

# ADDING SOME TEC-VARIETY

**100+ Activities for Motivating  
and Retaining Learners Online**



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## CHAPTER THREE

# ONLINE MOTIVATION FROM FOUR PERSPECTIVES

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief, and, yes, even beggarman and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors. I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years.

—John B. Watson, *Behaviorism*, 1930, p. 82

## Motivation: An Introduction

Former US Secretary of Education Terrel Bell hit the nail on the head when he mentioned, “There are three things to remember about education. The first is motivation. The second one is motivation. The third one is (you guessed it) motivation” (Ames, 1990). Bell echoes the sentiments of many others who view motivation as the essence of education (Bransford, Brown, & Cocking, 2000; Dennen & Bonk, 2007). Consider the following quotation from an online instructor we interviewed:

Getting the kids hooked in for the graduate courses . . . I'm constantly racking my brain as to how to get them more involved and get more interaction going. . . . Because it seems to me as though they are not necessarily engaging. I don't know whether the re-

sources aren't catchy enough or whether there's nothing I can do, whether it's actually them in the sense of they just haven't got the time or they just don't see it worthwhile. I tear my hair out. I don't know what to do to change it and I don't have the time to change it which is probably part of it as well (Laura, novice online lecturer).

Laura's comments typify some of the challenges faced by online lecturers. How do they motivate their learners to engage productively in Web-based learning environments? In Web-based contexts, understanding what motivates learners to study online and to continue to completion can give us clues as to how to best design and structure online courses to engage learners and encourage them to run the race to the end. Enhanced knowledge of learner motivation can give us greater insight into why some learners are more likely to be more successful than others along the way.

We begin by offering several perspectives on the term "motivation." Atkinson (1964) defined it as "the immediate influences on the direction, vigor, and persistence of action." Wlodkowski (1999, p. 8) expanded on this definition when he said motivation is "the natural human capacity to direct energy in the pursuit of a goal. . . . [W]e are purposeful, we constantly learn and when we do we are usually motivated to learn, we are directing our energy through the processes of attention, concentration and imagination, to name only a few, to make sense of our world." Fundamental in these definitions and viewpoints is the idea that human beings are purposeful in their actions and intents; that is, they focus their energies and interests in the process of striving toward a desired goal.

Educational theorists have typically considered the issue of human motivation from the standpoint of the current thinking on how humans learn. As a basis for our recap of several pertinent learning theories in this chapter as well as in the introductory sections of the next 10, we spent several years accessing and reading many special reports, monographs, and education books related to motivation in education (e.g., Ames & Ames, 1989; Brophy, 2010; Deci & Ryan, 1985; Lambert & McCombs, 1998; McCombs & Pope, 1994; Raffini, 1996; Reeve, 1996; Schunk, Pintrich, & Meece, 2008; Stipek, 1998). We uncover many of these motivational ideas through the following brief overview of four major theoretical eras: (1) behaviorism, (2) cognitivism, (3) constructivism, and (4) sociocultural theory.

## **Learning Theory #1: Behaviorism**

### **Learner Motivation Through Carrots and Sticks**

Behaviorists generally believe in scientific and objective measures of behavior to provide plausible explanations of learning. Such objectivistic theories were prominent throughout the first half of the twentieth century and still permeate educational settings today. Take the recent emergence of course management systems to offer online courses in a prestructured manner. Such highly structured or "canned" approaches are also apparent in MOOCs, which often rely on the instructor's preset delivery of content and later student regurgitation of it in computer-scored objective tests.

Unfortunately, internal aspects of human motivation were often ignored back in the 1920s, 1930s, and 1940s when behaviorism rose in prominence (Svinicki, 1999). The human mind was considered a “black box” that was too subjective and not to be trusted for scientific scrutiny. Experiments from this era were often conducted using water- or food-deprived animals, such as pigeons, dogs, mice, and cats. Among the best-known studies are Ivan Pavlov’s training of dogs to salivate in response to the sound of a bell. You can watch a video today on YouTube of Pavlov and his dogs and another of Edward Thorndike’s cats learning to escape from puzzle boxes, which showcase the concepts of trial and error and reinforcement.

A central aspect of behaviorism is that animals (including humans) learn by associating a stimulus to a response (or paired responses) that is promoted through external manipulation. In effect, human behavior can be reinforced or extinguished. It is malleable through rewards or punishments, hence the notion of carrots and sticks.

From this view, in an online or F2F classroom setting, the instructor is the dispenser of rewards and punishments while learners are mere passive respondents. Important in this idea of external manipulation is that external stimuli can affect student motivation to learn. For example, extrinsic motivational factors such as online scaffolds and guides, praise from tutors and instructors, and offering certificates on the way to master’s degrees are deemed important to online learners (Singh, Singh, & Singh, 2012).

***Encouragement and Feedback Principle.*** Based on work by Skinner (1938), the role of feedback in enhancing student motivation is particularly underscored. Providing feedback has been shown to enhance student performance and self-efficacy in learning (Wang & Wu, 2007). Timely feedback is widely recommended as part of an online lecturer’s pedagogical repertoire and is consistently mentioned as a vital principle of effective teaching and learning in general (Butler, 2003; Chickering & Gamson, 1987). An example of providing learners with ongoing personalized feedback and assessment to enhance their motivation for learning is seen in the assessment of large undergraduate classes in Japan. This system allows students in basic computing courses to sit for a number of short online tests throughout the course to assess their ongoing performance, obtain feedback on their progress, and receive recommended resources and teaching materials suited to their improvement level (Koike, Ishikawa, Akama, Chiba, & Miura, 2005).

Similarly, among the latest developments in this area of computerized learning programs is the creation of Knewton. As an adaptive learning platform, Knewton can be integrated into online or hybrid courses to provide customized, personalized, and immediate feedback. In effect, it adapts the learning materials according to students’ learning curves (Fischman, 2011). Based on behavioristic notions of feedback and corrective learning behavior, Knewton assesses what students are learning and how they best learn (that is, their learning styles). It also tracks their performance and progress, involves parents in students’ learning, recommends a range of learning resources (videos, animations, interactive games, quizzes, and so forth) that are staged according to progressive levels of difficulty. Drawing from a networked database of learner progress, it can even recommend and pair students with partners of a similar learning style or profile to supplement their learning. Such forms of personalized learner feedback are currently growing and they not only free up teachers to focus on helping learners develop their higher-order thinking skills, but also give them the opportunity to customize their teaching strategies.

Based on the theoretical and empirical ideas emerging from this era, behavioristic ideas related to shaping, feedback, and support underpin the second aspect of the TEC-VARIETY framework. Although considered antiquated by many psychologists and educators today, behaviorist elements still exist in countless education, training, and clinical settings. Educational strategies embracing behaviorist ideas were pervasive in first-generation online learning programs through their use of clear objectives and learning outcomes, clear presentation of content and multimedia materials, and the incorporation of online testing to assess the individual learner's achievement and provide rapid and individualized feedback.

As we see, the behaviorist tradition often reduced ideas of human motivation and learning to that of external stimulation and fairly rigid quantitative measures. Fortunately, the next wave of views of human learning and motivation recognized the centrality of the human mind and sought out qualitative measures for understanding human motivation and learning. At that time, researchers began to investigate increasingly intrinsic aspects of human motivation.

## **Learning Theory #2: Cognitivism**

### **Learner Motivation Through Intentional Goals, Beliefs, and Expectations**

In the 1970s and 1980s, cognitivism shifted the prevailing emphasis on external or environmental conditions toward a focus on the internal or mental processes occurring between a stimulus and response (Schunk, 2008). Simply put, the black box was opened up. With the rise of the computer and computing technologies, human learning or information processing became analogous to computer processing that could address more complex forms of learning (thinking, memory, problem solving, language, concept formation, information processing) (Ertmer & Newby, 1993). Learning in the era of cognitive psychology was viewed as a process of knowledge acquisition where the teacher transmitted information and assisted learners to develop more efficient processing strategies to organize information in a meaningful way. From this viewpoint, learners are active seekers and processors of information, able to attend to, code, select, transform, rehearse, store, and retrieve information. Along the way, they develop the appropriate metacognitive skills, including self-planning, self-regulation, and summarization. With such skills, the learner can assert greater control over his own learning (Schunk, 2008).

Cognitive psychology research inspired a host of experimentations with distance learning. Although such research initially took place with satellite technology, television, and interactive videoconferencing, its impact is now apparent in fully online learning and blended learning courses and programs. The initial goal of such research was to begin incorporating strategies that would enable learners to process the material more efficiently. A cognitive approach leveraged the processing and multimedia capabilities of the computer to present information in different modes, be they textual, verbal, or visual (i.e., multimedia), and to allow learners to explore such material according to their personal needs (i.e., hypermedia). This approach also encouraged information encoding

through the use of concept maps as well as analogies and acronyms. Similarly, online notecards, outlining tools, job aids, and question prompts could augment or support learners' limited working memory capabilities when reading or writing (Bonk, Medury, & Reynolds, 1994).

Research in cognitive psychology lends insight into how to adapt learning materials to suit a variety of learning styles or perspectives. It also influences how instructors utilize intrinsic and extrinsic motivational strategies to encourage learners to learn, giving learners opportunities to reflect on their learning and to monitor their own progress through self-check questions and exercises with feedback. When effectively implemented, such approaches help learners develop the requisite metacognitive strategies that can drastically improve their learning approach and outcomes (Mayer, 2003).

At the height of the cognitive psychology movement, much headway was made in terms of motivational theory development (Brophy, 2010; Svinicki, 1999). Key motivational theories derived at that time included attribution theory (Weiner, 1980), self-efficacy (Bandura, 1989), goal orientation theory (Ames, 1992; Dweck, 1986), and self-determination theory (SDT) (Deci, Vallerand, Pelletier, & Ryan, 1991).

Attribution theory focuses on explanations for motivation based on individuals' beliefs regarding the causes of their success or failure. Learners may attribute their success or failure on a task to themselves (e.g., their own ability) or to external situational factors (e.g., luck). Teachers can take appropriate measures to focus students' attention on factors that they have control over instead of uncontrollable external forces.

Self-efficacy is the belief or judgment of your ability to perform a task at a certain level to achieve particular goals. Learners with a high self-efficacy for learning believe in their ability to initiate successfully, cope with, and complete their learning task. Self-efficacy determines the level of effort and the degree of perseverance a learner is willing to invest when faced with setbacks (Bandura, 1986). Bandura's notion of self-efficacy and self-regulation has been successfully applied in the design of motivationally engaging online learning environments to encourage personalization, adaptivity, effective tutoring, and collaborative learning among students (Cocea & Weibelzahl, 2006).

Goal orientation theory examines individuals' cognitive motives and their relationship to intrinsic motivation. It highlights learners' behavior as determined by the type of goals they hold, such as learning goals or performance goals. When focused on learning goals, on the one hand, students are motivated to learn for intrinsic reasons, such as to enhance their knowledge, skills, and attitudes. Students with performance goals, on the other hand, are motivated by the need to demonstrate their competency and capability especially in competition with their peers. Performance-oriented goals tend to lead to more shallow and less diverse learning strategies.

Self-determination theory (SDT), however, describes motivation as being intrinsic or extrinsic in nature (Deci et al., 1991). Intrinsically motivated individuals are driven by an interest or enjoyment of a task, whereas extrinsically motivated individuals are driven by external rewards such as grades, punishment, coercion, and money. SDT emphasizes that individuals need to be self-determining or to have some degree of control in determining behavior. Importantly, it advocates that individuals' natural and intrinsic tendency to grow and develop can be fostered through supportive learning contexts that encourage learner autonomy, competence, and relatedness (Ryan & Deci, 2000).



Autonomous individuals exhibit higher levels of control and tend to experience a sense of freedom and choice over their actions.

***Autonomy Principle.*** Studies that have explored how to facilitate learner intrinsic motivation support the need for autonomy, competence, and relatedness (Pink, 2009). For instance, a study by Hartnett, St. George, and Dron (2011) revealed how situational factors can disrupt online learner autonomy and competence, thereby having an adverse impact on learners' levels of intrinsic motivation and collaborative effort in a blended learning context. Without sufficient intrinsic motivation, online learners will fail to elaborate on their arguments or problem solutions in group discussions (Xie & Ke, 2010). Not too surprisingly, Xie, DeBacker, and Ferguson (2006) have found that learners' intrinsic motivation was significantly related to their participation rates, and thus to the overall learning process. In fact, intrinsically motivated learners exhibited two to three times the participation rate of those who were extrinsically motivated.

Recently, other cognitivist principles such as learner academic locus of control (internal as opposed to external attribution of outcomes) and metacognitive self-regulation skills (such as the ability to self-evaluate, organize, monitor, review, and seek information) have been explored (Lee, Choi, & Kim (2012). Youngju Lee and her Korean colleagues compared differences between online students who persisted with their studies and those who dropped out. They found that students' perceptions of academic locus of control and metacognitive self-regulation for learning were the most important factors influencing their decisions to drop out. They recommend that online educators assess these two factors prior to students embarking on an online program, so that customized support and lessons can be tailored to students' learning needs.

***Curiosity Principle.*** Applications of SDT in educational settings to promote learners' intrinsic motivation have been extended to include learner-centered elements in the design of F2F as well as online courses. Such elements include enthusiasm, challenge, curiosity, choice, engagement, control, novelty, fun, fantasy, relevance, collaboration, and project tasks (Deci et al., 1991; Kawachi, 2002; Lepper & Hodell, 1989). Not too surprisingly, each element is aligned with the TEC-VARIETY framework.

As will be discussed in Chapter Six, researchers interested in the psychology of gaming, such as Thomas Malone (1981), have explored the intrinsic motivational properties of computer games. In particular, Malone was interested in how these games fostered a sense of fun, fantasy, challenge, and curiosity. Gaming principles related to learner Curiosity (surprise, intrigue) and Autonomy (choice, control) underpin the third and fifth components in the TEC-VARIETY framework.

## **Learning Theory #3: Constructivism Learner Motivation Through Active and Social Construction of Meaning**

Although cognitivism is progressive in bringing the need for students' control of their own learning to the forefront, it is still a highly individualistic concept of learning and



knowing. In the 1980s and into the 1990s, constructivism enjoyed increasing popularity. It championed a view of learners as actively involved in creating meaning from their experiences, instead of being spoon-fed knowledge through instruction (Ertmer & Newby, 1993). Decades prior to wider acceptance, proponents of constructivism had already included such notables as John Dewey, David Ausubel, Jerome Bruner, and Jean Piaget.

Constructivist views deem learning to occur best in problem-based settings where learners are required to use their prior knowledge and experiences to explore, inquire, interpret, reflect upon, judge, and construct understandings for themselves. Constructivist teaching approaches shift the focus from the teacher to the learner. In this approach, the teacher becomes the coach or the guide at the side who helps learners acquire knowledge on their own schedule. Specific constructivist-advocated teaching strategies include many active learning principles such as situating tasks in real-world contexts, goal-based learning attuned to learner interests, and guiding and coaching a novice toward expert performance as in a cognitive apprenticeship (Collins, Brown, & Newmann, 1989).

In terms of specific principles, an instructor wedded to constructivism might rely on the presentation of multiple perspectives by using collaborative learning to develop and share alternative views. She might also require social negotiation as found in debates, controversial discussions, and evidence giving. And she might utilize authentic examples and offer opportunities for reflective awareness on solutions, thereby fostering the development of self-regulatory skills (Jonassen, 1994).

***Tension Principle.*** Motivational theories that embrace constructivist ideas are based on the need for learners to have “consistent, accurate and useful understandings of the world” (Svinicki, 1999, p. 20). For example, Jean Piaget (1926) and his followers found that tension or controversy can move learners into a state of disequilibrium, thereby motivating them to find out more information in order to return to a state of equilibrium. Such principles are embedded in the ninth principle of the TEC-VARIETY model related to arousing motivation through tension and conflict.

***Variety Principle.*** A study by Leslie Miller and her colleagues (2011) at Rice University tested the extent to which Web-based forensic games were useful in engaging secondary science students to consider science, technology, engineering, and mathematics (STEM) careers. The games were designed to be ill-structured situations where students had to role-play and solve a real-life scientific problem. This process appealed to students and challenged them to engage with new science ideas in a novel manner. It also tapped into their personal fantasies and provided a fun and relevant context for them to engage with science content. At the end of the study, not only did students’ content knowledge increase but, more important, the role-play exercise elevated their motivation to take up future science careers. This gaming task relates to the curiosity and variety principles of the TEC-VARIETY framework.

***Setting the Tone/Climate Principle.*** In the current age of much learner choice and autonomy, humanistic ideas from decades past have begun to flourish once again. Humanistic psychologists view learners as seeking to better themselves through their learning experiences. Learner-centered ideas that place the learner at the core of the education process are central to humanistic psychology doctrine. Without a doubt, such views have recently risen in prominence. We should not forget, however, that giving

learners the autonomy, choice, and control over what they are learning and how best to learn was derived decades ago from the work of famed humanistic psychologists, such as Carl Rogers (1983) and Abraham Maslow (1987).

Both Rogers and Maslow spoke of the need to have a psychologically safe environment for learning. According to Rogers, the learning environment should be filled with respect, genuine forms of learning, and choice or freedom to learn. This has been a challenge for online learning environments, particularly those involving only asynchronous forms of communication which are often presumed to be cold and impersonal. Such environments lack the usual communicative cues we take for granted in F2F learning environments. The lack of social presence and verbal cues from the instructor as well as from peers in the course is often blamed for the acute sense of isolation and disconnectedness that online learners experience.

Research conducted during the past couple of decades has shown that it is possible to reduce the traditional social and psychological distance perceived by participants in online courses. The use of teacher “immediacy behaviors” is pivotal, however. Teacher immediacy behaviors can be verbal or nonverbal. Verbal immediacy relates to the increase in the psychological closeness between teachers and students. It is displayed in the use of student names, humor, encouraging student feedback, finding out how students are, and sharing personal experiences. In contrast, nonverbal immediacy includes cues communicated through smiling, eye contact, body movements, and vocal expressiveness (Hutchins, 2003).

In online environments, the teacher’s verbal immediacy behavior is particularly essential for setting the tone and climate conducive to enhancing student participation, satisfaction, and overall learning. Ben Arbaugh’s study (2001) of student satisfaction in an online MBA course found that lecturer immediacy behavior was a positive predictor of student satisfaction. Hutchins (2003) added that a sense of immediacy can also be related to course design or how a teacher arranges the course components in support of learners’ internal learning processes. For example, embedding help systems, online tutorials, and computer-scored exams can lend a sense of immediacy in feedback and support.

The TEC-VARIETY framework reflects these important principles, specifically that of setting appropriate tone or climate in the class (first principle), adding a variety of interesting tasks (fourth principle), and using tension or challenge (ninth principle) to facilitate learner interaction and exploration of course materials.

## **Learning Theory #4: Sociocultural Views Learner Motivation Through Considerations of the Cultural Milieu**

In the 1990s, there was an obvious shift in education and psychology toward acknowledging the role of social and contextual processes in how we learn. Some have argued that our cognitive processes are inherently cultural and thus inseparable from the spe-

cific situations in which we live (Rogoff, 2003). Most prominent among sociocultural theorists is Russian psychologist Lev Vygotsky (1978). Vygotsky recognized that scaffolded instruction by more knowledgeable others at the edges of a learner's zone of proximal development is pivotal to understanding human learning and development. Today, technology tools can foster new forms of such scaffolded support with word processors, grammar checkers, concept mapping tools, online think sheets, and referenceware like Wikipedia. People learn through their participation in commonly valued activities of a particular group where cultural tools such as language and artifacts help mediate learner understanding and meaning making in a highly collaborative learning process (Lave & Wenger, 1991). The sociocultural orientation is manifested through popular learning approaches and instructional ideas that have arisen since the late 1980s including situated cognition (Brown, Collins & Duguid, 1989), problem-based learning (Savery & Duffy, 1996), communities of practice (Wenger, 1998), and various ecological perspectives on learning (Barab & Roth, 2006).

Current online learning programs provide learners assorted means of electronic access and interaction with the learning materials. They also encourage fellow learners and tutors to emphasize strategies such as collaborative learning and the negotiation of ideas. Perhaps most salient and striking is the change in the role of the lecturer from an expert to that of a colearner or learning concierge and curator. As this change occurs, students become increasingly responsible for their own learning.

***Interaction Principle.*** The role of interaction with instructors and expert guests as well as with peers is underscored by the sociocultural approach. Various types of interactions are necessary to promote a supportive community of inquiry or learning community in online learning contexts. For example, Karen Swan emphasized learner interaction with the course content, the lecturer, and with peers (Swan, 2001). Other online learning researchers like Liam Rourke and his colleagues (Rourke, Anderson, Garrison, & Archer, 1999) have explored affective, interactive, and cohesive interactions. Still others have highlighted intellectual, social, and emotional interaction (Khoo & Forret, 2011).

Studies have revealed that interaction and socialization have a direct impact on online learner motivation (Xie & Ke, 2010). Specifically, interaction and socialization foster learners' intrinsic motivation and engagement in a course (Shroff, Vogel, Coombes, & Lee, 2007). They also influence student satisfaction and their perception of learning (Swan, 2001) including those of students in online MBA courses (Arbaugh, 2000).

So crucial is the notion of interaction in traditional and online learning environments that it is frequently cited as a key feature in principles of effective teaching practices (e.g., Chickering & Gamson, 1987). Besides learner-learner and learner-content interactions, learner-expert interactions are also vital in designing environments rich with authentic and problem-based learning (Grabinger & Dunlap, 1995).

***Relevancy Principle*** (also *Curiosity, Interactivity, Engagement, Tension, Yielding Products*). Perhaps the most widely researched teaching strategy of this recent sociocultural learning era is that of making learning relevant, authentic, and meaningful to students. Researchers such as Herrington, Reeves, and Oliver (2006) have advanced current ideas on authentic learning in Web-based learning contexts to spur students to undertake deeper and more meaningful approaches to learning. Authentic learning tasks are typically ill-structured and complex. They also tend to utilize different forms of

collaboration, involve creating a group product, embedding opportunities for reflection, and encouraging the exploration of a diversity of ideas and solutions. In such contexts, learners are empowered to choose what they need to learn, why they need to learn it, and how and in what order that learning will take place.

Current studies also underscore the importance of using relevant and authentic tasks among self-directed online learners as a way of fostering their intrinsic motivation to learn (Kim, 2009). Online corporate trainees tend to prefer the goal-driven aspects of product- and case-based learning approaches as well as opportunities for role play and debates (Bonk, Kim, & Lee, 2004). Similarly, students enrolled in professional programs want their learning related to real-life practice (Kember, Ho, & Hong, 2008). At the community college level, authentic tasks have been shown to reduce attrition rates (Aragon & Johnson, 2008).

The notion of relevancy is pivotal in many contemporary pedagogical frameworks that recognize learner-centered principles such as authenticity, collaboration, and active engagement (Toporski & Foley, 2004). Having a purpose or mission as well as a variety of challenging and fun topics is also vital (Butler, 2003).

Relevancy is also a cornerstone in the ARCS model developed by John Keller (1987, 2010) of Florida State University. The ARCS model can help online educators and trainers plan and design motivationally engaging courses and programs. In the ARCS model, four dimensions of motivation—attention, relevance, confidence, and satisfaction—contribute to students' interest, effort, and performance in a course. Gaining students' attention through resources that increase their curiosity or sense of inquiry is foundational for learning. This model is renowned for its systematic design and application of the ARCS dimensions across a variety of educational contexts (Cocea & Weibelzahl, 2006; Keller, 1999; Keller & Suzuki, 2004; Kember et al., 2008; Song & Keller, 2001). Kim and Frick's study (2011), for instance, highlighted the relevancy element in the ARCS model. More specifically, their study found that in addition to age and competence with technology, the best predictor of student motivation to initiate self-directed e-learning was the relevancy of the course to students' personal learning goals.

In sum, active and social collaborative strategies emphasizing the use of relevant and meaningful tasks (sixth principle), interactivity (seventh principle), engagement (eighth principle), and yielding products (tenth principle) underpin the entire TEC-VARIETY framework.

***Tone/Climate and Variety Principle.*** A further contribution from the sociocultural era is the incorporation of ideas centered on “culture” in education. Social psychologists and anthropologists have long indicated the need to understand the virtues and unique aspects of how groups form, be it according to culture, ethnicity, or gender. Understanding group formation and growth is increasingly vital for online educators as social media proliferates and Web contexts continue to attract a rich and diverse range of learners across varied geographical locations, languages, cultures, gender, ages, and socioeconomic backgrounds (Hartnett, Bhattacharya, & Dron, 2007).

Considerations of culture in the design of online learning environments have largely been ignored until recently. However, as online learning becomes increasingly global, it is critical for online lecturers to be culturally sensitive in their tasks and examples. In order to ensure the success of all learners, effective online educators acknowledge

the cultural capital and contribution that each student brings into the learning context. For instance, some students may come from collectivist-oriented cultures where one would quickly identify with a particular group's culture and goals, whereas others will undoubtedly come from more individualistic and competitive cultures and maintain goals geared toward personal success (Clem, 2005).

Along these same lines, Wlodkowski (1999) highlighted how strategies adopted by educators may, in fact, contribute to a lack of intrinsic motivation among some students. As an example, course icebreaker activities typically require students to share aspects of their personal experiences, beliefs, or feelings with others in the course. Although some students enjoy such interactions, those from cultures unfamiliar with such self-disclosure may be distressed by it. Wlodkowski cited how such experiences can be disconcerting for Asian Americans, Latinos, and Native Americans who typically confine such expressions to family members. Such tasks, in fact, can alienate some students from the rest of the class. Suffice it to say, such studies across countries and cultures raise important considerations for online educators to account for student diversity and their cultural contexts when adopting learning and motivational strategies to ensure the success of all students in the course.

Recognition of learner cultural diversity is acknowledged in our TEC-VARIETY framework, specifically that of setting appropriate tone or climate to foster a sense of belonging in the class (first principle) and using a variety of culturally relevant and inclusive strategies (fourth principle).

## Trends and Takeaways

Current trends in motivational research highlight the dynamic, complex, and multi-dimensional nature of the factors influencing human motivation and action in online learning contexts (Hartnett et al., 2011). The evolution of motivational models (including our TEC-VARIETY framework) portrays a shift from individual cognitive and affective processes to current views of a more dynamic and embedded relationship between the individual and her social context. Wlodkowski reminds educators not to focus only on one particular motivational technique or strategy as a panacea for facilitating intrinsic motivation but rather to consider a combination of strategies and how to combine them meaningfully in a way that their mutual influence might bring about maximum effect in a class.

And that is a key intent of the TEC-VARIETY framework. There are 10 principles that educators can put to work either singly or using two or more together. The more integrated and coordinated the elements in the instructional design, the more likely they are to sustain learner intrinsic motivation. Our friend Tom Reeves (2006) from the University of Georgia expanded this idea of integration to include aligning course components such as goals, tasks, student and instructor roles, course design, content, the available technology, and the instructor's own assessment practices. When thoughtfully blended together, these components develop students' capacities across the cognitive, affective, conative (i.e., striving, volition, desire, and so on), and psychomotor realms.



In this chapter, we visited four different theoretical perspectives and their underlying assumptions of how people learn and are motivated to take action to achieve their learning goals. While discussing these four psychological accounts of learning that have arisen in succeeding order during the past century, we highlighted studies that provided evidence for the viability of the 10 principles of our TEC-VARIETY framework. To help visualize the connection between learning theory and aspects of the TEC-VARIETY framework, see Table 3.1 which is intended to help instructors locate each principle in our framework in relation to the theoretical underpinning it serves (a check mark indicates that a theory supports a particular principle).

We encourage educators to gauge the usefulness of each motivational component found in TEC-VARIETY and consider how well it fits with their typical instructional strategies, course goals, content, types of learners, and overall teaching philosophy. Consider for a moment your own beliefs about how people learn. Then reflect on the extent to which you are comfortable in taking risks in using new technologies and teaching strategies. Perhaps this chapter will help you begin to think about which motivational principles may be lacking in your own courses. We hope that you continue to reflect on your pedagogical practices when perusing and selecting from among the 100+ activities put forward in the following 10 chapters of this book in accordance with the TEC-VARIETY framework.

The TEC-VARIETY framework is intended to be a helpful mnemonic for 10 key motivational principles for online learning success. It is a toolkit or online teaching guide. It can also be a framework that offers theory-to-practice-driven personal reflections at the end of a task, module, or course. TEC-VARIETY and the repertoire of practical ideas in the 100+ activities that follow in the following 10 chapters can empower you to adapt your instruction for higher levels of student motivation and engagement. If successful, you will enhance the quality of your class interactions, facilitate lifelong learning ambitions in your students, and help mitigate against student attrition.

It is now time to read on through the next 10 chapters and, we hope, to add a bit of TEC-VARIETY to your own courses.



# Praise for *Adding Some TEC-VARIETY*

*“There are books on theory and books on practice, however this is the best volume ever written for using learning theory to inform effective practice. This book is a tour de force for creating an environment where students not only succeed in online learning, but they achieve excellence as well.”*

—**Charles (Chuck) Dziuban**, Director, Research Initiative for Teaching Effectiveness (RITE), Professor Emeritus and Inaugural Pegasus Professor, University of Central Florida, and Sloan-C Fellow

*“An excellent book from world leaders in the field that will be of great value for educators and designers. Presents concrete examples grounded in solid ‘practical’ theory.”*

—**Charalambos Vrasidas**, Executive Director of the Center for the Advancement of Research & Development in Educational Technology (CARDET), Associate Dean for eLearning, University of Nicosia, Cyprus, and author of several information technology and distance learning books

Based on 10 theoretically driven and proven motivational principles, *Adding Some TEC-VARIETY* offers 100 practical yet innovative ideas to motivate online learners and increase learner retention.

## What motivates?

1. **Tone/Climate:** Psychological Safety, Comfort, Sense of Belonging
2. **Encouragement:** Feedback, Responsiveness, Praise, Supports
3. **Curiosity:** Surprise, Intrigue, Unknowns
4. **Variety:** Novelty, Fun, Fantasy
5. **Autonomy:** Choice, Control, Flexibility, Opportunities
6. **Relevance:** Meaningful, Authentic, Interesting
7. **Interactivity:** Collaborative, Team-Based, Community
8. **Engagement:** Effort, Involvement, Investment
9. **Tension:** Challenge, Dissonance, Controversy
10. **Yielding Products:** Goal Driven, Purposeful Vision, Ownership

This is the book you need to grow your online teaching repertoire in innovative ways that will grab your students' attention and imagination. **Additional book resources as well as a free e-book are available for download at <http://tec-variety.com>.**

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