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Nontraditional Adult Learners: The Neglected Diversity in Postsecondary Education

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Abstract

In the discourse on diversity in colleges and universities in the United States, an often-neglected population is nontraditional adult learners. This article explores this invisible aspect of undergraduate diversity, and addresses how competence-based education, which focuses on demonstrating the actual ability *to do*, is an innovative approach that caters to adult learners' life phase and learning needs. College arguably is a youth-centric phase of life generally designed for the younger student. However, the stereotypical full-time student who lives on campus is actually a small percentage of the entire postsecondary population. Due to the demands of an increasingly competitive world of work, nontraditional adult learners will continue to seek out postsecondary education. Unfortunately, the credit hour system is a significant barrier for both entry and success of adult learners. Merits of competence-based education are discussed, and implications are provided to best meet this significant component of student diversity.

Keywords

diversity, nontraditional, adult, competence-based education, credit hour

Over the past 15 years, the undergraduate student population in degree-granting postsecondary institutions of higher learning in the United States has seen significant growth in diversity. In 2013, there were just under 17.5 million total undergraduate students, represented by approximately 56.6% Caucasian, 16.4% Hispanic, 14.3% African American, 6.1% Asian/Pacific Islander, .85% Native American/Alaskan Native, 2.9% multiracial, and 2.8% nonresident alien students (Snyder & Dillow, 2015). As a point of comparison, in 2001, 67.6% of students were Caucasian, 11.6% were African American, 9.8% were Hispanic, 6.4% were Asian/Pacific Islander, 1% were American Indian/Alaskan Native, and 3.5% were nonresident alien (Snyder, 2005). In terms of the overall U.S. population, U.S. Census projections indicate that the general population will continue to increase in diversity, and by 2060 the percentage of Caucasians will represent 43.6% of the population, down from 62.2% as of 2014 (Colby & Ortman, 2015). In 2044, the United States is projected to become a "majority minority" (Colby & Ortman, 2015, p. 9) nation, where the total percentage of minorities will exceed the Caucasian population. With the total undergraduate population projected to increase by about 37% to just less than 24 million students by 2022 (Hussar & Bailey, 2014), the increasing racial/ethnic diversity in the United States will invariably continue to impact the diversity on college and university campuses across the country.

An important population of student diversity that is often neglected in postsecondary education, however, is nontraditional adult learners (NALs) even though they represent approximately 38.2% of the postsecondary population in the United States (National Center for Education Statistics, 2009). NALs, usually defined as aged 25 and over, also include those under 25 but who have characteristics indicative of adult responsibilities, such as working full-time, being financially dependent, has nonspousal dependents, is a single parent, as well as having a nontraditional educational trajectory, such as delayed enrollment into higher education or did not complete high school (Horn, 1996). Given these characteristics, the majority of students in undergraduate programs can be classified as nontraditional, suggesting that the traditional student, who enrolls full-time and lives on campus, is now actually the exception rather than the norm (Choy, 2002), even though they, the traditional student, arguably receive the vast majority of attention and resources from colleges and universities.

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The purpose of this article is to take the position that the presence of NALs on campuses across the United States is a diversity issue by bringing attention to decision-makers within higher education that certain postsecondary education systems and structures actively serve as barriers to entry and impediments to teaching practices that can benefit their learning. While the literature on adult learning theory and adult education is quite robust, the translation of these scholarship areas into actual education administration and subsequent teaching practice is quite limited (Cruce & Hillman, 2012). NALs are "often treated as 'charity' cases to be rescued from ignorance" (Northedge, 2003, p. 17), and this secondary student status is problematic because it continues to perpetuate limited progress in meeting their educational needs. The result is often a patronizing learning atmosphere that is acutely experienced by NALs when they step onto college and university campuses (Kasworm, 2010). I will explore the importance and implications of framing NALs as a distinctive issue of diversity, and discuss the value of a competence-based approach for teaching this significant yet invisible and neglected student population.

NALs as a Neglected Component of Diversity in Higher Education

The success of the American higher education system in achieving the broad range of postsecondary outcomes can largely be attributed to the diversity present in the system. The ability to provide access for both traditional and nontraditional students and all levels of academic achievement represents an American success unseen in virtually any other nation. (M. Harris, 2013, p. 54)

A significant strength of the American higher education system (Morphew, 2009), institutional diversity as an "ideological pillar" (Birnbaum, 1983, p. ix), has allowed postsecondary institutions to more effectively serve a diverse student population and their needs; it has both afforded opportunities to those historically underserved as well as removed barriers to both access and entry. Institutional diversity provides an important basis for colleges and universities to make decisions that both increase and accommodate a diverse student population. It provides opportunity for institution-side change, rooted in institutional self-assessment of their own *student-readiness*, instead of overly focusing on *college-readiness* of students, or the preparation of potential students to fit and meet the demands and culture of postsecondary education (White, 2016). Evaluating college-readiness of students, while needed, runs the risk of blaming students when they do not fit the academic culture. Evaluating institutional student-readiness, however, allows institutions to review systemic processes that may interfere or prevent student entry and success. It can even uncover institutional biases, implicit or explicit, that relate to potential practices that disadvantage specific student populations.

NALs are largely invisible to higher education, especially first-tier universities (Coulter & Mandell, 2012). An American Council for Education (ACE) survey found that over 40% of institutions indicated that they "did not identify older adult students for purposes of outreach, programs and services, or financial aid" (Lakin, Mullane, & Robinson, 2008, p. 12). When they do, the prevailing view of adult learners is that they are "one-dimensional" (Lakin, 2009, p. 40) focused predominantly on lifelong learning. The assumption in this perspective is that learning is an ancillary activity implying less urgency or need. However, adult students seek higher education for a multitude of reasons related to retirement, career change, and career retooling (DiSilvestro, 2013; Yankelovich, 2005). Overall, there is a paucity of research and data on NALs (Cruce & Hillman, 2011) and what has been conducted has mainly been descriptive analyses in policy reports (Irvine & Kevan, 2017). Between 1990 and 2003, only 1% of articles in seven widely circulated peer-reviewed higher education journals focused on adult learners (Donaldson & Townsend, 2007). Given the dearth of large-scale research and multivariate analyses, higher education institutions have had little data to even consider institution-side changes to address their needs.

As a point of comparison, colleges and universities have admirably made institution-side changes to address or increase diversity of traditional students on their campuses through two major strategies. First, on the domestic front, colleges and universities have increased their efforts to attract and retain students from different socioeconomic backgrounds through the elimination of barriers that may preclude diverse students to apply or enroll. One particular strategy that attempts to eliminate application barriers is the *test optional* admissions criteria whereby students have the option to withhold ACT and SAT scores; standardized college admissions examinations are not a requirement for admissions. Currently, over 850 colleges and universities have test optional criteria (FairTest, 2016). Research on the effectiveness of this criteria have been mixed with some research indicating that increased diversity has not been a consistent outcome (Belasco, Rosinger, & Hearn, 2015) to other data showing that those who do not submit scores tend to be first generation students, students of color, Pell grant recipients, and students with learning differences (Hiss & Franks, 2014). Another strategy to increase diversity is best encapsulated by Texas House Bill 588, which is also known as the "Top 10% Rule" (Cullen, Long, & Reback, 2013). In this legislative bill, the top 10% of students in each high school in the State of Texas receives automatic admissions to all state-funded institutions. While some have applauded this bill by recognizing the connection between diversity and socioeconomic status, critics have argued that the bill unfairly punishes qualified students from high-performing high schools, but who are not in the top 10% (Heilig, Reddick, Hamilton, & Dietz, 2010). Lastly, a small number of selective institutions have attempted to remove financial

barriers by offering free tuition for admitted students with family incomes less than a specific amount, such as recent proposals to offer free tuition for community colleges (Cubberly, 2015). Overall, these well-intended efforts are designed to actively address barriers for qualifying and/or potentially qualifying students, especially those from less resourced backgrounds.

Second, on the international front, colleges and universities have increased their outreach to international students. From 2005 to 2013, colleges and universities experienced a 64% increase in the international student population with representation from all around the world, but with particular influx from Asian and Middle Eastern countries, which represented around 58% of the total current international student population (Institute of International Education, 2016b). These efforts are partially to grow their international reputations and partially an economic one: International students pay full tuition, and in 2011 they contributed more than $30.5 billion to the U.S. economy (Institute of International Education, 2016a). International students are an increasingly important part of the higher education economy, and they will likely continue to grow in presence on campuses across the country.

The two major strategies represent some important institution-side shifts in postsecondary education that has resulted in opening new channels of entry for both domestic and international traditional students. The problem as it relates to NALs, however, is that these strategies have little impact or relevance to them. With estimates of adult learners projected to grow at a rate faster compared with the traditional late adolescent student for the foreseeable future (National Center for Education Statistics, 2009), it is vital for colleges and universities to recognize and cater to this aspect of student diversity. With projections indicating that 63% of jobs in the future will require at least a bachelor's degree (Carnivale, Smith, & Strohl, 2010) and that the United States needs at least 106 million Americans to have some postsecondary credentials for jobs by 2025 (Sherman & Klein-Collins, 2015), the demand for postsecondary education will increasingly attract an older student population that is qualitatively, developmentally, and socially very different from the traditional-age, late adolescent undergraduate student. As the need arises for more collegiate-level learning across the lifespan to meet the demands of workplace settings, a well-educated workforce requires institutions of higher learning to embrace this aspect of diversity as an economic and national necessity (Jones, Mortimer, & Sathre, 2007). The heterogeneity of both the NAL population and their learning needs demands that postsecondary education view them through a diversity perspective to engage institution-side changes. If not, postsecondary institutions will continue to view NALs as the "proverbial 'square peg' that meets resistance when forced to go through a round hole" that has been designed for the traditional student (Hagedorn, 2005, p. 22).

Youth-Centricity as an Institutional Barrier for NALs

The lack of a diversity perspective and the square-peg-in-round-hole view of NALs are rooted in the historic youth-centricity of postsecondary education. College is generally known as a phase of life for young persons, and a milestone for those leaving adolescents and entering into young adulthood (Kasworm, 2005, 2010). Developmentally, late adolescence/young adulthood is understood as a time to solidify an identity while also developing intimate relationships (Erikson, 1968). Therefore, it is not surprising that based upon these psychological stages of development, colleges and universities have often been seen as an important part of youth maturation, with significant resources deployed to support the well-being and transition of these students. With both domestic and international diversity represented, along with progressive social movements that are giving voice to previously invisible populations such as those who identify as LGBTIQ, as well as a diverse range of spiritual and religious backgrounds, colleges and universities have attempted to accommodate the range of lifestyles within the late adolescent life phase represented on campuses in three main ways.

First, colleges and universities have focused on physical structures to both house and offer different spaces to increase the quality of life for students. In 2014, colleges and universities spent over $12 billion on construction, 78.8% of which were new constructions (Abramson, 2015). For buildings completed in 2014/2015, approximately 60.8% were related to facilities typically related to supporting the lifestyles of the traditional-age student such as residential housing and physical education/athletics. Second, social programs assisting in the sociocultural development and adjustment of diverse students encourage formal and informal student organizations to develop community and friendships, which include the notion of *safe spaces*, physical places for cultural and other underrepresented groups to congregate and develop community in safety (Pittman, 1994). Third, colleges and universities have needed to reexamine curriculum and its delivery. Curricular changes include knowledge and skills for the modern era including environmental sustainability (Vincent & Focht, 2009), civic engagement (Adelman, Ewell, Gaston, & Schneider, 2014), information technology literacy (Jarson, 2010), and even multicultural and diversity training. Delivery changes include the growth in online courses and programs, electronic learning management systems, and more mobile and technologically focused solutions.

With the exception of education delivery changes, such as online learning, the aforementioned accommodations have a distinctly youth-centric feel, which are often significant barriers to NALs for engagement in postsecondary education. Traditional-aged students have held and continue to hold a privileged position within postsecondary education as represented by these institution-side changes. Frankly, there is uneven support for students based on age and life stage. Past

research has found that the traditional youth-centric environment has socially and educationally often been hostile or nonresponsive to adult learners (Kasworm, 2005), which perpetuates the feelings of difference and nonacceptance in higher education (Kasworm, 2010; Reay, 2002). NALs are not attracted to youth-centric lifestyle-based resources on campus and, in fact, these resources can confirm their feelings of alienation and isolation as college students.

Not only does institutional youth-centricity negatively impact academic entry and learning success, services that actually help NALs engage with academics are increasingly being cut. Estimates suggest that there are approximately 4.8 million college students who are parents. Over the past 10 to 15 years, however, colleges and universities that have day-care centers have steadily decreased (Eckerson et al., 2016), even though research has shown that student parents who have access to childcare are not only more likely to return to school but are also three times more likely to graduate. While modern residential halls and athletic facilities are "nice to haves" for traditional-age students, adult services like child-care or after business hours administrative services are essential to NALs academic success.

The NAL

To meet the learning needs of NALs, it is necessary to understand the nature of their diversity, who they are, and why they decide to enroll. Compared to traditional students, who primarily perceive their identity as students, NALs primarily perceive their identities as employees (Wirt et al., 2002), and it is through this identity in which they evaluate and prioritize higher learning. For the traditional-age student who enters college shortly after high school graduation, their identities have revolved around being a student. While many may have held part-time jobs and may have been involved with organizations that were not befitting of a student role, most of their time was spent as a student, and this primary identity moves with them to college. NALs, however, spend the majority if not all of their current time out of the educational setting, and mostly in employment settings. It is through this employment-based identity rooted in adult life responsibility in which they seek postsecondary education. Their unique diversity revolves around three general characteristics: the role of adult identity, the role of self-direction, and the role of life experience.

The Role of Adult Identity

One of the primary reasons that NALs struggle with postsecondary education is the competing nature of their life roles that accompany adulthood. While they may seek educational opportunities to advance their career identities, which may ultimately have a positive impact on their role as a caregiver in the long-term, the commitment and effort needed in the short-term in adopting a student role often comes in conflict with familial roles and work roles. NALs typically experience what is known as role strain (Goode, 1960), which is experiencing difficulty in meeting the demands of separate life roles. Roles strain is further subdivided into role conflict, role overload, and role contagion. Role conflict occurs when meeting the demands of multiple roles interfere with each other. Role overload occurs when there is a lack of resources to the demands of a role. Role contagion occurs when preoccupation with one role while being engaged in another. When NALs decide to add on a student role, this is another variable that adds to their experience of role strain.

NALs' engagement with higher education is impacted by the intersection of role strain and life stressors. Commitment to the student role, which conflicts with other roles (Padulla, 1994), has been found to be a significant predictor of psychological distress (Chartrand, 1990), and especially detrimental is that stress impacting work identity is the strongest predictor of well-being (Giancola, Grawitch, & Borchert, 2009). Simply put, the greater level of distress that interferes with the student role, the greater likelihood of disengagement with postsecondary education. Indeed, NALs' work-based identity is one that is most likely to be non-negotiable, and they have very little control over it. The demands of a job or a manager tend to push other identities aside. When NALs compare their struggles to the traditional-age student, the perception of difference was related to thoughts of withdrawing (Markle, 2015). When stress related to adult role conflict arises, NALs feel isolated from what they feel is a youth-centric environment that does not understand them or attempt to accommodate them.

The Role of Self-Direction

To cater to NALs' diversity, educators and practitioners must understand the difference between pedagogy, "the science and art of teaching children" (Knowles, 1980, p. 43), from andragogy, or "the science and art of teaching adults" (p. 43). Catering to adult learning needs requires understanding some basic assumptions about adult learners that are distinct from the late adolescent student. Whereas pedagogy is educator-dependent (i.e., the educator is central to the learning process and students are dependent upon the expertise of the educator), andragogy is learner-dependent (i.e., the learner is central to the learning process and the educator is a partner). There are six key assumptions about adult learners (Knowles, 1980):

1. Self-concept: Adults desire becoming more self-directed and independent
2. Experience: Adult brings life experiences into learning situations, which can enhance or prevent learning
3. Readiness to learn depends on need: Life situations determine the need and readiness to learn
4. Problem-centered focus: Immediate application of learning is essential, especially to solve a relevant problem

5. Internal motivation: These are motivations that are personally meaningful and more influential
6. The need to know why they are learning something: Adults need to see the relevance of the learning

Inherent in these assumptions about adult learners is the personalization of learning, and the importance of learning both in terms of practical utility and personal meaning. These assumptions fit with their developmental life phase and their work-based identity, which demands that NALs take initiative and hold responsibility for their life outcomes.

At the root of the concept of andragogy is self-directed learning, which is a foundational tenet of adult learning theories (Merriam, 2001). Self-directed learning is

> a process in which individuals take the initiative, with or without the help of others, in diagnosing their needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (Knowles, 1975, p. 18)

Self-directed learning and andragogy are important perspectives in understanding adult learning because it follows a long tradition of defining the purpose of learning for adults: that education is necessary for a changing world and a fundamental skill crucial to the life of every adult citizen (Knowles, 1975). Adult learning was founded partially upon the view that education is a medium for citizenry and a vital component of both self-betterment and societal progress (Dewey, 1916, 1938). Education is vital for becoming a competent and active adult and citizen, and a significant portion of the ability to do so is to improve one's economic stability. NALs are unlikely to stay committed to their schooling if they cannot justify it with outcomes that will improve or better their life situation, which ultimately becomes an issue of economics (Cruce & Hillman, 2011).

The Role of Experience and Social Context

Whereas the traditional student is more impressionable and has limited life experiences, NALs are not "blank slates" (Nelken, 2009, p. 183) and they enter learning situations with significant life experiences, often accompanied with strong opinions and perspectives. This implies that adult learners do not fit the student-as-vessel learning model typically ascribed to postsecondary education where knowledge is poured into them as receptive and empty vessels (Freire, 1970). While such top-down, educator-as-expert approaches may developmentally fit with the younger learner, NALs are more engaged with learning when their experiences are included and used as a major media for learning (Chen, 2014). Importantly, NALs seek to derive meaning from their educational experiences especially as they relate to their life histories (Nelken, 2009).

In using life experiences as a major medium for learning, academic knowledge moves quickly from something theoretical to something that is tangible and relevant. Understanding and perceptions of experiences are often deep-set, yet untested or evaluated. Within an academic learning environment, these perspectives are challenged when NALs interact with other students, many of whom may share different experiences and interpretations of experiences. Known as perspective transformation (Mezirow, 2009), NALs often engage in a process of learning that includes both cognitive as well as emotional change due to disorienting events that highlights the subjectivity of their perspectives. This type of learning can be highly uncomfortable yet extremely powerful because students begin to understand that their perceptions are shaped by sociocultural forces. Perspective transformation occurs when NALs engage in critical reflection, which aims to uncover biases in worldview. This type of learning is accelerated within a social context as issues related to race, class, and gender enter the learning process and understanding of experience (Cranton & Taylor, 2012). Importantly, this type of learning develops consciousness related to hegemonic worldviews (Brookfield, 2000; Freire, 1970). NALs realize that their perception and understanding of their experiences is situated within their personal social context. Therefore, they come to understand that others have different yet equally valid perceptions. NALs then experience less rigidity and more flexibility in their thinking.

Competence-Based Education (CBE): A Diversity-Affirming Approach to Adult Learning

Given the unique diversity that NALs bring to postsecondary education, CBE is a model of learning that is particularly well-suited for them. It is defined as a learning structure that is flexible and focused on mastery of academic content regardless of time, place, or pace of learning (Porter & Reilly, 2014). This type of education is distinct from traditional approaches that dominate the postsecondary education landscape because it is not tied to assigning college credit by *seat time* (i.e., actual time spent in a classroom), and, instead, provides students with personalized learning opportunities with various ways to earn college credit, including blended learning, project- and community-based learning, prior learning assessments, and independent learning. It focuses on the actual demonstration of skills learned. Learning within a competence-based framework entails both the development and demonstration of new, improved learning, or the expanded ability to do (Merriam, Caffarella, & Baumgartner, 2007). Especially important in competence-based frameworks is the ability to adapt learning to a variety of situations and challenges (Wiggins & McTighe, 2005), which happens to be a necessary and vital attribute for employment success (Eichinger & Lombardo, 2004). CBE approaches fits well

with NALs' learning needs due to its academic flexibility as well as its conceptual alignment with the demands and processes within the world of work. CBE approaches have been in existence since the 1970s but have exploded in popularity over the past few years with more than 600 postsecondary institutes offering CBE or planning to do so (Tate & Klein-Collins, 2015).

The Problem With the Traditional Credit Hour

Higher education has long focused on the credit hour as the standard bearer for whether students have met requirements for learning (Laitinen, 2012). However, the credit hour, which requires a certain amount of classroom time to obtain credit, is best designed for the full-time student who lives on campus, and who can consistently attend classes or give up other responsibilities to accommodate classroom attendance. Only 14% of all undergraduates both attend college full-time and also live on campus (Laitinen, 2012). The credit hour and the youth-centric perspective that learning equals seat time is increasingly irrelevant, and serves as a major barrier for engagement and an impediment to academic success for NALs.

The idea of the credit hour actually began in the late 1800s as a standard unit to better compare the time high school students spent learning a subject (Shed, 2003). At the postsecondary level, the credit hour as a standard unit arose out of Andrew Carnegie's concern for the poor compensation of faculty (Laitinen, 2012). The credit hour was used to measure the amount of time faculty and students interacted, for the purposes of qualifying for retirement pensions for faculty. It is important to note that the credit hour was an administrative measurement not a measurement designed to assess educational quality. In fact, the Carnegie Foundation was quite clear about this but in the early 1900s, colleges and universities did not head the Foundations advice because of the educational assessment convenience of the credit hour (J. Harris, 2002). Perhaps the most vital aspect of the credit hour that is a detriment to NALs is the assumption that all students will take the same predetermined amount of time to learn and complete their degree (Irvine & Kevan, 2017); it assumes learning uniformity and ignores the issues that arise from NAL diversity.

Research has consistently shown that time spent in the classroom does not equate to actual learning. Several major studies have revealed some sobering statistics related to actual college-level learning. Forty-five percent of students completing the first two years of college and 36% of students completing 4 years of college show no statistical difference in critical thinking, complex reasoning, and communication skills (Arum & Roksa, 2011). Graduating college students have been found to demonstrate deficiencies in document, prose, and quantitative literacy, with results ranging from only 25% to 31% of college graduates being able to do these tasks (Kutner, Greenberg, & Baer,

2006). As a result, employers have expressed their dissatisfaction with the preparation of college students for the workplace (Hart Research Associates, 2010).

Thus, while the credit hour as a means of educational assessment for credit is (a) not being used as its intended function and (b) has not been found to predict academic success, it continues to be the de facto framework for colleges and universities and is perhaps the most significant systemic barrier for NALs to engage with postsecondary education. Because missing a certain amount of class time typically results in automatic failure, and given work, family, and other adult responsibilities, it is difficult for NALs to succeed in this type of environment. While NALs have been found to be dedicated students and highly motivated (Knowles, Holton, & Swanson 2012; Merriam et al., 2007), their adult status and issues that relate to this type of diversity directly conflicts with the dominant method for assessing and assigning college credit in postsecondary education. It is important to note that the credit hour system has implications not only for educational delivery and assessment, but also for financial aid and full/part-time student status (Silva, White, & Toch, 2015).

To cater to their needs, colleges and universities, along with NALs themselves, must first eschew their stereotypical framework associated with learning within the credit hour system both in terms of what constitutes learning and the traditional nature of educational hierarchy. First, learning defined in CBE is measured by the actual demonstration of competence; therefore, time is an irrelevant metric. NALs and colleges and universities must break the association with classroom time, and focus upon mechanisms that showcase the demonstration of competence. Second, because CBE approaches focus on personalized learning and a learner-centric stance to education, educators play multiple roles in addition to being the context expert, which means that NALs and colleges and universities must break the association between educator and content expert. While educators within CBE approaches do have content expertise, they also play the role of mentor, facilitator, and educational collaborator. CBE breaks down traditional educational hierarchy in the classroom and, instead, works toward empowering the NAL. Consequently, NALs must become accustomed to being an active partner as well as taking a leadership role in this framework. They can no longer be passive recipients of knowledge since the basis for CBE is dependent on the educational desires and direction of the learner.

But perhaps one of the most important aspects of CBE for NALs is its potential for meaningful and transformative learning. Given its highly personalized and customized approach, NALs have the opportunity to confront the basis for their prior learning through a reflective process, and they come to understand how they have developed knowledge. Postsecondary education does not only meet the employment and practical needs of NALs, it can provide a personal, life-changing experience.

Remedying the Credit Hour Problem

Competence-based approaches fit particularly well with NALs because it upholds and accommodates two important factors: (a) learning for a purpose in a (b) flexible way. There are several characteristics of CBE approaches that address the diversity of needs represented in the NAL population.

Self-paced. Given the demands of adult life, NALs engagement with higher education is highly dependent on other schedules related to work and family identities. Schooling is often a priority to exclude when there are stressors. Traditional modes of education based on the credit hour demands a certain amount of physical seat time in the classroom to obtain credit. This rigid structure often precludes NALs from obtaining credit due to the need to be away from the classroom for various reasons. The self-paced structure of CBE is not tied to actual time in a seat and, instead, assesses learning based upon the demonstration of learning at a pace that respects NALs' life schedules.

Individualized. CBE models are learner-centric in the sense that programs will personalize learning plans to meet both the outcomes desired as well as allow the learner to help identify the methods of demonstration of mastery. CBE meets students *where they are* by helping them determine what they already know, and to build upon that knowledge in a way that meets their goals for education. NALs have the option to be as focused and personal in their learning as they wish; learning is dependent on what they actually want to learn.

Assessment of prior learning/multiple ways of knowing. In a credit hour system, students have to physically be present to receive credit. This is simply not possible for many NALs. A midlevel manager at a financial services firm most likely already has competence in basic finance and accounting. However, the only way for her to obtain credit is to actually take the requisite courses even though she likely already knows the material and can demonstrate competence. In fact, she likely has the expertise to teach some classes. Assessment of prior learning is a set of strategies used by institutions to evaluate college-level learning for credit outside of a formal college course (credit hour; Tate & Klein-Collins, 2015). Removing the constraints of minimum time in the classroom opens the door for NALs to receive credit for knowledge and skills they already demonstrate. Assessment of prior learning opens the door to receiving credit for evaluation of corporate or military training, individualized student portfolios, or standardized exams. These methods demonstrate that there are multiple ways of knowing, and that NALs can utilize several methods to not only learn but to demonstrate their level of learning.

Deeper meaning through critical reflection. For NALs who have a wealth of experience, learning is typically not "new" in the sense that they will be learning something that they have never heard of or have been exposed to. However, learning more likely entails a reorientation of prior assumptions or beliefs. Critical reflection is a process of questioning the veracity and integrity of longstanding beliefs (Taylor, 2008), and looks to understand the basis of these beliefs and how they developed. It is the "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusion to which it tends" (Dewey, 1993, p. 9). It can be an inherently disconcerting experience but one that holds tremendous long-term utility for NALs because of its potential for long-term, memorable learning. There is potential for learning to include emotional reactions, spiritual formation, and embodied experiences in addition to cognitive/intellectual growth.

Challenges and Criticisms With CBE

While CBE approaches are not new, they have only recently attracted attention at a large scale. While CBE holds potential to address the diversity issues that arise with NALs, there are several significant challenges and criticisms associated with the interconnectedness of both its viability as a learning approach as well as its viability for wide-scale adoption.

According to Irvine and Kevan (2017), CBE faces significant headwinds in establishing itself as a viable educational approach. Perhaps the main criticism of CBE is the lack of quantitative, large-scale, multivariate studies. Research on CBE has predominantly been disseminated through policy papers by nonprofit educational think tanks, likely due to the fact that CBE programs continue to reside in the periphery of postsecondary education. A recent large-scale review of CBE, conducted by a policy research institute, consisted of analyses of 380 articles of which only 26.8% employed quantitative, descriptive methodology (Kelly & Columbus, 2016). Sixty percent were qualitative investigations and 11.6% were literature reviews (1.6% was not categorized). While qualitative methods provide insightful, population-specific data, predictive quantitative methods are needed to provide statistics on effectiveness and prediction confidence. Without large-scale, quantitative data, there are limits to extolling the effectiveness of CBE. Another significant criticism is that CBE lacks a standard definition. The literature contains different monikers including mastery-based, proficiency-based, and outcomes-based education that adds to the complexity of formally defining CBE (Book, 2014; Gallagher, 2014).

Accompanying the criticisms are specific challenges. First, there are different two main models, course/credit equivalence and direct assessment, within CBE. Course/credit equivalence are competences that are embedded into the traditional course-based format (Book, 2014). They are currently the more common of the two but because of their similarity and ties to the credit hour, its relevance to NALs

runs into similar challenges of traditional course. Direct assessment allows self-paced progress and demonstration of mastery before moving to another level (Book, 2014). Given that there are several ways to demonstrate mastery of competences apart from traditional course assessment, there has been hesitancy for institutions to implement these models. Although potentially viable, the nature of these self-paced programs may not include consistent interaction with faculty, as required by federal law (but assumed within a credit hour system), which brings up the third challenge for CBE: the role of the federal government. CBE program viability is closely tied to federal financial aid because of its connection to the credit hour (Irvine & Kevan, 2017), and CBE has had difficulty being recognized by the U.S. Department of Education as well as accrediting bodies. There has been little guidance from the federal government regarding their perception and support for direct assessment (Fain, 2014).

Lastly, CBE has fundamental implications for the role of faculty and assessment (Irvine & Kevan, 2017). The trend has been the "unbundling" or "disaggregation" (p. 13) of faculty roles, which shifts some responsibility to support staff, so that faculty can focus less on delivery of academic content but more on personalized feedback to students. Given the self-paced and self-directed nature of CBE, individualized feedback and support and an understanding of students unique goals may be more effective for student learning compared to faculty solely focused on content development as in the traditional model. In terms of assessment, CBE has not achieved consensus on quality assessment. Currently, there are differing views on the role of assessment, when competence is achieved, and the role of standardization (Gibson, 2013).

Implications for Practitioners and Institutions

While there are understandable criticisms and challenges related to CBE, given the specific set of diversity issues that NALs bring to postsecondary education, it is imperative to understand them through a diversity lens. Their purposes for entering higher education and their ability to engage with it are distinctly different from the late adolescent student and the youth-centric institutions that serve them. Catering to NALs requires an educational approach that respects their life phase and the limitations that these life phases have on their ability to consistently engage within time-based, credit hour system. CBE offers an approach that provides a model that respects the demands of their life phase as well as maximizes their learning experience. Because of its personalized approach, NALs greatly benefit due to its direct relevance to multiple areas of their lives. Adopting a CBE perspective holds significant potential for both education practitioners as well as institutions to better attract, retain, and educate this subsection of the undergraduate population that will only continue to grow in the future.

Implications for Practitioners

At a tangible level, practitioners need to reorient their perceptions of their role and move away from the limitations of a content expert and time-based credit hour perception of college learning. The relationship between educator and NAL has been shown to be one of the most impactful factors in the ability to persist in schooling (Daloz, 1999), especially when their struggles and stressors are acknowledged and validated. Three implications of a more relational approach to educating adults are provided.

Facilitating self-direction. Due to its emphasis on learner-centricity, the key to learning success in CBE for NALs is the learner, not the educator. To help the NAL realize his/her potential, he/she must be encouraged to adopt self-direction to take educational initiative. The personalized nature of CBE indicates that prior to determining the path toward graduation, the educator must first understand the reasons that the NAL is engaging in higher education. This requires a more intimate and interactive relationship that is different from traditional academic advising. The educator is tasked to adopt more of a facilitator role that helps to set the conditions for self-direction and subsequent learning (Brockett & Hiemstra, 1991; Knowles, 1980) through inviting the learner to accept the primary responsible role for learning.

Tennant (2006) uses the metaphor of a growing plant to demonstrate the facilitative role of adult educators. Much like a seed is determined to be a plant, an adult learner is determined to better herself. However, in the same way that there are certain environmental conditions that can either promote or inhibit growth in the plant, there are conditions that can act similarly with an NAL. The educator facilitates learning (i.e., growth) through helping set conditions for learning. This generally revolves around creating safety for the NAL to ask difficult questions, to challenge their own thinking, and to feel that their experience is valid.

Personal narrative as a primary learning medium. What is clear about working with NALs is that their experiences and narratives are key to learning (Chen, 2014). Unlike traditional students who have less life experience and who are generally more impressionable, NALs have opinions and convictions, sometimes very strongly, regarding certain topics. Utilizing their perspective and inviting them to delve into the formation of their viewpoint and narrative is an important step toward learning. These experiences are often jarring for NALs as they are appropriately challenged to consider the basis of their perspectives (Mezirow, 2009). While colleges and universities should have established curricula, which represent a diverse range of academic topics, finding ways for an adult learner to find usefulness in the topic is paramount. For example, while an adult learner may be working in finance and have little utility for Latin American literature, situating the literature within an appropriate context of globalization and culture can increase relevance of the material

as the adult learner may work with colleagues with Latin American backgrounds or she may have contact with colleagues living within Latin American countries.

Personalizing learning also provides flexibility for NALs to use settings, questions, and problems of interest as the main media for learning. For example, a professor of psychology may be teaching a course on group dynamics. While there are general psychological principles to be learned, application of the learning could be based upon the interests and experiences of the adult learner. They could be asked to pick a group that they are either involved in or can readily observe, and they would be able to observe the principles occurring within those groups.

Transformational versus instrumental learning. Given the wealth of experiences that NALs bring to the classroom, the chances of them having some conflictual or uncomfortable past life experiences is quite high (Daloz, 1999). Adult educators recognize the interconnection between learning and emotional growth in NALs. Respected adult education scholar, Laurent Daloz (1999), best sums up this connection, "I have come to believe that the line between learning and healing is finer than we might think . . . Within the obvious limits, perhaps a deeper understanding of the dynamics of healing would inform our knowledge of learning" (p. 241). However, they may not have had the opportunity to understand or even examine the experience. In CBE, having prior experiences by themselves is not learning (we all have life experiences), but the ability to disentangle the nuances of the experience, critically examine it, and derive meaning from them is part of the process to more fully develop a tested, open, flexible perspectives (Mezirow, 2009). For example, an NAL of color, through repeated discriminatory experiences, may demonstrate internalized racism. He comes to believe that he is inferior, he has accepted this perspective, and he brings this perspective to the classroom. When encountering a difficult assignment, he may attribute his challenges to inferior ability, and give up. Transformational learning allows the student to confront the experiences that led to this belief, and it frees him to be able to learn without the constraints of the previously oppressive self-perspective.

Implications for Institutions

Postsecondary institutions play a powerful role both in the educational lives of students as well as in the broader educational policy community. The growth in recent years of for-profit educational institutions is due, in part, to the market for postsecondary education that fits with the learning needs and lifestyle of NALs. Given that colleges and universities serve at some level as gatekeepers toward a more educated workforce, they are at the frontlines of national stability and economic prosperity. Colleges and universities, in adapting to both employment and educational realities, can help shape the betterment of citizens. Three implications of institution-side change are provided.

Reassessment of the credit hour. One of the boldest initiatives is for colleges and universities to reassess tying college credit to the credit hour for NALs. This longstanding foundation of higher education fits the needs of a more static world but given that the student body is quickly changing, the credit hour is now providing numerous challenges and proving to be a significant barrier for entry into higher education. Loosening of this concept while also embracing the notion that there are a variety of ways to demonstrate learning will help make postsecondary education more accessible to NALs. Most importantly, recognizing that knowledge can be gained outside the constraints of the credit hour system is also symbolic in that the institution validates multiple ways of learning. The one-size-fits-all credit hour system, while useful in its administrative intentions, is less of a relevant concept in today's educational landscape. One could argue that it is an archaic relic of a different era that has long outlived its utility, and is now a potentially unfair practice.

Adult-friendly campuses. Youth-centric campuses tend to deter NALs from engaging with them (Kasworm, 2010; Nelken, 2009) especially if they have had prior negative experiences (Crossan, Field, Gallacher, & Merrill, 2003). Interestingly, NALs' identities as students are often shaped by institutional shortcomings when it comes to their needs (O'Donnell & Tobbell, 2007); they rally around the fact that they are outliers in colleges and universities. These institutions can become more attractive to NALs through two main strategies. First, the educational model must fit with their life stage and needs. Adopting CBE models offers the flexibility that begins to solve one of the biggest barriers for NALs, the aforementioned credit hour. A robust CBE model reveals multiple pathways to obtaining a college degree. Second, college and university campuses can better accommodate NALs by offering support services relevant to them. While colleges and universities should not get rid of the youth-centric services that attract traditional students, they can do a better job of offering adult-centric services. For example, university counseling centers in recent years have expanded services to better fit the needs of NALs (e.g., evening hours, adult-centric groups). Given the primary role of work in their decision to engage with postsecondary education, more robust career services designed for students in higher job positions would be especially welcomed, as well as services focused on more adult-centric career themes such as career transitions or second career seekers.

Educational partner. It is quite clear that NALs do not fit the youth-centric educational mold. Given that the demand for postsecondary education from NALs will continue to increase, colleges and universities need to reassess their role within an educative environment. Currently, traditional

models of education are highly prescribed in terms of credit hours needed for graduation as well as specified courses that make-up general education requirement and major courses. While these requirements make sense for the traditional-age student, this top-down approach is poorly matched to the adult learner, in which top-down hierarchy and predefined learning is both personally and developmentally incompatible. Instead, colleges and universities can benefit from adopting a partnership approach to educating NALs. While standards of competence and learning do need to be upheld, perhaps a more collaborative, flexible approach, based upon the needs of the actual learner, would be more beneficial. Adopting an educational partnership role allows colleges and universities to work more closely and intimately with NALs to meet their individual needs.

Conclusion

In the broader discussion of diversity in colleges and universities, NALs should not be neglected. For too long, this significant section of the undergraduate student population has been ignored. While they are motivated students, they have less opportunity to successfully engage in postsecondary education due to the youth-centric collegiate culture serving as a barrier to both entry and success for NALs. The demands of a dynamic world of work requires an increasingly educated workplace and employees. NALs are looking to better their own situations and part of their strategy is to engage in postsecondary education. Because their presence on campuses is projected to continue to grow and at a faster rate compared to the traditional, late adolescent student, they can no longer be ignored. The totality of the undergraduate student population is outgrowing the traditional educational mold. Ignoring this section of diversity in the undergraduate population will ultimately have economic, political, and social ramifications.

Declaration of Conflicting Interests

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References

Abramson, P. (2015, February). *20th annual college construction report: National statistics, building trends & median costs*. Springboro, OH: College Planning and Management.

Adelman, C., Ewell, P., Gaston, P., & Schneider, C. G. (2014). *The degree qualifications profile 2.0: Defining US degrees through demonstration and documentation of college learning*. Indianapolis, IN: Lumina Foundation.

Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago, IL: University of Chicago Press.

Belasco, A. S., Rosinger, K. O., & Hearn, J. C. (2015). The test-optional movement at America's selective liberal arts colleges: A boon for equity or something else? *Educational Evaluation and Policy Analysis*, *37*, 206-223.

Birnbaum, R. (1983). *Maintaining diversity in higher education*. San Francisco, CA: Jossey-Bass.

Book, P. A. (2014). *All hands on deck: Ten lessons from early adopters of competency-based education*. Boulder, CO: Western Interstate Commission for Higher Education.

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in learning: Perspectives in theory, research, and practice*. London, England: Routledge.

Brookfield, S. D. (2000). Transformative learning as ideology critique. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 125-148.). San Francisco, CA: Jossey-Bass.

Carnivale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education and the workforce—Requirements through 2018*. Washington, DC: Georgetown University's Center on Education and the Workforce.

Chartrand, J. M. (1990). A causal analysis to predict the personal and academic adjustment of nontraditional students. *Journal of Counseling Psychology*, *37*, 65-73.

Chen, J. C. (2014). Teaching nontraditional adult students: Adult learning theories in practice. *Teaching in Higher Education*, *19*, 406-418.

Choy, S. (2002). *Findings from the condition of education 2002: Nontraditional undergraduates*. Washington, DC: National Center for Education Statistics.

Colby, S. L., & Ortman, J. M. (2015). *Projections of the size and composition of the U.S. population: 2014 to 2060* (Current population reports, P25-1143). Washington, DC: U.S. Government Printing Office, U.S. Census Bureau.

Coulter, X., & Mandell, X. (2012). Adult higher education: Are we moving in the wrong direction? *The Journal of Continuing Higher Education*, *60*, 40-42.

Cranton, P., & Taylor, E. W. (2012). Transformative learning theory: Seeking a more unified theory. In E. W. Taylor & P. Cranton (Eds.), *The handbook of tranformative learning: Theory, research, and practice*. San Francisco, CA: Jossey-Bass.

Crossan, B., Field, J., Gallacher, J., & Merrill, B. (2003). Understanding participation in learning for non-traditional adult learners: Learning careers and the construction of learning identities. *British Journal of Sociology of Education*, *24*, 55-67.

Cruce, T. M., & Hillman, N. W. (2012). Preparing for the silver tsunami: The demand for higher education among older adults. *Research in Higher Education*, *53*, 593-613.

Cubberly, F. (2015). The reality of free community college tuition. *Journal of College Admission*, *227*, 21-23.

Cullen, J. B., Long, M. C., & Reback, R. (2013). Jockeying for position: Strategic high school choice under Texas' top ten percent plan. *Journal of Public Economics*, *97*, 32-48.

Daloz, L. (1999). *Mentor: Guiding the journey of adult learners*. San Francisco, CA: Jossey-Bass.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York, NY: Macmillan.

Dewey, J. (1938). *Experience and education*. New York, NY: Macmillan.

Dewey, J. (1993). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston, MA: D.C. Heath.

DiSilvestro, F. R. (2013). Continuing higher education and older adults: A growing challenge and golden opportunity. *New Directions for Adult and Continuing Education*, *140*, 79-87.

Donaldson, J. F., & Townsend, B. K. (2007). Higher education journals' discourse about adult undergraduate students. *The Journal of Higher Education*, *78*, 27-50.

Eckerson, E., Talbourdet, L., Reichlin, L., Sykes, M., Noll, E., & Gault, B. (2016, September). *Childcare for parents in college: A state-by-state assessment*. Institute for Women's Policy Research. Retrieved from https://www.luminafoundation.org/files/resources/child-care-for-parents-in-college.pdf

Eichinger, R. W., & Lombardo, M. M. (2004). Learning agility as a prime indicator of potential. *Human Resource Planning*, *27*, 12-16.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: W.W. Norton.

Fain, P. (2014, September 10). Keeping up with competency. *Inside Higher Ed*. Retrieved from https://www.insidehighered.com/news/2015/09/10/amid-competency-based-education-boom-meeting-help-colleges-do-it-right

FairTest. (2016). Retrieved from http://www.fairtest.org/about

Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Continuum.

Gallagher, C. W. (2014). Disrupting the game-changer: Remembering the history of competence-based education. *Change: The Magazine of Higher Education*, *46*, 16-23.

Giancola, J., Grawitch, M., & Borchert, D. (2009). Dealing with the stress of college: A model for adult students. *Adult Education Quarterly*, *59*, 246-263.

Gibson, R. (2013, August 2). *Competency-based learning: Four challenges and impediments*. Retrieved from https://evolllution.com/opinions/competency-based-learning-challenges-impediments/

Goode, W. J. (1960). A theory of role strain. *American Sociological Review*, *25*, 483-496.

Hagedorn, L. S. (2005, January/February). Square pegs: Adult students and their "fit" in postsecondary institutions. *Change*, *37*, 22-29.

Harris, J. (2002). *Brief history of American academic credit systems: A recipe of incoherence in student learning*. Washington, DC: U.S. Department of Education. Retrieved from http://eric.ed.gov/PDFS/ED470030.pdf

Harris, M. (2013). *Understanding institutional diversity in American higher education*. San Francisco, CA: Jossey-Bass.

Hart Research Associates. (2010). *Raising the bar: Employers' views on college learning in the wake of the economic downturn*. Washington, DC. Retrieved from https://www.aacu.org/sites/default/files/files/LEAP/2009_EmployerSurvey.pdf

Heilig, J. V., Reddick, R. J., Hamilton, C., & Dietz, L. (2010). Actuating equity: Historical and contemporary analyses of African American access to selective higher education from Sweatt to the top 10 percent law. *Harvard Journal of African American Public Policy*, *17*, 11-27.

Hiss, W. C., & Franks, V. W. (2014). *Defining promise: Optional standardized testing policies in American college and university admissions*. Arlington, VA: National Association for College Admissions Counseling.

Horn, L. (1996). *Nontraditional undergraduates, trends in enrollment from 1986 to 1992 and persistence and attainment among 1989–90 beginning postsecondary students* (NCES 97–578). Washington, DC: U.S. Government Printing Office, U.S. Department of Education, National Center for Education Statistics.

Hussar, W. J., & Bailey, T. M. (2014). *Projections of educational statistics to 2022* (NCES 2014-051). Washington, DC: U.S. Government Printing Office, U.S. Department of Education, National Center for Education Statistics.

Institute of International Education. (2016a). *Special reports: Economic impact of international students*. Retrieved from http://www.iie.org/Research-and-Publications/Open-Doors/Data/Economic-Impact-of-International-Students

Institute of International Education. (2016b). *2015 "Fast Facts."* Retrieved from http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fast-Facts

Irvine, C. K. S., & Kevan, J. M. (2017). Competency-based education in higher education. In K. Rasmussen, P. Northrup, & R. Colson (Eds.), *Handbook of research on competency-based education in university settings* (pp. 1-27). Hershey, PA: IGI Global.

Jarson, J. (2010). Information literacy and higher education: A toolkit for curricular integration. *College & Research Libraries News*, *71*, 534-538.

Jones, D., Mortimer, K., & Sathre, C. O. (2007). *Increasing productivity: Is higher education up to the task? Paper presented to the Association for the Study of Higher Education*. Louisville, KY.

Kasworm, C. (2005). Adult student identity in an intergenerational community college classroom. *Adult Education Quarterly*, *56*, 3-20.

Kasworm, C. (2010). Adult learners in a research university: Negotiating undergraduate student identity. *Adult Education Quarterly*, *60*, 143-160.

Kelly, A. P., & Columbus, R. (2016, June). *Innovate and evaluate: Expanding the research base for competency-based education*. Retrieved from https://www.aei.org/wp-content/uploads/2016/06/Innovate-and-Evaluate.pdf

Knowles, M. S. (1975). *Self-directed learning*. Chicago, IL: Follett.

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Chicago, IL: Follett.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2012). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). London, England: Routledge.

Kutner, M., Greenberg, E., & Baer, J. (2006). *A first look at the literacy of America's adults in the 21st century* (NCES 2006-470). Washington, DC: U.S. Department of Education National Center for Education Statistics. Retrieved from http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED489066

Laitinen, A. (2012, September). *Cracking the credit hour*. New American Foundation and Education Sector. Retrieved from http://www.cbenetwork.org/sites/457/uploaded/files/Cracking_the_Credit_Hour_Sept5_0.pdf

Lakin, M. B. (2009). Forging new identities: Older adults in higher education. *International Journal of Continuing Education and Lifelong Learning*, *2*, 33-44.

Lakin, M. B., Mullane, L., & Robinson, S. (2008). *Mapping new directions: Higher education for older adults. Reinvesting in the third age: Older adults and higher education—Second report*. Washington, DC: American Council on Education.

Markle, G. (2015). Factors influencing persistence among nontraditional university students. *Adult Education Quarterly*, *65*, 267-285.

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, *89*, 3-13.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco, CA: John Wiley.

Mezirow, J. (2009). Transformative learning theory. In J. Mezirow & E. Taylor (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 18-32). San Francisco, CA: John Wiley.

Morphew, C. C. (2009). Conceptualizing change in the institutional diversity of U.S. colleges and universities. *Journal of Higher Education*, *80*, 243-269.

National Center for Education Statistics. (2009). *Projections of educational statistics to 2018. Table 11. Actual and middle alternative projects numbers for total enrollment in all degree-granting postsecondary institutions, by sex, age, and attendance status: Fall 1993 to Fall 2018*. Retrieved from https://nces.ed.gov/pubs2009/2009062.pdf

Nelken, M. L. (2009). Negotiating classroom practice: Lessons from adult learning. *Negotiation Journal*, *25*, 181-194.

Northedge, A. (2003). Rethinking teaching in the context of diversity. *Teaching in Higher Education*, *8*, 17-32.

O'Donnell, V. L., & Tobbell, J. (2007). The transition of adult students to higher education: Legitimate peripheral participation in a community of practice? *Adult Education Quarterly*, *57*, 312-328.

Padulla, M. A. (1994). Reentry women: A literature review with recommendations for counseling and research. *Journal of Counseling and Development*, *73*, 10-16.

Pittman, E. (1994). Cultural centers on predominantly White campuses: Campus, cultural and social comfort equals retention. *Black Issues in Higher Education*, *11*, 104.

Porter, S. R., & Reilly, K. (2014, July). *Competency-based education as a potential strategy to increase learning and lower cost*. Retrieved from http://www.cbenetwork.org/sites/457/uploaded/files/MaximizingResources_CBE.pdf

Reay, D. (2002). Class, authenticity and the transition to higher education for mature students. *The Sociological Review*, *50*, 398-418.

Shed, J. M. (2003). The history of the student credit hour. In J. V. Wellman & T. Ehrlich (Eds.), *How the student credit hour shapes higher education: The tie that binds* (pp. 5-12). San Francisco, CA: Jossey-Bass.

Sherman, A., & Klein-Collins, R. (2015). *State policy approaches to support prior learning assessment*. Chicago, IL: Council for Adult and Experiential Education. Retrieved from http://www.cael.org/pdfs/cael_hcm-pla-state-policy-report-2016

Silva, E., White, T., & Toch, T. (2015). *The Carnegie unit: A century-old standard in a changing educational landscape*. Retrieved from https://www.carnegiefoundation.org/wp-content/uploads/2015/01/Carnegie_Unit_Report.pdf

Snyder, T. D. (2005). *Mini-digest of education statistics* (NCES 2005-017). Washington, DC: U.S. Government Printing Office, U.S. Department of Education, National Center for Education Statistics.

Snyder, T. D., & Dillow, S. A. (2015). *Digest of education statistics 2013* (NCES 2015-011). Washington, DC: U.S. Government Printing Office, National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Tate, P., & Klein-Collins, R. (2015, October). *PLA and CBE on the competency continuum*. Chicago, IL: Council for Adult and Experiential Learning. Retrieved from http://www.cael.org/pdfs/cael-views-on-cbe-and-pla-oct-2015

Taylor, E. (2008). Transformative learning theory. *New Directions in Adult and Continuing Education*, *119*, 5-15.

Tennant, M. (2006). *Psychology and adult learning* (3rd ed.). New York, NY: Routledge.

Vincent, S., & Focht, W. (2009). US higher education environmental program managers' perspectives on curriculum design and core competencies: Implications for sustainability as a guiding framework. *International Journal of Sustainability in Higher Education*, *10*, 164-183.

White, B. P. (2016, March). *The myth of the college-ready student*. Retrieved from https://www.insidehighered.com/views/2016/03/21/instead-focusing-college-ready-students-institutions-should-become-more-student

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). New York, NY: Pearson.

Wirt, J. S., Choy, S., Gerald, D., Provasnik, S., Rooney, P., Watanabe, S., & Tobin, R. (2002). *The condition of education 2002*. Washington, DC. Retrieved from http://nces.ed.gov/pubs2002/2002025.pdf

Yankelovich, D. (2005, November). Ferment and change: Higher education in 2015. *Chronicle of Higher Education*. Retrieved from http://www.viewpointlearning.com/wp-content/uploads/2011/04/fermentchange_1105.pdf

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