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CHAPTER 9

Motivation

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Motivation to learn, as initially described by Brophy (2004), is the tendency to find learning activities meaningful and worthwhile and to benefit from them—to try to make sense of available information, relate this information to prior knowledge, and develop additional knowledge and skills. Motivation is basic to survival. It is the natural human process that fuels the energy and direction of human behavior (Reeve, 2009). Being motivated means being purposeful; achieving goals through attention, concentration, imagination, and other processes to accomplish our intentions. Yet attempting to understand what human motivation is requires the realization that the causes of human behavior evade any simple explanation or prescription. Depending on their discipline and cultural context, the definition of motivation and the concept of *motivation to learn* varies among scholars.

This overview of adult motivation to learn addresses the range of topics upon which researchers in this field have primarily focused. We begin with a review of the multidisciplinary orientation to understanding human motivation to learn and then proceed to how the concept of adult motivation and its relationship to adult characteristics has evolved. We then discuss the elements that comprise an educational and instructional perspective of adult motivation to learn. These take into consideration intrinsic motivation, a motivational framework for teaching adults, online learning, and transformative learning. The chapter concludes with a discussion of educational programs and improvements designed to increase persistence and degree completion among underserved adult learners.

Motivation to Learn: A Multidisciplinary Perspective

Most social scientists regard motivation as a concept that explains why people think and behave as they do (Weiner, 1992). We know from psychological research that it is part of human nature to be curious, to be active, to make meaning from experience, and to be effective at what we value (Lambert & McCombs, 1998). These are primary sources of motivation that reside in all human beings and are basic to our survival and our capacity to thrive.

Neuroscience provides a biological perspective. Within this rapidly emerging field, motivation is a process that determines how much energy and attention the brain and body assign to a given stimulus—whether a thought or a situation (Ratey, 2001). This effects the initiation, mediation, and outcome of a learning experience. How we start, how we continue, and how we complete a learning endeavor are all motivational processes that are indivisible from learning itself. In reality, motivation is not an either/or condition, but when motivation to learn is low, we can generally assume that learning will be diminished (Reeve & Lee, 2012).

Motivation and learning are inherently cultural (O'Brien & Rogers, 2016). Culture is the deeply learned mix of language, beliefs, values, and behaviors that pervade every aspect of our lives (Geertz, 1973). The cultural group(s) within which we are socialized influence systems throughout our brains, the language we use to think, the way we travel through our thoughts, how we communicate, and how we make sense of and mediate moral decisions. Although how we interact and make sense of the world may change as we age, the influence of early socialization is significant. Emotions as basic as joy and fear are initially felt and understood within the cultural contexts of our communities, families, and peers (Barrett, 2005). In any situation, and certainly when we feel threatened, emotions mediate what and how we prioritize. Every moment is a competition among our senses to perceive what matters most (Ahissar et al., 1992). Emotions add relevance and human beings are compelled to pay attention to what matters.

In learning and life, relevance guides attention and is basic to survival. In this regard, engagement with any learning task is always in a state of flux, diminishing, strengthening, or changing emotionally. From the written words on a single page of a book or in the span of 5 minutes in a course, learners may experience a range of emotions: inspiration, curiosity, futility, and inspiration once again. This dynamic makes sustaining learning a nuanced endeavor that warrants careful instructional planning. As discussed later, when instructional plans are also motivational plans, educators increase the likelihood that students will direct their energy, attention, and interest to educational tasks throughout an entire learning experience.

Adult Motivation to Learn: Research and Conceptual Understandings

A review of the literature on the relationship between adult motivation and learning is international in its scope and includes wide-ranging considerations: cultural contexts, learning environments, academic levels, multiple disciplines, motivational theories, and stages of development. Most of the research on adult motivation and learning outcomes are small-scale studies or case studies of specific teaching practices in relation to adult learning. Often, the term *adult learner* is synonymous with *nontraditional learner*, which may mean one or more of the following: entry to college delayed by at least a year following high school, having dependents, being a single parent, being employed full time, being financially independent, attending part time, and not having a high school diploma (Ross-Gordon, 2011).

There are large-scale studies that consider instruction as one of several institutional factors that influence student success, for example Kuh et al. (2010). However, few, if any, specifically focus on adult motivation, cultural diversity, or are grounded in a comprehensive synthesis of research on postsecondary teaching and learning. Given increased attention to college completion, marketable skills for learners from a wide range of backgrounds, and persistent disparities in postsecondary graduation rates, the need for large scale studies that connect teaching adults to learning outcomes and persistence has never been greater (Silva & White, 2013).

Some of the strongest analyses of the relationship of motivation to learning are found in youth education. In this body of research, there is substantial evidence that motivation is consistently and positively related to engagement, learning, and educational achievement (Hulleman & Barron, 2016). Several studies include precise investigations that range from targeted interventions to comprehensive interventions that also consider curriculum and teaching methods (Lazowski & Hulleman, 2016).

Since motivation is situation specific, its meaning, purpose, and context will affect its quality and intensity. For example, an adult might be highly motivated to play an instrument with their family, but not motivated to play music with other people or, for that matter, not motivated to perform in front of an audience.

Within the last decade, research on learners' engagement has gained considerable attention. As concepts, motivation and engagement are related (Shernoff, 2013). Motivation can be seen as an individual's behavior, goals, beliefs, emotions, and thoughts. Research on engagement focuses more on the observable interaction between the person and a system or environment with emphasis on activities or relationships. When applied to learning, motivation and engagement studies converge and include active participation in academic activities, the role of energy and effort, and the influence of culture and context on learners (Christenson et al., 2012). Thus, we consider engagement to be a motivational construct.

Characteristics of Adult Learners

Responsibility is the cornerstone of adult motivation. Most cultural communities view adults as more responsible for their actions than children. The deep social value of responsibility is why competence—being effective at what one values—looms so large as a force for adult learning. Most employers and educational institutions value and reward self-directed competence and many adults are socialized with these values. These cultural conventions account for one of the most widely accepted generalizations in adult education: Adults are highly pragmatic learners.

The second major characteristic that distinguishes adults' motivation to learn is accumulated experience and learning. The sum of adults' personal knowledge contributes to a higher regard for learning that is useful, relevant, and interesting. Neuroscientifically, prior knowledge determines what adults are attuned to and will likely concentrate on (Zull, 2006). Maturity of brain development makes a difference. In the United States, the legal age for many privileges and responsibilities of adulthood is 18, for example voting and eligibility for military service. However, emerging evidence suggests that the prefrontal cortex is often not mature until at least the age of 25, with some evidence that women develop somewhat earlier than men (Arnett, 2015). Across genders, it continues to develop throughout life (Audesirk et al., 2008).

The neurons in the frontal lobe form rules from learned experiences that support cognitive processes such as self-control and planning complex tasks (Wallis et al., 2001). This is where we create holistic views of what the world is, what we want to do about it, and what direction we want to pursue (Zull, 2011). These findings may reflect adults' greater desire to learn for a sense of accomplishment, effectiveness, and the value of what is being learned.

What these differences in biology and experience mean motivationally is that adults are likely to have certain characteristics, some of which overlap with youth motivation:

- To be sensitive to and require respect from their teachers as a condition for learning
- To use relevance (what matters rather than what is playful or stimulating) as the ultimate criteria for sustaining their interest
- To be more critical and more self-assured about their judgment of the value of what they are learning
- To be reluctant to learn what they cannot endorse by virtue of its value, usefulness, or contribution to their goals
- To want to actively test what they are learning in work and other settings
- To want to use their experience and prior learning as consciously and directly as possible while learning
- To want to integrate new learning with their roles in family, work, and community

There are other distinguishing characteristics in terms of motivation to learn, but research, theory, and our own history as educators suggest that the influences of responsibility and experience are the most notable.

Intrinsic Motivation and Adult Learning

Theories of intrinsic motivation strongly associate with characteristics of adult learners. As defined by Ryan and Deci (2000), "intrinsic motivation is entailed whenever people behave for the satisfaction inherent in the behavior itself" (p. 16). For example, someone reads a novel because they find it innately interesting. Behavior that people find intrinsically satisfying likely conforms to what they are physiologically, psychologically, and culturally disposed to want or need, for example, being effective at work or in their communities. When adults see that what they are learning makes sense and is important according to their values and perspectives, their motivation emerges. Such circumstances elicit intrinsic motivation.

Intrinsic motivation is evoked. It is a form of physical energy that emerges within supportive and relevant environments, for example, environments with familiar cultural values, behavioral norms, and roles. As conceived by Barrett (2017), such motivation is an interoceptive activity, a feeling constructed from all of the sensations in our bodies and the instantaneous melding of our neuronal networks. When adults feel respected, care about what they are learning, and know they are becoming more effective at what they value, intrinsic motivation surfaces like a cork rising through water.

Intrinsically motivated learning promotes enduring learning, the genesis of which is usually an engrossing and successful learning experience. This contributes to the trait of lifelong learning (Nakamura, 2001). It is commonly understood that being a lifelong learner is a highly valued trait within communities and work contexts. Fostering the will to learn may be of greater consequence than learning a specific thing at a specific time. Generally, people who eventually find satisfaction in reading, writing, calculating, communicating, exploring technology, and expanding their knowledge and skills are productive lifelong learners.

Researchers Richard Ryan and Edward Deci (2017), who have spent most of their lives studying the phenomenon of intrinsic motivation, believe the key to finding the act of learning worthwhile throughout life is developing motivation as an autonomous process. Intrinsically motivated lifelong learners possess a broad and deep goal orientation to learning. They find new learning to be challenging, interesting, worth mastering, and something they are capable of achieving. In general, learning experiences that foster autonomy (that feel volitional, self-regulated, and congruent with one's interests), competence (that indicate accomplishment and effectiveness), and relatedness (that feel socially connected to and cared about by others) encourage and develop lifelong learning. In addition, they probably increase an adult's sense of personal agency. Although contexts of cultures vary widely, there is emerging international evidence that intervention programs personally chosen by adults, and in which they are willing participants rather than externally controlled, are enterprises in which they are more likely to persist and experience the value of personal determination (Ibrahim & Alkire, 2007).

Such learning experiences may also contribute to feelings of flow. People are intrinsically motivated during flow: absorbed in an activity with little self-consciousness, realizing full participation with adequate skill in a challenging endeavor (Nakamura & Csikszentmihalyi, 2003). In such situations, there may be a feeling of transcendence or a merging with the activity and environment. Writers, dancers, therapists, surgeons, lawyers, pilots, and instructors report feelings of flow in repertoires of engrossing tasks. In fact, when interviewed, they report that flow experiences are among the major reasons why they enjoy and pursue the work they do.

Most adults have had flow experiences while engaged in challenging learning activities. If we think of our favorite courses and most effective instructors, we often remember being captivated by challenging and creative activities. With effort and concentration, we participated at heightened levels of motivation and skill that extended our capabilities. Because flow occurs throughout the world, this optimal state may have developed to help human beings recognize and preserve certain patterns of action.

As a guide to construct learning activities, flow experiences have remarkably similar characteristics:

- Goals are clear and compatible. For example, comparing different opening repertoires in chess to understand their cultural and competitive implications.
- Feedback is immediate, continuous, and relevant as the activity unfolds. For example, receiving auditory feedback while writing a piece of music.
- The challenge is in balance with our skills or knowledge but stretches existing capacities. For example, applying an analytical protocol to an existing set of data for insight into a medical problem in a health education course.

According to Nakamura (2001), at its highest qualitative level, intrinsic motivation is vital engagement: the experience of learning "characterized by both felt meaning (subjective significance) and enjoyed absorption" (p. 8). This kind of motivation occurs in the immediate experience of learning and over time as an enduring relationship or personal trait—a love of learning surrounding a particular subject. While vitally engaged, adults take what they learn seriously, possibly for years, realizing the subject has inherent worth to sustain concentration and energy. This allows for a range of commitments and vocational callings such as computer programming, architectural design, or political organizing—sustained actions that are personally significant to adults. Many educators are lifelong learners who know that vital engagement is most likely to occur when there is a "felt conviction" that the learning task is part of something "inherently important" (Nakamura & Csikszentmihalyi, 2003, p. 100).

A Motivational Framework for Teaching Adults

Psychological, biological, and cultural studies offer an essential understanding of adult motivation to learn: All adults want to make sense of their world, find meaning, and become effective at what they value. This is what fuels adult motivation to learn. The key to adult teaching is to evoke and encourage this natural inclination among adult learners from a range of backgrounds and identities. But how?

In her study of motivation and its impact on personal development, Dweck (2018) highlights a broader understanding of this question. She asks, "Within this field, many new motivational interventions have been designed and tested, but how do they all fit together and how can we evaluate and increase their efficacy?" (p. 42). The motivational framework for culturally responsive teaching (Wlodkowski & Ginsberg, 1995) responds to this query. Since its inception over 2 decades ago, it has become internationally recognized as an integrative application of research findings on intrinsic motivation, teaching, and learning. It has a cross-curricular reach. Adult educators continue to apply and research the framework in fields such as nursing, teacher professional development, ethnic studies, engineering, computer programming, and game design (Barnes, 2012; Rhodes, 2017; Zigarelli, 2017).

As a metaframework for instructional design it respects an essential tenet: No learning situation is culturally neutral. Learners are individuals with complex identities, personal histories, and unique living contexts. For example, a person is not just older or African American or female; she is older, African American, and female. This example is still too simple because it does not include her religious or spiritual beliefs, sexual orientation, and income or professional status, among other influences. Each of us has a variety of identities through which we make sense of things. The framework's four-question protocol requires instructors to reflect on learner diversity as a central consideration while planning instruction (Ginsberg & Wlodkowski, 2009).

The motivational conditions and related questions are:

1. Establishing inclusion: *How do we create or affirm a learning environment in which we feel respected by and connected to one another?*
2. Developing a positive attitude: *How do we create or affirm a favorable disposition toward learning through personal relevance and learner volition?*
3. Enhancing meaning: *How do we create engaging and challenging learning experiences that include learners' perspectives and values?*
4. Engendering competence: *How do we create or affirm an understanding that learners have effectively learned something they value and consider authentic for application in the world?*

Colleges and universities have more students than ever before whose perceptions and ways of making sense of interactions and information vary from one another and from their instructors. In 2013, just 14% of Latinos, 15% of Native Americans, 16% of Pacific Islanders, and 19% of Black adults over the age of 25 had earned a bachelor's degree, compared with 33% of White adults (Musu-Gillette et al., 2016). For learners with low incomes, disparities in educational attainment are even more pronounced (Snyder et al., 2016). Without an instructional architecture, adult educators tend to rely on intuition and a few "best practices" to elicit motivation among a broad range of learners. The motivational framework offers a theoretically coherent set of practices to codify, research, and experiment with for enhanced inclusion, diversity, and learning (Rhodes, 2018).

Online Learning

The internet has created access to knowledge more than any technological innovation in history. It is a force behind the acceleration of online learning in higher education and training. Nearly 90% of postsecondary institutions in the United States offer online courses and approximately 65% offer complete online degree programs (Allen & Seaman, 2012). The majority of online enrollees are nontraditional adult learners (Stavredes, 2011).

Most online adult learners reflect adult pragmatism. They want their education to prepare them for their careers, job changes, and to update their skills. Flexibility and convenience are important attributes of the programs they select. However, findings regarding retention in online programs are neither clear

nor consistent (Meyer, 2014). They vary widely from institution to institution, and program dropout rates are generally higher for online learners than for traditional, on-campus students (Allen & Seaman, 2012). Studies offer ample evidence that a direct increase in the interactions of online learners with instructors and in activities such as collaborative learning and group projects, encourages persistence and certificate or degree completion (Meyer, 2014).

In addition, there is broad consensus among researchers and adult educators that instructional methods and activities that encourage adult motivation and engagement in face-to-face learning environments are useful and adaptable for online learning formats (Meyer, 2014). Through their review of research on instructional methods for enhancing intrinsic motivation, Wlodkowski and Ginsberg (2017) found 24 effective strategies for teaching adults in both online *and* classroom environments. These include such classic teaching methods as effective feedback; solving relevant problems; and a clear, inviting, and inclusive course syllabus.

Transformative Learning

Intrinsically motivated learning (Ryan & Deci, 2017) and transformative learning (Cranton, 2016) have the potential to encourage nondefensive awareness and personal change among adults. Each are associated with caring and accepting social relationships, qualities basic to motivated learning.

Kroth and Cranton (2014) define *transformative learning* as a process by which individuals engage in critical reflection and self-reflection, and intuitive and imaginative explorations, which results in developmental changes leading to a deep shift in perspective and habits of mind that are more open, permeable, and discriminating. Individual change may lead to social change, and social change may promote individual change (p. 9). Although transformative learning may not always be enjoyable, it is usually absorbing and significant to adults—qualities integral to vital engagement. From a developmental perspective, such as a period from 20 years to 40 years of age, it is likely that vital engagement and transformative learning are at times reciprocal processes.

In recent years, there has been a trend among scholars of adult education to use storytelling to foster transformative learning. Less bound by real time, stories allow adult learners to reflect over longer periods of living at a more emotional and deeper level. Personal stories are relevant, engaging, and offer insight into how the lives of adults have changed. Kroth and Cranton (2014) have used storytelling to encourage people to explore the potential for transformative learning in their own lives, practices, and communities. The personal nature of stories allows people to readily know how others have reconsidered hidden assumptions and offers hope for making changes to heighten personal fulfillment and social contribution. Because they provide insight into real, complex lives, narratives such as biography and memoir may also allow a better understanding of how intrinsic motivation and transformative learning enhance each other as they work in concert to drive adult learning and change (Wlodkowski, 2019).

Underserved and Low-Income Adult Learners

Over 90 million adults participate in formal and informal education including postsecondary education, adult basic education, English language learning, workplace learning, and personal development classes (Paulson & Boeke, 2006). When this number is examined through the lens of income, race, ethnicity, disability, and credential and degree completion, troubling disparities emerge.

The most underserved group in adult education are low-income adults (Hartle & Nellum, 2015). While postsecondary institutions are becoming more culturally and economically diverse, the degree attainment gap for low-income individuals is widening. A 45-year trend report by the Pell Institute for the Study of Opportunity in Higher Education (Cahalan & Perna, 2015) shows that while bachelor's degree attainment among students from wealthy families has increased significantly, it has barely moved for low-income learners. Although slowly changing, workplace learning, especially in large organizations and corporations, tends to prioritize learning programs for top management rather than low-skilled learners (Watkins & Marsick, 2009).

Some states (e.g., Tennessee and California) are eliminating noncredit remedial courses. In these courses, most of the students are low income. Historically, the record of success with developmental classes

is dismal (Rutschow et al., 2019). With limited time and resources to improve their practice, faculty too often rely heavily on ineffective instructional methods such as prolonged lectures. Low rates of completion are exacerbated by financial constraints as well as family and work responsibilities.

As an institution, community colleges offer an extraordinary benefit to society. They are the largest gateway for adults and nontraditional learners, who comprise 70% of their student body. Most community colleges in the United States are open-access institutions enrolling a much broader variety of students than 4-year colleges. In 2012, 49% of all Black undergraduates and 56% of all Latino undergraduates were enrolled at community colleges (American Association of Community Colleges, 2013). However, as of 2011, only 30% of African Americans and 20% of Latinos ages 25 years to 34 years had attained an associate degree. This compares to 49% of White Americans of European background (Lee & Ransom, 2011).

Data from the Century Foundation (2013) indicates that, although community colleges enroll a disproportionate number of historically underserved students, they are underfunded and underresourced. This amounts to a separate and unequal educational system with completion rates impeded by one or more of the following: unwelcoming institutional climates, understaffing, and insufficient instructional support for faculty (Center for Community College Student Engagement, 2014).

Thus far, no single policy or program has significantly raised the persistence and degree completion of adult learners at a national scale. There is widespread agreement that goal completion among adult learners (and all students) requires system-wide efforts to strengthen financial assistance, provide proactive advising, and expand teaching centers to improve instruction (Haras et al., 2018; Rutschow et al., 2019). Researchers have found that improvements in instruction contribute to increased learner motivation and persistence in postsecondary education (Fong et al., 2017).

Research by the Center for Community College Student Engagement (2014), with 30 student focus groups comprising Black, Latino, and White males across the country, reveals four commonly agreed-upon needs. These are classic instructor and instructional qualities to encourage adult motivation to learn (Wlodkowski & Ginsberg, 2017) and include:

- personal connections for students that create a sense of belonging and that someone believes in them;
- high expectations for excellence;
- faculty commitment, with a demonstrated interest in students, enthusiasm for subject matter, and support for academic success; and
- engagement in learning.

Conclusion

Throughout this chapter we have offered a research-based perspective on adult motivation to learn. Motivation to learn can serve as a foundation for systemic endeavors to improve adult learning in training and postsecondary settings. While practices, policies, and politics are influential arbiters of equitable and effective motivational opportunities for the learning of adults, the role of instructors cannot be underestimated. Their own love of learning, professional craft, personal mission, and social contributions change the lives of adult learners every day. This is the platform upon which to build.

References

Ahissar, E., Vaadia, E., Ahissar, M., Bergman, H., Arieli, A., & Abeles, M. (1992). Dependence of cortical plasticity on correlated activity of single neurons and on behavioral context. *Science, 257*(5075), 1412–1415.

Allen, E. I., & Seaman, J. (2012). *Changing course: Ten years of tracking online education in the United States*. Babson Survey Research Group.

American Association of Community Colleges. (2013). *Community college fact sheet*. Author.

Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press.

Audesirk, T., Audesirk, G., & Byers, B. E. (2008). *Biology: Life on earth with physiology*. Pearson Prentice Hall.

Barnes, P. (2012). *Motivational conditions experienced by diverse adult learners in cohort-based accelerated degree programs: Quantifying learner perceptions for assessment and enhancement of adult motivation to learn* [Unpublished doctoral dissertation]. Kansas State University.

Barrett, L. F. (2005). Feeling is perceiving: Core affect and conceptualization in the experience of emotion. In L. F. Barret, P. M. Niedenthal, & P. Winkielman (Eds.), *Emotion and consciousness* (pp. 255–284). Guilford Press.

Barrett, L. F. (2017). *How emotions are made: The new science of the mind and brain.* Houghton Mifflin Harcourt.

Brophy, J. (2004). *Motivating students to learn* (2nd ed.). Lawrence Erlbaum.

Cahalan, M., & Perna, L. (2015). *Indicators of higher education equity in the United States: 45 year trend report.* Pell Institute for the Study of Opportunity in Higher Education.

Center for Community College Student Engagement. (2014). *Aspirations to achievement: Men of color and community colleges.* www.ccsse.org/docs/MoC_Special_Report.pdf.

Century Foundation Task Force on Preventing Community Colleges From Becoming Separate and Unequal. (2013). *Bridging the higher education divide.* Century Foundation Press.

Christenson, S. L., Reschly, A. L., & Wylie, C. (Eds.). (2012). *Handbook of research on student engagement.* Springer.

Cranton, P. (2016). *Understanding and promoting transformative learning.* Stylus.

Dweck, C. (2018, July/August). What's next? *Monitor on Psychology*, 42–43.

Fong, C. J., Davis, C. W., Kim, Y., Kim, Y. W., Marriott, L, & Kim, S. Y. (2017). Psychosocial factors and community college student success: A meta-analytic investigation. *Review of Educational Research, 87,* 388–424.

Geertz, C. (1973). *The interpretation of cultures.* Basic Books.

Ginsberg, M., & Wlodkowski, R. (2009). *Diversity & motivation: Culturally responsive teaching in college*. Jossey-Bass.

Haras, C. A., Taylor, S. C., Sorcinelli, M. D., & von Hoene, L. (Eds.). (2018). *Institutional commitment to teaching excellence: Assessing the impacts and outcomes of faculty development.* American Council on Education.

Hartle, T., & Nellum, C. (2015, November). *Where have all the low-income students gone?* American Council on Education.

Hulleman, C. S., & Barron, K. F. (2016). Motivation interventions in education: Bridging theory, research, and practice. In L. Corno & E. M. Anderman (Eds.), *Handbook of educational psychology* (3rd ed., pp. 160–171). Routledge.

Ibrahim, S., & Alkire, S. (2007). Agency and empowerment: A proposal for internationally comparable indicators. *Oxford Development Studies*, *35*(4), 379–403.

Kroth, M., & Cranton, P. (2014). *Stories of transformative learning*. Sense.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student success in college: Creating conditions that matter*. Jossey-Bass.

Lambert, N. M., & McCombs, B. L. (1998). Introduction: Learner-centered schools and classrooms as a direction for school reform. In N. M. Lambert & B. L. McCombs (Eds.), *How students learn: Reforming schools through learner-centered education* (pp. 1–22). American Psychological Association.

Lazowski, R. A., & Hulleman, C. S. (2016). Motivation interventions in education: A meta-analytic review. *Review of Educational Research*, *86*(2), 602–640.

Lee, J. M., & Ransom, T. (2011). *The educational experience of young men of color: A review of research, pathways and progress*. College Board Advocacy and Policy Center.

Meyer, K. A. (2014). Student engagement online: What works and why. *ASHE Higher Education Report, 40*(6). Jossey-Bass. https://doi.org/10.1002/aehe.20018

Musu-Gillette, L., Robinson, J., McFarland, J., KewalRamani, A., Zhang, A., & Wilkinson-Flicker, S. (2016). *Status and trends in the education of racial and ethnic groups* (NCES 2016-007). U.S. Department of Education, National Center for Education Statistics.

Nakamura, J. (2001). The nature of vital engagement in adulthood. *New Directions for Child and Adolescent Development, 93,* 5–18.

Nakamura, J., & Csikszentmihalyi, M. (2003). The construction of meaning through vital engagement. In C. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 83–104). American Psychological Association.

O'Brien, D., & Rogers, T. (2016). Sociocultural perspectives on literacy and learning. In L. Corno & E. M. Anderman (Eds.), *Handbook of educational psychology* (3rd ed., pp. 311–337). Routledge.

Paulson, K., & Boeke, M. (2006). *Adult learners in the United States: A national profile*. American Council on Education.

Ratey, J. J. (2001). *A user's guide to the brain: Perception, attention, and the four theatres of the brain.* Pantheon.

Reeve, J. (2009). *Understanding motivation and emotion* (5th ed). John Wiley.

Reeve, J., & Lee, W. (2012). Neuroscience and human motivation. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 365–380). Oxford University Press.

Rhodes, C. M. (2017). A validation study of the culturally responsive teaching survey. *Universal Journal of Educational Research*, *5*, 45–53.

Rhodes, C. M. (2018). Culturally responsive teaching with adult learners: A review of the literature. *International Journal of Adult Vocational Education and Technology*, *9*(4), 33–41.

Ross-Gordon, J. (2011). Research on adult learners: Supporting the needs of a student population that is no longer nontraditional. *Peer Review, 13*, 26–29.

Rutschow, E. Z., Cormier, M. S., Dukes, D., & Zamora, D. E. C. (2019). *The changing landscape of developmental education practices: Findings from a national survey and interviews with postsecondary institutions*. Center for the Analysis of Postsecondary Readiness. https://www.mdrc.org/sites/default/files/CAPR_Landscape_Report_2019.pdf

Ryan, R. M., & Deci, E. L. (2000). When rewards compete with nature: The undermining of intrinsic motivation and self-regulation. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 13–54). Academic Press.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness.* The Guilford Press.

Shernoff, D. J. (2013). *Optimal learning environments to promote student engagement.* Springer.

Silva, E., & White, T. (2013). *Pathways to improvement: Using psychological strategies to help college students master developmental math*. Carnegie Foundation for the Advancement of Teaching.

Snyder, T. D., de Brey, C., & Dillow, S. A. (2016). *Digest of education statistics, 2014 NCES 2016-006. Table 104.92* (p. 10). National Center for Education Statistics, Institute of Education Science, U.S. Department of Education.

Stavredes, T. (2011). *Effective online teaching: Foundations and strategies for student success*. Jossey-Bass.

Wallis, J. D., Anderson, K. C., & Miller, E. K. (2001). Single neurons in pre-frontal cortex encode abstract rules. *Nature*, *411*, 953–956.

Watkins, K. E., & Marsick, V. J. (2009). Trends in lifelong learning in the U.S. workplace. In P. Jarvis (Ed.). *The Routledge international handbook of lifelong learning* (pp. 129–138). Routledge.

Weiner, B. (1992). *Human motivation: Metaphors, theories, and research*. SAGE.

Wlodkowski, R. J. (2019). *Living a motivated life: A memoir and activities.* Brill/Sense.

Wlodkowski, R. J., & Ginsberg, M. B. (1995). *Diversity and motivation: Culturally responsive teaching.* Jossey-Bass.

Wlodkowski, R. J., & Ginsberg, M. B. (2017). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults* (4th ed). Jossey-Bass.

Zigarelli, J. (2017). *The role of motivation in changing teacher beliefs: an investigation of a strengths based intervention* [Unpublished doctoral dissertation]. University of Washington.

Zull, J. E. (2006). Key aspects of how the brain learns. *New Directions for Adult and Continuing Education*, *2006*(110), 3–9.

Zull, J. E. (2011). *Brain to mind: Using neuroscience to guide change in education*. Stylus.