

# THE POST-TRADITIONAL LEARNERS MANIFESTO REVISITED

Aligning Postsecondary Education with Real Life for Adult Student Success



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### AMERICAN COUNCIL ON EDUCATION

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# **EXECUTIVE SUMMARY**

Bernadine is a 45-year-old, African American mother of three who is among the millions of Americans already in the workforce and actively seeking to build their human capital to remain competitive in today's labor market. Bernadine's human capital is enhanced in complex ways that bridge the ecosystems of college, workplace, and community-based learning. Her journey is ongoing, will take decades, and may never end. Moreover, in order to promote individual opportunity, social mobility, and national competitiveness in the global innovation economy, the United States needs people like Bernadine to succeed on their learning journeys. Bernadine is a post-traditional learner. The amount of hard work, tenacity, and courage it will take for her to succeed is worthy of a manifesto—a *Post-traditional Learners Manifesto*.

In 2013, ACE released Post-traditional Learners and the Transformation of Postsecondary Education: A Manifesto for College Leaders to highlight the importance of helping individuals like Bernadine succeed in increasing their human capital. Manifestos are designed to spark new insight into recognized challenges, provide high-level principles, and spur experimentation on new solutions. The Post-traditional Learners Manifesto made the simple data-supported argument that the lifelong learning journey of someone like Bernadine, rather than being an anathema to traditional colleges and universities, could serve as the jumping-off point for academic, technological, and revenue innovations to redesign the postsecondary education sector for new forms of college-going and human capital acquisition.

The 2013 paper cast a wide net by defining post-traditional learners as "individuals already in the work force who lack a postsecondary credential yet are determined to pursue further knowledge and skills while balancing work, life, and education responsibilities" (Soares 2013, 1–2). This definition encompasses roughly 98 million people, according to the U.S. Census Bureau's 2016 Current Population Survey, and also serves to place a special emphasis on those who haven't yet achieved any postsecondary education credential—a key public policy challenge.

Still, post-traditional learners are a diverse group. The term encompasses individuals with a range of education needs, from high school graduates to dropouts and those with limited literacy and English language skills. Post-traditional learners also encompass many life stages and identities: they are single mothers, immigrants, veterans, and at-risk young people looking for a second chance. Yet this diversity belies commonalities that are shaping a new form of demand for postsecondary education in the twenty-first century into a more fluid form of college-going with longer, episodic participation.

The new demand tends toward human capital development that is integrated across different learning ecosystems—college, work, and community—and creates a unique adult

According to the U.S. Census Bureau's 2016 Current Population Survey, there are 98 million Americans age 25 and above with either a high school diploma or equivalency (62 million), or some college education but no degree (36 million).

learning identity that manifests as a dynamic relationship between learners' characteristics and higher education structures. Fundamental elements of learner identity in this model include learner roles, life roles, life experiences, and knowledge mastery. Key higher education learning structures include policies and practices, academic programs, faculty and staff relations, and institutional clusters and systems.

We posit that leveraging the interplay of these learner and system elements is crucial to unlocking innovation at scale in postsecondary education.

Yet, innovative solutions that change sectors do so by solving specific problems for specific learners and institutions. Thus, in revisiting the *Post-traditional Learners Manifesto*, we decided to dig deeper into post-traditional learner demand in two ways. One way was to explore the subset of post-traditional learners that we could quantify with a specific data set, the National Postsecondary Student Aid Study 2011–12 (NPSAS:2012), with an emphasis on teasing out learners who are older, work full time, are financially independent, or are connected with the military. Another way was to explore more qualitative ways to understand post-traditional learner demand by incorporating a conceptual model for adult learner identity (noted above) and introducing our own adaptation of a broader view on how human capital development can occur, which we call the learning ecosystem.

Exploring the NPSAS:12 data with a particular focus on age, working intensity, financial independence, and military connection, we found that post-traditional learners represented as much as 60 percent of enrolled undergraduates. Forty-four percent of post-traditional learners were from non-white populations, and 60 percent were women. Seventy percent of post-traditional learners were employed while enrolled, and 45 percent worked full time while enrolled. Nine percent of post-traditional learners had some type of military connection.

A majority of post-traditional learners were enrolled in two-year public institutions (53 percent), while 20 percent of post-traditional learners were enrolled in for-profit institutions. Post-traditional learners were also four times more likely than other students to have previously earned a degree—41 percent versus 10 percent. Still, like Bernadine, many post-traditional learners face substantial obstacles to earning a degree. Of the American adults with some college education but no degree, more than half have spent two or more years in college. That is no accident; the current learning ecosystem is not set up for their success.

Post-traditional learners are more likely than other undergraduates to be women, seek career-oriented credentials, and attend less well-resourced, open access institutions. This pattern of college-going is shaped by the diverse demographics, experiences, and enrollment patterns of post-traditional learners, and reflects the manner in which these factors impact their efforts at building human capital.

Navigating this complex human capital development process to help post-traditional learners earn a credential is a must for colleges and universities in an era of heightened accountability, with diminished public support and an intensifying focus on outcomes.

In the beginning of a movement, a manifesto serves to catalyze action. Yet, innovation most often unfolds incrementally, with steps that eventually create a new paradigm that seems almost self-evident. Post-traditional learners are here to stay, and they will have lasting and transformative effects on our society and economy, and on higher education. They remain an emergent force in reshaping the demand for postsecondary education that will yield new academic, technological, and financial models. With an eye toward stepwise progress along this vector, we provide recommendations for improving data, developing more robust or integrated financial aid and employment policies, and tailoring academic programs in ways that would strengthen how post-traditional learners are served.

#### USE BETTER DATA FOR BETTER DECISIONS

- At the national level, build on ongoing improvements to the Integrated Postsecondary Education Data System (IPEDS) that allow for better understanding the college-going patterns of post-traditional learners.
- At the state level, leverage Statewide Longitudinal Data Systems to better understand the relationship between post-traditional learners' learning journeys and outcomes.

# BETTER ALIGN FEDERAL POLICIES WITH POST-TRADITIONAL LEARNER REALITIES

- Continue to invest in the Pell Grant program in ways that make college more affordable for post-traditional learners.
- Better align federal financial aid and unemployment insurance policies.
- Tap into new research on the Federal Work Study Program to explore ways to better serve post-traditional learners.

#### ENABLE POST-TRADITIONAL LEARNER SUCCESS

- · Acknowledge learning that occurs outside higher education.
- Embrace systems and consortia.
- Use institutional data, policies, and systems to prescribe the right delivery models and services.
- · Create better engagement between higher education and the workforce.

# INTRODUCTION

Bernadine is a post-traditional learner. She is an African American woman in her forties in the process of researching local colleges and universities. She plans to pursue a degree in business administration and hopes that the program will accept most or all of her credits earned from four different institutions over a 20-year period. Bernadine is also hopeful that the courses she needs to complete the degree will be offered at times that will allow her to maintain her full-time job as an administrative assistant. Not unrelated to her search process is that she is a single mother of three children, one of whom just transferred from a community college to a four-year university. Her search has slowed because she has not been able to easily find information about the class schedule or how to submit her previous transcripts for credit on websites. She is currently trying to figure out a time to visit the campus during business hours to speak with an admissions representative. However, the visit keeps getting put off until tomorrow because time is scarce, every dollar counts, and her family needs her.

There are millions of post-traditional learners like Bernadine who face similar challenges in their efforts to earn a credential. Whether because of their age, employment intensity, or other responsibilities such as caregiving, parenting, or military enlistment, post-traditional learners struggle to earn a college degree because institutions were not designed to be inclusive of them. As a result, many post-traditional learners pile up credits, others accumulate debt, and many will never earn a degree. With more post-traditional learners like Bernadine seeking a postsecondary education, the mismatch between them and many traditional colleges and universities will grow more apparent. Simply put, neither students nor institutions can afford for these misalignments to persist (Drucker 2008; Soares 2013). Serving post-traditional learners is an imperative for higher education leaders and policymakers alike (Soares 2013).

Given the importance of post-traditional learners to the future of American higher education, more researchers, institutional leaders, and policymakers have endeavored to serve them better. Yet, these efforts have been slowed by a lack of comprehensive data and a limited understanding of how post-traditional learners prefer to engage in a postsecondary education. In this paper, we attempt to characterize post-traditional learners across higher education using data from the National Postsecondary Student Aid Study 2011–12 (NPSAS:12). In particular, we explore how the unique life experiences and roles, and the learning preferences of post-traditional learners shape how they go to college. This segues into a discussion of why this is important for both policymakers and college and university leaders. Finally, recommendations for both policy and practice are offered to help better serve post-traditional learners.

# THE POST-TRADITIONAL LEARNERS MANIFESTO REVISITED

### College Incompletion Hurts Us All

If you think Bernadine is an anomaly, think again. Out of the 215 million Americans age 25 years or above, 29 percent (62 million) have a high school diploma or GED® credential. Seventeen percent (36 million) have some college education but no degree. Of those with some college education but no degree, more than half (19 million) have spent two or more years in college. Many of these students have made substantial progress toward completion over multiple terms (Shapiro et al. 2014).² Too many leave burdened with debt, saddled with credits, and less likely to complete than they were before (Fain 2013; Park 2013). They also go without the full benefits of earning a degree, including higher lifetime income, greater insulation from unemployment, and more plentiful opportunities at a time when the premium on credentials continues to rise (Baum 2014; Ma, Pender, and Welch 2016). Perhaps in recognition of this, more adult learners are on their way back. By 2026, it is projected that approximately 8.8 million students age 25 and older will be enrolled at colleges and universities, up from 8.1 million in 2015, and 6.3 million in 2000.<sup>3,4</sup>

College incompletion is harmful in both direct and indirect ways. It hurts people like Bernadine and her children. It also erodes communities as a result of limited civic engagement, diminished social capital, and reduced public health (Ma, Pender, and Welch 2016). Economies fail to reach their full potential due to higher unemployment rates, lower earnings and tax revenues, and misaligned talent pools (Baum 2014; Carnevale, Jayasundera, and Gulish 2017; Ma, Pender, and Welch 2016). It also adversely affects the bottom line of colleges and universities, many of which are struggling to remain viable (Gephardt 2015; Hoover and Lipka 2016).

Every degree left on the table also hurts the United States, which runs the risk of losing its edge in a globally competitive knowledge and learning economy unless steps are made to ensure that more people earn college credentials (Keeley 2007; Merisotis 2015; Soares 2013; Stokes 2015). Yet, progress remains mixed. On one hand, the number of undergraduate credentials conferred annually at U.S. colleges and universities grew 69

<sup>2</sup> A recent analysis of students with some college but no degree revealed that more than two-thirds were multiple-term enrollees. Of the 31,458,482 students examined in this study, 31.9 percent (10,036,274) were one-term enrollees; 55.7 percent (17,508,166) were multiple-term enrollees with less than two years' progress; and 12.4 percent (3,914,042) were potential completers (multiple-term enrollees with two years' progress or more).

<sup>3</sup> This represents total fall enrollment figures provided by the NCES Digest of Education Statistics: https://nces.ed.gov/programs/digest/d16/tables/dt16\_303.40.asp.

<sup>4</sup> It should be noted that the high mark for this population was 8.9 million, which was in 2010.

percent between 1997–98 and 2014–15.<sup>5</sup> On the other hand, graduation rates have remained stagnant. The six-year graduation rate for bachelor's-seeking students has risen only 4 percent<sup>6</sup> over the last two decades, while the graduation rate for first-time associate- or certificate-seeking students actually declined 1 percent when comparing the 2000 and 2010 cohorts.<sup>7</sup> Simultaneously, other nations have caught on to the importance of providing a higher education, making great strides in the postsecondary educational attainment rates of young adults. According to the Organisation for Economic Co-operation and Development (OECD), the United States fell from the most educated nation in the world in 1997 to the fifth-most today (OECD 2016).<sup>8,9</sup> Taken together, these domestic and international developments are a losing formula in a fiercely competitive global economy, and many have taken notice.

### The Completion Agenda

In recent years, higher education, policymakers, the private sector, and civic society have banded together to create an ambitious higher education reform agenda based on increasing the number of people who have earned a postsecondary credential. Known as the completion agenda, a number of states have set their own goals related to increasing post-secondary attainment levels (Soares 2013; Snyder and Fox 2016). Many of these statewide goals include targets related to adult postsecondary attainment given declining enrollments and projections of fewer recent high school graduates (Bransberger and Michelau 2016; Brown 2012; Jaschik and Lederman 2017; Lederman and Seltzer 2017; HCM Strategists 2014). While adult postsecondary attainment goals have been included in statewide completion plans, many colleges and universities have yet to focus on these populations, opting instead to concentrate on traditional students.

This focus on traditional students has made it difficult for colleges to continue to close gaps between traditional students and today's older, more racially and socioeconomically diverse students. In fact, recent evidence from the National Student Clearinghouse shows that since 2012 the largest drops in degree attainment were among adult learners (Cara-

<sup>5</sup> In 1997–98, a total of 2,295,442 undergraduate credentials were awarded by Title IV participating public, private not-for-profit, and for-profit institutions. That number increased to 3,870,072 in 2014–15. Undergraduate credentials include bachelor's degrees, associate degrees, and certificates under the associate degree.

<sup>6</sup> The six-year graduation rates for the 1996 and 2008 starting cohorts were 55.4 percent and 59.5 percent, respectively, according to the 2015 Digest of Education Statistics.

<sup>7</sup> The graduation rates from first institution attended within 150 percent of normal time for first-time, full-time degree/certificate-seeking students at two-year postsecondary institutions in the 2000 and 2010 cohorts were 30.5 percent, and 29.4 percent, respectively, according to the 2015 Digest of Education Statistics.

<sup>8</sup> Currently, 44.6 percent of Americans between the ages of 25 and 64 have completed some form of postsecondary education, which places the U.S. as fifth in the OECD *Education at a Glance* rankings (2016), down from first in the world in 1997. Moreover, 46.5 percent of Americans between the ages of 25 and 34 have completed a postsecondary education, which ranks the U.S. as 11th in the world, according to *Education at a Glance*.

<sup>9</sup> Between 1997 and 2015, the percentage of Americans between the ages of 25 and 34 with a college credential dropped from second to 11th (OECD 2016).

pezza 2016). These trends persist despite data suggesting that nontraditional learners will be increasingly important in the ongoing national discussion on college completion (de Vise 2011, para. 1). Policymakers and college and university leaders should consider how higher education can be reconfigured to support post-traditional learners like Bernadine, who encounter inflexible and insufficient financial aid policies and support, suboptimal transfer pathways, duplicative coursework, unaware faculty and staff members, and scarce resources for child care.

"I have not been at a university for a long time. I really need to find an institution that is going to count some of the units I earned from four previous institutions toward my degree." —Bernadine

College and university leaders must ultimately realize that higher education policy and practice need to evolve so that they are better able to accommodate post-traditional learners' need to balance life, work, and education (Soares 2013).

### The Changing Nature of the Student Body

More comprehensive data and research geared toward post-traditional learners are necessary in order to better understand and serve them. Currently, the presence of quality performance measures for post-traditional learners is spotty, and targeted research is sparse. Although student demographics have shifted since its release in 2002, the best-known consideration of the changing makeup of students on college campuses is the National Center for Education Statistics report *Nontraditional Undergraduates* (Choy 2002). The report defined a "nontraditional" student as any undergraduate with one of following seven "risk factors":

- · Delayed enrollment into postsecondary education
- Attends part time
- Is financially independent of parents
- · Works full time when enrolled
- · Has dependents other than a spouse
- Is a single parent
- · Lacks a standard high school diploma

The study found that nontraditional students enrolled more often at two-year institutions<sup>10,11</sup> and at for-profit institutions<sup>12</sup> when compared to traditional students. Nontra-

<sup>10</sup> The likelihood of enrolling at two-year institutions increased the more nontraditional characteristics a student had.

<sup>11</sup> In Choy (2002), minimally nontraditional students are defined as having only one nontraditional characteristic. Moderately nontraditional students are defined as having two or three nontraditional characteristics. Highly nontraditional students are defined as having more than three nontraditional characteristics.

<sup>12</sup> Moderately nontraditional students (7.1 percent) and highly nontraditional students (6.6 per-

ditional students were also far more likely than their traditional peers to leave college without a credential. As such, they were deemed as "at-risk," a label that remains a barrier to fully understanding who these students are.

In 2003, Berker, Horn, and Carroll examined the characteristics and experiences of working adult undergraduates. The study examined those who considered work to be their primary activity (employees who study). Most employees who study enrolled because they wanted a better job (85 percent), were seeking personal enrichment (89 percent), and wanted a credential (80 percent). In comparison to those who considered their postsecondary education to be their primary activity (students who work), employees who study were older, and more likely to be married and have children/dependents. Academically, employees who study were more likely than their traditional peers to seek shorter-term credentials in vocational fields and take courses that did not lead to any degree. Six years after beginning their studies, 62 percent of employees who study had not completed a degree or certificate and were no longer enrolled in college.

These studies reveal some key insights into post-traditional learners. Their motivating factors for enrolling (e.g., getting a better job, personal enrichment, earning a credential) are similar to those of typical incoming freshmen. Yet, they have different personal and professional responsibilities that shape their sense of identity and affiliation in addition to occupying a majority of their time. These competing priorities make earning a credential a more complex and difficult process (Bean and Metzner 1985). In short, post-traditional learners want the same thing for the same reasons as their traditional counterparts. They just need different pathways to earning a degree that can be molded to fit well with their life roles and experiences, and their learning preferences. Still, the traits and factors that positively and negatively impact post-traditional learner success are not well understood. That will need to change in order to develop and implement effective policy solutions.

# Characterizing the Post-traditional Learner

In recognition of the growing number of post-traditional learners, college and university leaders and policymakers have begun to reflect on what can be done to facilitate post-traditional learner success. As such, there have been multiple attempts to identify some of the defining characteristics of post-traditional learners, summarized in Table 1.

"Going back to school, for me, means that I will have more skills to advance in my career." —Bernadine

cent) were slightly more likely than minimally nontraditional students (4.7 percent), and three times more likely than traditional students (2.2 percent) to be enrolled at private for-profit institutions.

<sup>13</sup> According to *The American Freshman: National Norms Fall 2016*, 84.8 percent of first-time, full-time freshmen attending baccalaureate institutions were concerned about going to college to get a better job. Additionally, 72.6 percent identified making more money as a very important reason to attend college. Of surveyed first-time, full-time freshmen, 75.4 percent thought that gaining a general education and appreciation of ideas was a very important factor influencing their decision to go to college (Eagan et al. 2017).

 Table 1. List of Organizations and Characteristic Factors Used to Describe Modern Undergraduates

ORGANIZATION	LABEL	CHARACTERISTIC FACTORS
American Council on Education	Post-traditional learners (2013)	<ul> <li>Age 25 or above</li> <li>Are needed wage earners for themselves or their families</li> <li>Are military connected</li> <li>May have dependents</li> <li>Work full time</li> </ul>
Center for American Progress	Working learners (2009)	<ul> <li>Already in the workforce</li> <li>Lack a postsecondary credential</li> <li>Are needed wage earners for themselves or their families</li> </ul>
Institute for Higher Education Policy	21st century student (2013)	<ul> <li>First generation</li> <li>Low to moderate income</li> <li>Age 24 or above</li> <li>From communities of color</li> <li>Attending part time</li> <li>Taking care of children or other dependents</li> <li>Working while enrolled</li> <li>Non-native English speaking</li> <li>Immigrant</li> <li>Active duty, military, or veteran</li> </ul>
Lumina Foundation	Today's student (2015)	<ul> <li>Older than 25</li> <li>Working while enrolled</li> <li>Raising children</li> <li>Financially independent</li> <li>Racially diverse</li> <li>Struggling to graduate</li> </ul>
Excelencia in Education	Post-traditional learners (2013)	<ul> <li>May need academic preparation or remediation</li> <li>Enroll at a community college or part time</li> <li>Delay entry</li> <li>Live off campus with parents or own dependents</li> <li>First generation</li> <li>Latino or African American</li> <li>Worked over 30 hours each week</li> </ul>
Georgetown Center for Education and the Workforce/ACT Center for Equity in Learning	Working learners (2015)	Young or mature part- or full-time workers while enrolled
Center for Law and Social Policy	Nontraditional students (2011)	<ul> <li>Older than 25</li> <li>Financially independent</li> <li>Enrolled at two-year college</li> <li>Minority students</li> <li>Low-income students</li> <li>Employed part time or full time</li> <li>Student parent</li> </ul>
National Center for Education Statistics	Nontraditional undergraduates (1996)	<ul> <li>Delays enrollment</li> <li>Attends part time for at least part of the academic year</li> <li>Works full time (35 hours or more per week) while enrolled</li> <li>Financially independent</li> <li>Has dependents other than a spouse</li> <li>Is a single parent</li> <li>Has either not finished high school or has equivalency</li> </ul>

There is a quantitative richness in these overlapping approaches to defining post-traditional learners in the examples provided in Table 1. They can greatly assist in framing policy and practice in postsecondary education. Yet the key to truly understanding and supporting post-traditional learners is a qualitative understanding of their life roles and identities, as well as the emerging ecosystems they create around themselves as they progress through their learning journeys.

This blended approach to understanding post-traditional learners is at the heart of the definition in the *Post-traditional Learners Manifesto*. Using this approach and Soares's definition as a guide, the following section will explore some of the distinct ways in which post-traditional learners utilize higher education, and then use national data to explore their profile.

### **Understanding Post-traditional Learners**

Bernadine's story shares many aspects with those of other post-traditional learners, who have been described previously as "individuals already in the workforce who lack a postsecondary credential yet are determined to pursue further knowledge and skills while balancing work, life, and education responsibilities" (Soares 2013, 2). As evidenced by Table 1, contemporary definitions of post-traditional learners reflect this, despite having some level of variability. Post-traditional learners are typically older, or they are regularly engaged with the workforce. Some are parents or caregivers. Others have served in the military. Some or all of these traits may apply to one person. Many are financially independent due to their age<sup>14,15</sup> (Federal Student Aid 2017; IRS 2017). Unlike traditional undergraduates, post-traditional learners are rarely, if ever, just fulfilling an undergraduate student role at an institution (Kasworm 2007).

### **Post-traditional Learner Preferences**

While definitions are important, the focus on post-traditional learners is about more than coining a new moniker. These undergraduates make college-going decisions that are based on a set of adult-life commitments that make their needs and experiences once enrolled very different from traditional undergraduates. For example, post-traditional learners often make decisions to participate in or forego higher education based on and evaluated against a complicated set of priorities that involve work and family, and shaped by unique adult-life experiences and responsibilities (Soares 2013).

<sup>14</sup> According to the Internal Revenue Service, a child may be claimed as a dependent for the purposes of filing taxes if he or she is younger than 19, or will be a student younger than 24 years old at the end of the calendar year. There is no age limit if a child is "permanently and totally disabled" or meets the qualifying relative test: https://www.irs.gov/help-resources/tools-faqs/faqs-for-individuals/frequently-asked-tax-questions-answers/filing-requirements-status-dependents-exemptions/dependents-exemptions-2.

To file as an independent when submitting a Federal Student Aid application, the applicant must be younger than 24 by December 31 of the school year for which they are applying for financial aid: https://studentaid.ed.gov/sa/fafsa/filling-out/dependency#dependent-or-independent.

The Adult Undergraduate Student Identity (AUSI) model proposed by Kasworm (2007) provides a framework to better understand the interplay for post-traditional learners between adult and student roles and responsibilities that make their engagement and learning distinctive. Figure 1 is an adapted representation of the AUSI model that represents how individual students interact with traditional higher education forms. The center of the figure includes four primary student components—learner roles, life roles, life experience, and knowledge mastery—that represent the post-traditional learner identity, which is shaped by dual roles as a student and adult. The periphery includes the formal higher education structures, policies, and stakeholders that each post-traditional learner navigates in his or her pursuit of a credential. Each of these components is described below:

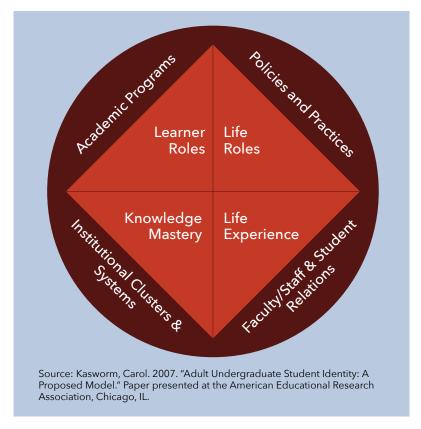


Figure 1. Adult Undergraduate Student Identity (AUSI) Framework: Modification of Kasworm (2007)

- Learner roles. As an adult and undergraduate, the learner role is a reflection of a post-traditional learner's sense of positionality and agency as a learner and student in the collegiate environment.
- **Life roles.** Similarly, as an adult undergraduate, life roles signify competing and complementary roles, such as worker, family member, or community citizen, that influence a post-traditional learner's identification with the collegiate environment.

- Life experiences. The life experience of post-traditional learners is shaped by their
  maturational level and world view, linkages to the community, and beliefs about the
  impact that furthering their education will have on their future.
- **Knowledge mastery.** Post-traditional learners come to the undergraduate environment and classroom as adults with knowledge mastery, and derive meaning based in part on their life experience, and in particular as members of the labor market.

These factors interface with formal higher education structures (the outer periphery of the circle) such as:

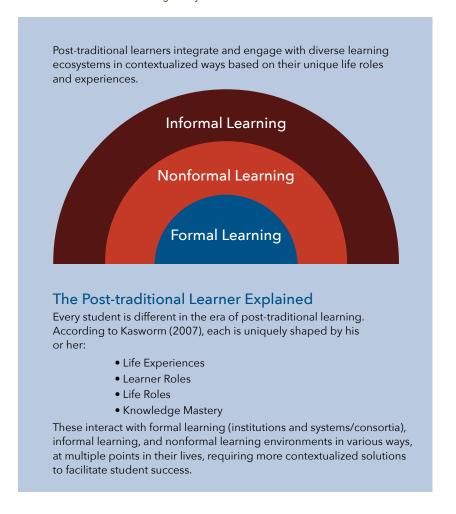
- Policies and practices. Post-traditional learners encounter an array of complex policies (e.g., admissions, financial aid, degree requirements) in their efforts to navigate college.
- Academic programs. Selecting an academic program is an important decision for
  post-traditional learners who draw some of their motivation for attending college
  from wanting a better job. Selecting wisely requires guidance, support, and insight.
- Faculty and staff relations. In order to successfully navigate a complicated set of
  policies, practices, and academic programs, post-traditional learners require strong
  connections to empathetic faculty and staff who prioritize meeting their needs.
- Institutional clusters and systems. Enrolling at multiple institutions is a reality for some post-traditional learners. Stronger pathways between colleges would maximize the value of each step in their education journeys.

The adapted AUSI model provides a means for higher education leaders to extend their thinking about post-traditional learners beyond demographic categorization. This is critical because college and university leaders and policymakers tend to focus narrowly on aspects of the post-traditional learner profile related to the *learner and life roles* (i.e., they are older, working, or have children) that set these students apart from other undergraduates. In particular, attention to the *life experience and knowledge mastery* components of the model emphasizes that post-traditional undergraduates uniquely make decisions, learn, and navigate institutions. As a result, their engagement and learning is qualitatively different and can have an impact on their experiences, retention, and success within the context of traditional higher education models.

### The Need for a More Fluid Learning Ecosystem

Post-traditional learners make decisions about how they engage in higher education based on a set of complicated life priorities that involve work and family (Soares 2013). For example, the willingness or ability to engage in a credential program or a class can change quickly if a child or parent requires care, or an opportunity for overtime arises. In order to manage these priorities and successfully pursue a college education, post-traditional learners need a more flexible learning ecosystem that is distributed across different life stages, places, times, platforms, and experiences (see Figure 2).

Figure 2. The Post-traditional Learning Ecosystem



The most familiar learning environments are formal ones, like colleges and universities, credential programs, and classes. However, this learning ecosystem also has informal environments, which include knowledge acquisition that occurs through life and work. Nonformal learning environments also exist, and these often develop organically and are loosely structured around community assets that include human capital, networks, and cultures. Today, all of these formal, informal, and nonformal components of the learning ecosystem are also mediated by technology and the Internet, making different kinds of physical and digital learning environments accessible to post-traditional learners. This allows post-traditional learners to access knowledge and engage in learning in ways that fit with their learning preferences, time constraints, and responsibilities.

Better understanding the unique identities, responsibilities, and needs of post-traditional learners is crucial to designing a learning ecosystem that is optimized for them. Doing so effectively will improve student outcomes, boost completions, and make institutions more sustainable. The following section uses available data to estimate the number of post-traditional learners, and identify some of their distinguishing traits.

### **Estimating the Number of Post-traditional Learners**

For the purposes of this paper, post-traditional learners were defined as students who were over the age of 25, working full time, financially independent, or connected with the military. Based on those criteria, and data from the 2003–04, 2007–08, and 2011–12 versions of the National Postsecondary Student Aid Study (NPSAS), post-traditional learners have been a consistent and significant presence in higher education, making up close to 60 percent of the undergraduate population in each of the previous three years of the study. During the 2011–12 academic year, the latest for which we have federal data, 13.3 million out of a total 23.1 million undergraduates enrolled in two- and four-year colleges and universities would be considered post-traditional learners (see Table 2).

Table 2. Proportion of Undergraduates in 2011–12 Classified as Post-traditional or Other

STUDENT TYPE	NUMBER	%
Post-traditional	13,294,258	57.7%
Other	9,761,184	42.3%
Total	23,055,442	100.0%

Source: Authors' estimates using National Postsecondary Student Aid Study 2011-12 (NPSAS:12).

# Post-traditional Learners Are Different from Other Students

Post-traditional learners constituted a majority of undergraduate enrollments while also being shaped by a host of different formative experiences in comparison to other undergraduates (see Table 3).

In 2011–12, 70 percent of post-traditional learners were employed while enrolled, compared to 52 percent of other undergraduates. Additionally, 45 percent of post-traditional learners were working full time while enrolled. Forty-eight percent of all post-traditional learners had dependents, and more than a quarter (26 percent) were single parents. Sixty percent of post-traditional learners were women, and 44 percent were non-white. Two percent of post-traditional learners lived on campus versus 26 percent of other students. Nine percent of post-traditional learners were connected to the military. 16

Enrollment was more sporadic for post-traditional learners. Only 41 percent of post-traditional learners were able to maintain full-time enrollment throughout the year, versus

<sup>16</sup> This refers to National Guard members, reservists, active duty personnel, and veterans (Molina and Morse 2015).

63 percent of other students. Post-traditional learners also sought shorter-term credentials. Sixty-one percent of post-traditional learners were enrolled in a certificate or associate degree program, versus 36 percent of other students. They were also twice as likely (4 percent) as other students (2 percent) to be enrolled in a non-certificate/degree program.

Post-traditional learners were also enrolled at different kinds of institutions. A higher percentage of post-traditional learners (53 percent) enrolled in two-year institutions in comparison to other students (35 percent). Additionally, post-traditional learners were far more likely to enroll in for-profit institutions. According to NPSAS:12, post-traditional learners were six times more likely (13 percent) than other students (2 percent) to enroll in for-profit four-year institutions, and twice as likely (4 percent) to enroll in for-profit two-year institutions. Post-traditional learners were also more than four times more likely than other students to have previously earned a certificate or degree (41 percent and 10 percent, respectively).

The data validate that post-traditional learners are distinct from other students. The diverse demographics, experiences, and enrollment patterns of post-traditional learners reflect the array of life roles and experiences that uniquely shape their identities. These characteristics also influence how post-traditional learners engage with the higher education learning ecosystem, which has implications for their social needs, academic needs, and decision making once enrolled. Getting a handle on the complex identities and needs of post-traditional learners is a must for colleges and universities in an era of heightened accountability, diminished public support, and an intensifying focus on outcomes.

Understanding these unique convergences and how they might guide postsecondary education policy and practice is a key utility of our adaptation of Kasworm's life roles model of post-traditional learner behavior. It allows for a more holistic view of the competing priorities that structure a post-traditional learner's decision making about postsecondary education. Using that understanding to inform policymaking and institutional practice has a host of potential benefits.

### The Importance of Serving Post-traditional Learners

### **POLICYMAKERS**

Whether or not a post-traditional learner earns a degree is a matter of wide concern for a variety of reasons. The 13.3 million post-traditional learners who were enrolled at the time of NPSAS:12 were just the tip of the iceberg. Take for example, the 36 million Americans who are 25 or older that have some college education but no degree. Together they represent 17 percent of the adult population 25 years and older. Many are closer to earning a degree than policymakers might realize (see Table 4).

 Table 3. Characteristics of Post-traditional and Other Students, 2011–12

CHARACTERISTICS	POST-TRADITIONAL %	OTHER %	
Female	60.1%	52.7%	
Non-white	44.2%	39.3%	
Not working	29.9%	48.4%	
Residence while enrolled			
On-campus	2.3%	25.6%	
Off-campus	57.2%	30.8%	
With parents	33.0%	34.3%	
Attending multiple institutions	7.5%	9.3%	
Enrolled in:			
Certificate program	10.8%	4.2%	
Associate degree program	49.8%	32.0%	
Bachelor's degree program	34.9%	61.9%	
Non-certificate/degree program	4.4%	1.9%	
Institutional type		'	
Public four-year	22.5%	43.3%	
Private four-year	8.2%	18.8%	
For-profit four-year	13.2%	1.9%	
Total four-year	43.9%	64.0%	
Public two-year	48.7%	32.3%	
Private two-year	0.5%	0.2%	
For-profit two-year	3.8%	2.0%	
Total two-year	53.0%	34.5%	
Public less than two-year	0.5%	0.2%	
Private less than two-year	0.0%	0.0%	
For-profit less than two-year	2.7%	1.2%	
Total less than two-year	3.2%	1.4%	
Enrollment intensity across all institutions enrolled (2011–12)			
Exclusively full time	41.0%	63.4%	
Exclusively part time	42.9%	16.4%	
Mixed	16.1%	20.2%	
Previously earned a certificate or degree	40.7%	9.7%	

Source: Authors' estimates using National Postsecondary Student Aid Study 2011-12 (NPSAS:12).

**Table 4.** Years of College Completed by People 25 Years and over with Some College but No Degree, 2016

YEARS OF COLLEGE COMPLETED	N (IN THOUSANDS)
Total, Some College, No Degree	36,003
Less than one year of college, no degree	5,045
One year of college, no degree	11,715
Two years of college, no degree	13,841
Three years of college, no degree	3,674
Four or more years of college, no degree	1,728

Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement

Four out of five (86 percent) have one year of college or more with no degree to show for their efforts. That's nearly 31 million would-be post-traditional learners who are at the doorstep of a credential.

The economic impact of helping these post-traditional learners earn a degree would be staggering. Based on recent data, someone with an associate degree earns an additional \$3,100 in after-tax income and pays \$1,200 more per year in comparison to a person with some college but no degree (Ma, Pender, and Welch 2016). Based on those figures, if everyone in the United States 25 years or older with some college but no degree earned an associate degree it would result in an additional \$111.6 billion in after-tax income, and an additional \$43.2 billion in tax revenue, all in one year (see Table 5).

**Table 5.** Single Year Tax and Income Impact of 25 and Older Population with Some College but No Degree Earning an Associate Degree

SCENARIO	N (INTROJECNIES)	AGGREGATE EARNINGS AND TAX PAYMENTS OF FULL-TIME, YEAR-ROUND WORKERS	
	(IN THOUSANDS)	TAXES PAID	AFTER-TAX INCOME
All "Some College No Degree" Earn an Associate Degree	36,003	\$ 363,630,290	\$ 1,292,507,664
Status Quo for "Some College No Degree"	36,003	\$ 320,426,691	\$ 1,180,898,367
Additional Tax Revenues and Income		\$ 43,203,599	\$ 111,609,297

Notes: Table assumes full-time year-round employment at median income level.

Estimated taxes represent the estimated the average federal income, Social Security, Medicare, state and local income, sales, and property taxes paid at these income levels.

Sources: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement; Ma, Pender, and Welch 2016, Figure 2.1; calculations by the authors.

The positive effects would be even more far-reaching than additional income and tax revenues. By earning an associate degree, those Americans age 25 or older with some college

but no degree would decrease their likelihood of living in poverty by 3 percent. In other words, 1.1 million Americans would climb out of poverty. The likelihood of unemployment would decrease by 1 percent, meaning that 432,000 Americans would have found jobs. This would help more than 1.1 million get off Medicaid. Roughly 972,000 fewer people would require Supplemental Nutrition Assistance Program (SNAP) assistance (see Table 6). The individual and collective social and economic benefits of facilitating post-traditional learner success are too big to ignore and should be a major focus of policymakers.

**Table 6.** Impact of Earning an Associate Degree on People 25 Years and over with Some College but No Degree, 2016 (N in Thousands = 36,003)

STATEMENT	% CHANGE DUE TO EARN- ING ASSOCIATE DEGREE	N
Would no longer live in poverty	3.1%	1,116,093
Would have employer-provided health insurance coverage	1.7%	612,051
Would not participate in Medicaid	3.1%	1,116,093
Would not participate in the SNAP program	2.7%	972,081
Would no longer be unemployed	1.2%	432,036

Sources: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement; Ma, Pender, and Welch 2016, Figures 2.12a, 2.14a, 2.16a, 2.17; calculations by the authors.

### INSTITUTIONAL LEADERS

Helping post-traditional students succeed is also a huge opportunity for college and university leaders to innovate (Soares 2013; Soares, Steele, and Wayt 2016). For many institutions, it could be the key to sustainability, as many have struggled through a difficult decade characterized by economic recession, stagnant wages, ballooning tuition, and stagnant public subsidy per student. Between 2004 and 2014, an average of five four-year public and private not-for-profit colleges closed per year, and that rate is expected to triple in the near future (Gephardt 2015). Smaller colleges are expected to bear the brunt of that, particularly those from the Northeast and Midwest (Bransberger and Michelau 2016). Heavily dependent on tuition revenues—and in the case of public institutions, state funding—these colleges are witnessing their markets and traditional funding sources shrink. Already constrained in their capacity to invest in academic programs and facilities, limited economies of scale and inefficient cost structures further disadvantage these institutions.

<sup>17</sup> According to the State Higher Education Executive Officers Association report State Higher Education Finance: FY 2015, educational appropriations per student increased for three consecutive years after four years of decline in 2009 through 2012. While national per student funding levels now meet their pre-recession 2008 levels, 19 states still remain below that threshold. During that same time frame, tuition revenue as a share of total educational revenues has increased 10.7 percent, from 35.8 percent in 2008 to 46.5 percent in 2015.

For many institutions, college and university sustainability is increasingly a game of volume and margins: getting more students to quality credentials in cost-effective ways is how you win. Playing by those rules will be increasingly important, considering that the number of high school graduates will plateau for most of the next decade, according to the Western Interstate Commission on Higher Education (Bransberger and Michelau 2016). As competition for recent high school graduates increases, some institutions will be squeezed out of that market. The 31 million prospective post-traditional learners offer college and university leaders a chance to brighten their institutions' financial outlook in both the short-term and long-term. They just need to be willing to adopt policies and practices that meet the needs of post-traditional learners.

# Looking to the Future

Post-traditional learners are here to stay, and they could have lasting and transformative effects on our society and economy, and on higher education. As our population grays, and the global economy requires lifelong learning and retooling, policymakers and college and university leaders have been forced to think differently about how to engage with prospective learners. People need the ability to learn while they work, provide care, or serve in the military, and that will become more commonplace over time. So, while post-traditional learners may have once been an afterthought, they can no longer be ignored. The policies and structures that shape the higher education delivery model must be reconsidered to suit them. The following section includes recommendations for improving data, developing more robust or integrated financial aid and employment policies, and tailoring academic programs in ways that would strengthen how post-traditional learners are served.

### **USE BETTER DATA FOR BETTER DECISIONS**

The fact that this paper is using data from 2011–12 should signal that the higher education community needs broader access to better data. In that vein, and to serve post-traditional learners better, higher education should consider improving its national data system to ensure that it includes the enrollment and completion patterns of post-traditional learners. The primary federal source for data on colleges and universities is the Integrated Postsecondary Education Data System (IPEDS). IPEDS excludes post-traditional learners who entered higher education with prior college credit or reentered after some time away. Institutions that participate in federal student financial aid programs are required—through a series of IPEDS surveys—to report information about enrollment, finance, and graduation rates.

For some time, the design of IPEDS has been critiqued because the surveys that track attainment have focused on first-time, full-time students. Changes to the 2015–16 IPEDS data collection will require institutions to report on non-first-time and part-time students in the new Outcome Measures survey. However, the data will not be broken down by key traits including age, race/ethnicity, or gender, which will make it difficult to identify and

define who post-traditional learners are and analyze whether or not they complete. Future data collections should at a minimum improve on these limitations, which would better align data-reporting requirements with student realities. This would provide colleges, universities, policymakers, and a host of other stakeholders with a more accurate analytical snapshot of student persistence and graduation, and help ensure that the burdens associated with data-reporting requirements provide value to colleges, universities, and students.

At the same time, policymakers, researchers, and institutional researchers could increase their use of Statewide Longitudinal Data Systems (SLDS), which contain more granular data on individuals spanning K-12, higher education, the workforce, and other important state agencies (Gagliardi and Turk 2017; National Center for Education Statistics 2017a). Currently, 47 states have statewide longitudinal data systems, making them widely accessible to colleges and universities. After years of funding the construction of SLDS infrastructure, the Department of Education (ED) has shifted to investing in developing the capacity to use these systems to answer important questions spanning the cradle-to-career pipeline (National Center for Education Statistics 2017b).

In short, diverse data are already being collected at the national and state levels, but they need to be used in smarter ways. Doing so will require continued investments in order to ensure that these national and state data systems are fully utilized in a complementary fashion for the purposes of post-traditional learner success and institutional reforms.

# BETTER ALIGN FEDERAL POLICIES WITH POST-TRADITIONAL LEARNER REALITIES

As the number of post-traditional learners continues to grow, financial aid policies and unemployment insurance policies will play a more prominent role in helping them complete. As evidenced by the data, the enrollment of post-traditional learners was more sporadic, a fact likely owed to their multiple roles and an increasingly volatile economy. Often, the only time a post-traditional learner has to retool is when a layoff has occurred, which makes attending college less affordable at a time when it may offer the greatest return on investment. Two policies that could be readjusted to better reflect the realities faced by post-traditional learners are the Pell Grant program and unemployment insurance (UI).

### **READJUST PELL**

Recently, Congress approved the restoration of year-round Pell in order to enable college completion for the millions of students who depend on federal financial aid (Kreighbaum 2017). The Pell Grant program is one of the major tools at the disposal of the federal government to help students attend college. Designed to help low-income undergraduate students, the program provides grants of between \$581 and \$5,920. In 2015–16, the program awarded 7.6 million students roughly \$36.8 billion (U.S. Department of Education

2016). There has been substantial growth in Pell Grant expenditures over the course of the last decade. Still, in recent years, total Pell Grant expenditures have declined in inflation-adjusted dollars (Ma, Pender, and Welch 2016). Policymakers can take additional measures to ensure that Pell Grants serve low-income students and are aligned with the needs of a changing demographic. According to Turk and Chen (2017), these include providing the funding increases so that Pell Grants can match the pace of inflation, and making the Pell Grant an entitlement. Either would be an important step that would help post-traditional learners afford the pursuit of a postsecondary education.

### FURTHER ANALYSIS OF FEDERAL WORK STUDY

Federal Work Study (FWS) is one of the oldest federal programs intended to promote college access and persistence for low-income students. FWS provides up to \$1 billion annually to cover 75 percent of the wages of student employees, who typically work on campus for 10 to 15 hours. Recent research suggests that FWS overall has a modest positive impact on persistence and graduation (Scott-Clayton and Minaya 2016; Scott-Clayton 2017). Given the attachment to work of most post-traditional learners, we suggest more study of FWS in the context of the work/education patterns of these students. Doing so may provide opportunities for FWS program modifications that better serve low-income students who are also post-traditional learners.

### CREATE MORE COMPLEMENTARY UNEMPLOYMENT POLICIES

Many post-traditional learners stop in and out of higher education depending on their work status. Adult and unemployed workers stand to gain the most from postsecondary skills during hard economic times, but they are also vulnerable financially, reducing their capacity to make an investment in their future. Currently, unemployment insurance (UI) policies are misaligned with federal financial aid policies, and have design elements that can deter post-traditional learners from electing to participate in certain postsecondary programs (Turner 2017).

Turner (2017) proposes a systemic policy realignment that better connects workforce policies and postsecondary policies (including financial aid). The Enrollment for Employment Earnings proposal would replace traditional Pell Grants for those on UI with more structured and individualized federal funding. It would do so by first mandating that all UI recipients be notified of their eligibility for funding. UI recipients would also be required to receive guidance in choosing an approved training or educational program that would meet their skills and interests. They would also be required to receive instruction in academic and financial planning, in addition to having to submit weekly attendance and certified progress reports. Satisfying these requirements would make UI recipients eligible for larger Pell Grants and prolonged funding eligibility (Turner 2017).

### **ENABLE POST-TRADITIONAL LEARNER SUCCESS**

Enabling post-traditional student success starts with better data and thoughtful policies. However, it also requires the redesign of campus programs and services in ways that meet the unique needs of post-traditional learners. The following recommendations are intended to offer college and university leaders ideas for doing so.

# ACKNOWLEDGE THE LEARNING THAT OCCURS OUTSIDE HIGHER EDUCATION

Validating and credentialing college-level knowledge and skills acquired outside the post-secondary context is an increasingly popular option for supporting educational attainment, particularly for post-traditional learners. These college processes have a generative impact by linking together the formal, informal, and nonformal elements of the learning ecosystem in ways that promote degree completion. Competency-based education (CBE) is one popular approach to doing so, and in fact, it has become an umbrella term encompassing many older practices including prior learning assessment and newer ones including stackable credentials.

Rather than awarding credit based on the credit hour, CBE focuses on awarding credit for skill, competency, and knowledge mastery or simply demonstrating competency itself as the means of awarding a credential. Such an approach is particularly useful for adult post-traditional learners who are juggling a variety of life roles and responsibilities. Since 2014, when ED announced its Experimental Sites Program, a number of institutions have allowed students to earn credit through competency-based assessments (Baker 2014; Cunningham, Key, and Capron 2016). One notable example is Southern New Hampshire University's College for America program. The program was the first of its kind to be approved for federal financial aid under ED's direct assessment provisions, and was awarded a First in the World grant totaling \$3.9 million to build a new student support structure aimed at providing just-in-time assistance in 2014 (CFA 2014). Programs like CFA leverage the totality of students' life roles and experiences, across formal, informal, and nonformal learning environments, in ways that help post-traditional learners earn a degree.

Other stepwise innovation initiatives that are helping to build bridges between formal and informal learning ecosystems include the American Association of College Registrars and Admissions Officers/NASPA – Student Affairs Professionals in Higher Education Comprehensive Record Project and the American Council on Education's Alternative Credit Project.<sup>TM</sup> 18,19 The Comprehensive Record Project attempts to capture all learning outcomes that occur around the typical college classroom; for example, in internships, leadership experiences, service, and many other cocurricular experiences. The Alternative Credit Project.<sup>TM</sup> connects non-college education providers with colleges who have

<sup>18</sup> http://www.aacrao.org/resources/record

<sup>19</sup> http://www.alternativecreditproject.com

agreed to accept their courses for credit after an ACE quality review. All of these examples can help to align the way postsecondary education considers learning and the needs of post-traditional learners.

### EMBRACE SYSTEMS AND CONSORTIA

Using data and evidence, redesigning federal and state policies, and rethinking academic programs and review creates a more navigable learning ecosystem for the post-traditional learner. However, a key challenge remains: an undergraduate education is often no longer the domain of a single institution; it is a collaborative effort that often spans multiple academic programs and campuses. As a result, colleges and universities must make the flow of students between them more seamless, which begs for the more effective use of higher education systems and consortia (Gagliardi et al. 2015; Lane and Johnstone 2013). For example, the State University of New York recently underwent a process of collaboration across 64 campuses that led to the creation of its seamless transfer policy and Transfer Paths program. This collaborative effort led to the alignment of more than 32,000 academic courses that comprise the most popular majors and account for 95 percent of all transfers within the system (State University of New York 2015). Efforts to create common frameworks for lower division courses, the development of meta-majors, and comprehensive transfer articulation agreements are strategies that have helped students reduce time, credits, and cost to degree.

# USE DATA, POLICIES, AND SYSTEMS TO PRESCRIBE THE RIGHT DELIVERY MODELS AND SERVICES

It is not easy for institutions and systems to create a standard set of outcomes, particularly as the variability in student characteristics and needs increases. Still, that is what stakeholders are demanding of them. Given that, institutions have to better calibrate and connect their data infrastructures with policies and academic programs so that post-traditional learners can be served in a more contextualized fashion. For example, many institutions have separate database systems and architectures across organizational units, data topics (e.g., finance, personnel, facilities), or both (Gagliardi, Parnell, and Carpenter-Hubin, forthcoming). This can make it difficult to assess whether or not different services, platforms, majors, and courses improve student outcomes in cost-effective and scalable ways that are of quality, and that support the core identity, mission, and vision of the organization (Gagliardi and Turk 2017). Regardless of the sophistication of analytics functions, institutions can take basic steps to use data in ways that focus on utilizing data analytics to prescribe the kinds of support and service that nudge a student toward success (Parnell, forthcoming; Wildavsky 2014).

# CREATE BETTER ENGAGEMENT BETWEEN HIGHER EDUCATION AND THE WORKFORCE

More and more, stakeholders, including students, policymakers, and employers, believe that graduates should be ready to succeed in the workforce. Often, colleges and universities are of the belief that students should be ready for a career, whereas employers want graduates who are ready for a specific job. While those two perspectives aren't mutually exclusive, they are sometimes at tension with one another, and also miss the broader point: both are needed for success in a learning economy. In order to ensure that graduates are ready for the workforce, better collaborations between higher education and the private sector are needed.

For example, the Business-Higher Education Forum (BHEF) is connecting corporate and higher education executives who are mutually committed to creating a highly skilled future workforce. Examples of some of BHEF's work include its Future Cyber Leaders program, and its efforts to bolster America's data science and analytics talent (PwC and Business-Higher Education Forum 2017). These initiatives are built on a platform of big data gathered from job postings and resumes through the latest web-enabled tools, and represent the latest evolution of collaboration catalysts across learning ecosystems, which have grown in sophistication and become more necessary to build human capital in a global, learning economy. These types of organizations are essential to stepwise innovation.

Stronger workforce and college partnerships are foundational elements of a national plan for human capital development in the twenty-first century (Soares 2010; Steigleder and Soares 2012). In order to help facilitate the creation of a plan for human capital development, platforms like the Credential Engine are emerging. The Credential Engine grew from Lumina Foundation's Credential Transparency Initiative, and is designed to interface and complement ongoing efforts at improving the credentialing marketplace. It is growing into a repository for the estimated 250,000 credentials in the U.S. education/labor marketplace, and aims to describe these credentials based on a common set of characteristics including learning outcomes, labor market outcomes, and transfer value so that consumers can make better choices about which program is right for them. Such platforms can help to create a deeper understanding of areas where educational supply and occupational demands are either aligned or mismatched, allowing for institutions to guide post-traditional learners in the selection of academic programs.

<sup>20</sup> http://www.bhef.com/about

<sup>21</sup> https://www.credentialengine.org/about

# **CONCLUSION**

Higher education has fueled social mobility and economic growth for generations of Americans through multiple periods of innovation. As a result, students from diverse backgrounds have benefited from the value offered by a postsecondary education. While colleges and universities have done well in their efforts to fulfill their dual promise of access and opportunity, they are confronting a series of social, political, economic, and technological pressures that undermine their future ability to do so.

By helping post-traditional learners earn a credential, institutions will become more sustainable, and our nation's economic vitality will be strengthened. The first step in facilitating post-traditional learner success is creating insights that map who they are and what they need. This insight will help higher education leaders and policymakers work together to deliver them value. Only recently, as demographic changes have accelerated, and economic conditions have sputtered, have policymakers and institutional leaders redoubled their efforts to do so. Many now recognize the growing number of post-traditional learners as an opportunity, not a challenge. Taking advantage of that opportunity will require the creation of policies and the implementation of structural reforms that help Bernadine, and the millions like her, get the most out of their higher education.

# REFERENCES

- Baker, Jeff. 2014. "Live Internet Webinar Experimental Sites Initiative (ESI)

  Experiments." Washington, DC: Federal Student Aid, U.S. Department of
  Education. https://ifap.ed.gov/dpcletters/ANN1417.html.
- Baum, Sandy. 2014. *Higher Education Earnings Premium: Value, Variation, and Trends.*Washington, DC: Urban Institute.
- Bean, John P., and Barbara S. Metzner. 1985. "A Conceptual Model of Nontraditional Undergraduate Student Attrition." Review of Educational Research 55 (4): 485–540.
- Berker, Ali, Laura Horn, and C. Dennis Carroll. 2003. Work First, Study Second: Adult Undergraduates Who Combine Employment and Postsecondary Enrollment (NCES 2003-167). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Bransberger, Peace, and Demarée K. Michelau. 2016. Knocking at the College Door:

  Projections of High School Graduates. 9th ed. Boulder, CO: Western Interstate
  Commission for Higher Education.
- Brown, Patricia. 2012. Degree Attainment for Adult Learners. Washington, DC: American Council on Education. http://www.acenet.edu/news-room/Documents/Degree-Attainment-for-Adult-Learners--Brown.pdf.
- Business-Higher Education Forum. 2017. Invest to Improve: The Cybersecurity Talent Deficit. Washington, DC: Business-Higher Education Forum. http://www.bhef.com/publications/invest-improve-cybersecurity-talent-deficit.
- Carapezza, Kirk. 2016. "A New College Ranking Designed for Adults." On Campus: The WGBH News Higher Education Blog, WGBH. September 8, 2016. http://blogs.wgbh.org/on-campus/2016/9/8/different-kind-college-ranking.
- Carnevale, Anthony P., Tamara Jayasundera, and Artem Gulish. 2017. America's Divided Recovery: College Haves and Have-Nots. Washington, DC: Georgetown University Center on Education and the Workforce.
- Choy, Susan. 2002. *Nontraditional Undergraduates* (NCES 2002–012). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- College for America (CFA). 2014. "SNHU Awarded \$3.9 Million 'First in the World' Grant from U.S. Department of Education." *College for America Blog*, Southern New Hampshire University. September 30, 2014. http://collegeforamerica.org/snhu-awarded-3-9-million-first-in-the-world-grant-from-u-s-department-of-education.
- Cunningham, Jennifer, Emily Key, and Rhonda Capron. 2016. "An Evaluation of Competency-Based Education Programs: A Study of the Development Process of Competency-Based Programs." The Journal of Competency-Based Education 1 (3): 130–139.
- de Vise, Daniel. 2011. "Non-traditional Students Key to College Completion Goal." *The Washington Post*, March 25, 2011.
- Drucker, Peter F. 2008. The Essential Drucker: The Best of Sixty Years of Peter Drucker's Essential Writings on Management. New York: Harper Business.
- Eagan, Kevin, Ellen Bara Stolzenberg, Hilary B. Zimmerman, Melissa C. Aragon, Hannah Whang Sayson, and Cecilia Rios-Aguilar. 2017. *The American Freshman: National Norms Fall 2016.* Los Angeles: Higher Education Research Institute, University of California, Los Angeles.

- Fain, Paul. 2013. "Third Try Isn't the Charm." *Inside Higher Ed,* November 15, 2013. https://www.insidehighered.com/news/2013/11/15/students-are-unlikely-graduate-if-they-stop-out-more-once-study-finds.
- Federal Student Aid. 2017. "Dependency Status." https://studentaid.ed.gov/sa/fafsa/filling-out/dependency#dependent-or-independent.
- Gagliardi, Jonathan S., Rebecca R. Martin, Kathleen Wise, and Charles Blaich. 2015. "The System Effect: Scaling High-Impact Practices Across Campuses." New Directions for Higher Education 2015 (169): 15–26.
- Gagliardi, Jonathan S., Amelia Parnell, and Julia Carpenter-Hubin, eds. Forthcoming. *The Analytics Revolution in Higher Education: Big Data, Organizational Learning, and Student Success.* Sterling, VA: Stylus Publishing.
- Gagliardi, Jonathan S., and Jonathan M. Turk. 2017. *The Data-Enabled Executive: Using Analytics for Student Success and Sustainability.* Washington, DC: American Council on Education.
- Gephardt, Dennis. 2015. Small College Closures Poised to Increase. New York: Moody's Investors Service. https://www.chronicle.com/items/biz/pdf/Small%20 College%20Closures%20Poised%20to%20Increase%5B6%5D.pdf.
- HCM Strategists. 2014. States with Higher Education Attainment Goals. Washington, DC: HCM Strategists. http://strategylabs.luminafoundation.org/wp-content/uploads/2014/02/State-Attainment-Goals.pdf.
- Hoover, Eric, and Sarah Lipka. 2016. "Enrollment Goals Remain Elusive for Small Colleges." *The Chronicle of Higher Education*, December 11, 2016.
- Internal Revenue Service (IRS). 2017. "Dependents & Exemptions 2." Last modified August 15, 2017. https://www.irs.gov/help-resources/tools-faqs/faqs-for-individuals/frequently-asked-tax-questions-answers/filing-requirements-status-dependents-exemptions/dependents-exemptions-2.
- Jaschik, Scott, and Doug Lederman, eds. 2017. 2017 Survey of College and University Presidents: A Study by Inside Higher Ed and Gallup. Washington, DC: Inside Higher Ed. https://www.insidehighered.com/booklet/2017-inside-higher-ed-survey-college-and-university-presidents.
- Kasworm, Carol. 2007. "Adult Undergraduate Student Identity: A Proposed Model." Paper presented at the American Educational Research Association, Chicago, IL.
- Keeley, Brian. 2007. *Human Capital: How What You Know Shapes Your Life*. OECD Insights. Paris: OECD Publishing.
- Kreighbaum, Andrew. 2017. "Year-Round Pell Grants Available July 1." *Inside Higher Ed,* June 20, 2017. https://www.insidehighered.com/quicktakes/2017/06/20/year-round-pell-grants-available-july-1.
- Lane, Jason E., and D. Bruce Johnstone, eds. 2013. *Higher Education Systems 3.0:*Harnessing Systemness, Delivering Performance. Albany, NY: State University of New York Press.
- Lederman, Doug, and Rick Seltzer. 2017. "The Rose-Colored Glasses Come Off: A Survey of Business Officers." *Inside Higher Ed*, July 28, 2017. https://www.insidehighered.com/news/survey/survey-finds-business-officers-increasingly-considering-more-painful-options.
- Ma, Jennifer, Matea Pender, and Meredith Welch. 2016. Education Pays 2016: The Benefits of Higher Education for Individuals and Society. Trends in Higher Education Series. Washington, DC: College Board.

- Merisotis, Jamie. 2015. America Needs Talent: Attracting, Educating, and Deploying the 21st-Century Workforce. New York: RosettaBooks.
- Molina, Dani, and Andrew Morse. 2015. Military-Connected Undergraduates: Exploring
  Differences Between National Guard, Reserve, Active Duty, and Veterans in
  Higher Education. Washington, DC: American Council on Education and NASPA
   Student Affairs Administrators in Higher Education. http://www.acenet.edu/
  news-room/Documents/Military-Connected-Undergraduates.pdf.
- National Center for Education Statistics. n.d. Integrated Postsecondary Education Data System (IPEDS). Washington, DC: National Center for Education Statistics, U.S. Department of Education. https://nces.ed.gov/ipeds.
- National Center for Education Statistics. 2005. National Postsecondary Student Aid Study 2003–04 (NPSAS:04). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- National Center for Education Statistics. 2009. National Postsecondary Student Aid Study 2007–08 (NPSAS:08). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- National Center for Education Statistics. 2013. National Postsecondary Student Aid Study 2011–12 (NPSAS:12). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- National Center for Education Statistics. 2017a. "Statewide Longitudinal Data System Grant Program." https://nces.ed.gov/programs/slds/about\_SLDS.asp.
- National Center for Education Statistics. 2017b. "Statewide Longitudinal Data System Grant Program—Grantee States." https://nces.ed.gov/programs/slds/stateinfo.asp.
- Organisation for Economic Co-operation and Development (OECD). 2016. *Education at a Glance 2016: OECD Indicators*. Paris: OECD Publishing. http://dx.doi.org/10.1787/eag-2016-en.
- Park, Toby J. 2012. "Working Hard for the Degree: An Event History Analysis of the Impact of Working While Simultaneously Enrolled." Paper presented at the American Educational Research Association's Annual Conference, Vancouver, Canada, April 2012. https://www.insidehighered.com/sites/default/server\_files/files/PARK\_WORKING.pdf.
- Parnell, Amelia. Forthcoming. "Data Analytics for Student Success: Elaborate Profusion of Institutional Research into Student Affairs." In *The Analytics Revolution in Higher Education: Big Data, Organizational Learning, and Student Success,* edited by Jonathan S. Gagliardi, Amelia Parnell, and Julia Carpenter-Hubin. Sterling, VA: Stylus Publishing.
- PwC and Business-Higher Education Forum. 2017. Investing in America's Data Science and Analytics Talent: The Case for Action. Business Higher Education Forum.
- Scott-Clayton, Judith. 2017. Federal Work-Study: Past Its Prime, or Ripe for Renewal?

  Washington, DC: Brookings Institution. https://www.brookings.edu/wp-content/uploads/2017/06/ccf\_20170622\_scott-clayton\_evidence\_speaks.pdf.
- Scott-Clayton, Judith, and Veronica Minaya. 2016. "Should Student Employment Be Subsidized? Conditional Counterfactuals and the Outcomes of Work-Study Participation." *Economics of Education Review* 52 (June): 1–18.
- Shapiro, Doug, Afet Dundar, Xin Yuan, Autumn T. Harrell, and Phoebe Khasiala Wakhungu. 2014. Completing College: A National View of Student Attainment Rates—Fall 2008 Cohort. Signature Report No. 8. Herndon, VA: National Student Clearinghouse Research Center.

- Snyder, Martha, and Brian Fox. 2016. *Driving Better Outcomes: Fiscal Year 2016 State Status and Typology Update.* Washington, DC: HCM Strategists.
- Soares, Louis. 2010. Community College and Industry Partnerships. Washington, DC: Center for American Progress. https://www2.ed.gov/PDFDocs/college-completion/02-community-college-and-industry-partnerships.pdf.
- Soares, Louis. 2013. Post-traditional Learners and the Transformation of Postsecondary Education: A Manifesto for College Leaders. Washington, DC: American Council on Education.
- Soares, Louis, Patricia Steele, and Lindsay Wayt. 2016. Evolving Higher Education Business Models: Leading with Data to Deliver Results. Washington, DC: American Council on Education.
- State University of New York. 2015. "SUNY Achieves Seamless Transfer Guarantee as Chancellor Zimpher Aims to Boost Completion." Press release, August 26, 2016. https://www.suny.edu/suny-news/press-releases/august-2015/8-26-15/suny-achieves-seamless-transfer-guarantee-as-chancellor-zimpher-aims-to-boost-completion.html.
- Steigleder, Stephen, and Louis Soares. 2012. Let's Get Serious About Our Nation's Human Capital: A Plan to Reform the U.S. Workforce Training System. Center for American Progress. https://cdn.americanprogress.org/wp-content/uploads/issues/2012/06/pdf/workforce\_training.pdf.
- Stokes, Peter J. 2015. Higher Education and Employability: New Models for Integrating Study and Work. Cambridge, MA: Harvard Education Press.
- Turk, Jonathan M., and Wei-Lin Chen. 2017. Improving the Odds: An Empirical Look at the Factors That Influence Upward Transfer. Washington, DC: American Council on Education.
- Turner, Sarah. 2017. Labor Force to Lecture Hall: Postsecondary Policies in Response to Job Loss. Policy Brief 2017–06. Washington, DC: Brookings Institution.
- U.S. Census Bureau and the U.S. Bureau of Labor Statistics. 2016. *Current Population Survey: Annual Social and Economic (ASEC) Supplement*. Washington, DC: U.S. Census Bureau.
- U.S. Department of Education. 2016. Federal Pell Grant Program 2015–2016 End of Year Report. Washington, DC: U.S. Department of Education. https://www2.ed.gov/finaid/prof/resources/data/pell-data.html.
- Wildavsky, Ben. 2014. "Nudge Nation: A New Way to Use Data to Prod Students into and Through College." In *Building a Smarter University: Big Data, Innovation, and Analytics*, edited by Jason E. Lane. Albany, NY: State University of New York Press.

