to coalesce around a few solid principles for making instructional decisions. The most powerful one is the recognition (or perhaps, more tentatively, the hypothesis) that what is central to human behavior is the agency of the individual to interpret and respond based on his or her own interactions with the situation. This changes the way education should be carried out. More and more we are finding that including the individual in the decisions about his or her learning is a potent way to tap sources of motivation that lie within the self. Because so much of psychology is based on constructs that we can't really see, but only infer, why not use the insights of the one person who has a better chance of accurately tapping into those motivation sources—the individual learner—from his expectancies for success to his orientations toward success and his desire to drive his own success? The theories and suggestions included in this IDEA paper will help teachers take advantage of that source.

Marilla Svinicki began her professional life teaching at Macalester College in St. Paul, MN, after graduating with a Ph.D. in experimental psychology from The University of Colorado. Shortly thereafter she began a 30-year journey of development with the Center for Teaching Effectiveness at the University of Texas. In August of 2004 she retired from the Center and became a full-time faculty member in Educational Psychology where she taught undergraduate and graduate courses in instructional psychology, learning, cognition and motivation. She retired from the University in 2014, changing her title to Emeritus but remaining active in the field, particularly in the area of applying research to higher education.

#### References

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1, 163-180.

Cashin, W. E. (1979). *IDEA Paper No. 1: Motivating students*. Manhattan, KS: The IDEA Center.

Deci, E. L. (1980). *The psychology of self-determination*. Lexington, MA: D. C. Heath.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26(3 & 4), 325-346.

Duckworth, A., Peterson, C., Matthews, M., & Kelly, D. R. (2007). Grit – perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101.

Dweck, C. S. (2006). Mindset. New York, NY: Random House.

Eccles, J., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132.

Elliot, A. J., & Harkiewicz, J. (1996). Approach and avoidance: Achievement goals and intrinsic motivation. *Journal of Personality and Social Psychology*, 70(3), 451-475.

Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well being. *American Psychologist*, 55(1), 68-78.

Yaeger, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, *47*(4), 302-314. doi: 10.1080/00461520.2012.722805

**T:** 800.255.2757 **T:** 785.320.2400

301 South Fourth St., Suite 200 Manhattan, KS 66502-6209 **E:** info@IDEAedu.org

IDEAedu.org



Our research and publications, which benefit the higher education community, are supported by charitable contributions like yours. Please consider making a tax-deductible donation to IDEA to sustain our research now and into the future.