

Demographic Shifts in Educational Demand and the Rise of Alternative Credentials

Jim Fong, UPCEA

Peter Janzow, Pearson

Dr. Kyle Peck, Penn State University

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Executive Summary

With the U.S. experiencing major demographic shifts such as boomers starting to retire and millennials coming of age, changes in the workforce and in economic power, education standards, and practices are starting to change. [IPEDS data](#) shows an increase in non-degree education awards and certificates from under 600,000 issued in 2001–2002 to nearly 1 million in 2013–2014. Recently the National Student Clearinghouse reported that part-time college enrollments have dropped for the third consecutive year. This—coupled with rising traditional tuition costs, the growth of MOOCs, and other forms of informal alternative education, regulatory challenges in for-profit education, and the speed of change in the U.S. economy—may also be responsible for a rise in alternative credentials. It has been suggested that the traditional bachelor's degree may not be suited for some of the millennial generation, and that other types of learners may favor an educational credentialing system built around recognition for learning outcomes in the form of competency badges or certificates.

This research explored the role that alternative credentials play in higher education, as reported by 190 institutions of higher education, including community colleges (11%), baccalaureate colleges (12%), masters' colleges or universities (27%) and doctorate-granting universities (50%), 61% of which were public entities.

It revealed that non-traditional courses and programs with alternative credentialing have become increasingly popular and are a staple among higher education institutions, with almost all of the institutions profiled having at least one offering of this type. Alternative credentials now play a critical role in revenue and revenue planning for academic institutions and are seen as important for their future success. In this context, universities must have a full understanding of the alternative credential landscape and its potential for shifting the educational marketplace.

What are alternative credentials?

Competencies, skills, and learning outcomes derived from assessment-based, non-degree activities and align to specific, timely needs in the workforce.

¹ 2014, 2015 and 2016 National Student Clearinghouse Reports

² See Kevin M. Guthrie, [Higher Credentiaion](#) among others



The major findings of this study include:

- Alternative credentials are offered by 94% of institutions profiled.
- One in five institutions offers digital badges.
- Digital badges are most commonly offered in business-related domains.
- Institutions with corporate engagement consistently valued alternative credentialing more than institutions that did not.
- Sixty-four percent of respondents either strongly or somewhat agreed that their unit sees alternative credentialing as an important strategy for its future.

Detailed Findings

State of Alternative Credentialing

Alternative credentialing has become more common in higher education because it provides individuals with new ways to demonstrate their knowledge and skills to potential employers. Non-credit training courses, non-credit certificate programs, and micro-credentialing all provide learners with less expensive and faster alternatives to traditional degree programs. Degree holders now acquire professional licenses, education certificates and other alternative credentials from a myriad of providers including their professional associations and online programs as well as traditional higher education institutions. What was previously thought of as cutting edge is now becoming mainstream. A 2014 study by the United States Census Bureau revealed that 30% of the adult population holds an alternative credential.³

Important Emerging Trends

Major players in the private sector are increasingly focused on talent development and skill progression. Organizations like LinkedIn, a company whose mission is, **“to connect the world’s professionals to make them more productive and successful.”** are playing larger roles in professional learning, credentialing, recruitment, and employment. The company aspires to be the primary connector of learners, learning opportunities, and employment. **In March of 2016, LinkedIn launched more than 50 “Learning Paths”** (sequential sets of Lynda.com courses, complete with practice sections, assessments and “accolades” designed to support and motivate learners as they progress, and related digital certificates that can be shared via LinkedIn). Udemy, PluralSight, Udacity, edX, various coding bootcamps and many others have targeted the same opportunity to deliver need-to-know content to working professionals, just-in-time, in small units, often with associated digital learning credentials. The U.S. Department of Education’s “experimental site” program, which allows alternative learning providers to qualify for Title IV student aid may also play an important contributing role in the near future.

This trend may have the potential to **disrupt the diploma** for adult learners as well as for traditional higher education students. It may also serve as a wake-up call for leaders of colleges and universities to embrace new forms of learning and credentials sooner rather than later, so as not to cede the vast population that needs to “re-skill,” upskill, or career-shift. Professionally-focused learning goals require smaller, simpler, more applied

³ <http://www.usatoday.com/story/news/nation/2014/07/11/nanodegrees-alternative-credentials/11236811/>

learning programs that are shaped by industry need, less expensive than degrees, and sometimes smaller than courses. They also benefit from recognition through digital credentials that enable learners to tell the story of their learning and development across professional networks and job sites.

While gaining in popularity, these new programs are not without significant problems. Many of the new private sector providers struggle to deliver consistent quality in learning design, assessment and outcome certification, and their instructors have varying levels of competency. They are fast and nimble, often at the expense of learning efficacy, and they generally lack formal accreditation. All of these factors combine to present an opportunity for accredited higher education institutions whose core competencies are firmly established, provided they can adapt and rise to the challenge.

The root of the word “credential” is “credence,” and the value offered by credibility is only possible when credentials are based on a foundation of solid learning and assessment design, backed by trusted, experienced learning organizations. While sound learning outcomes and assessments are common in some vocational trades and academic disciplines, they are not overtly stated or assessed with rigor in others. The work represented by the creation of effective alternative credential programs may pose a significant obstacle, delaying or preventing slower-moving institutions from delivering new programs that are more learner- and employer-responsive, but for institutions and organizations willing to accept the challenge, the emerging opportunities will be significant.

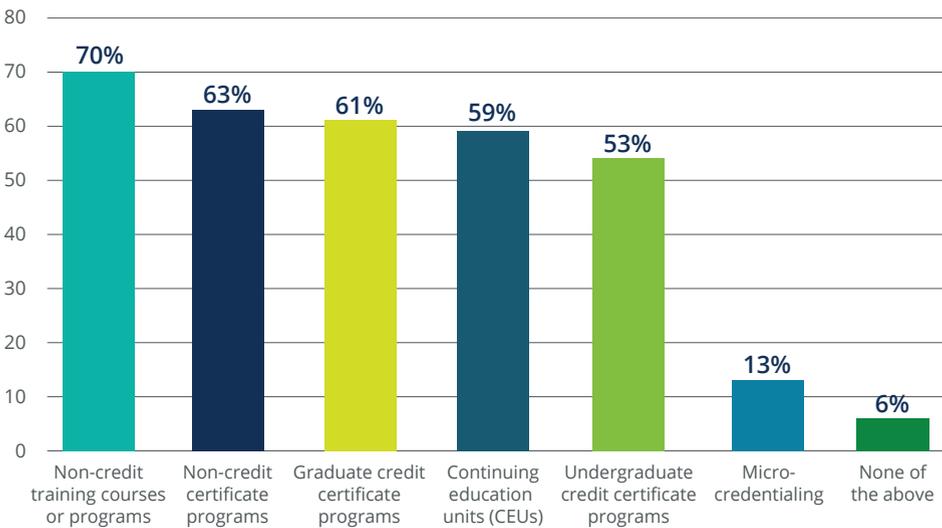
A key component of the new learning programs is digital, verified credentials. Delivered in the form of open badges, these learner-controlled credentials are configured with standardized data fields that communicate the criteria required to earn them, the assessment tools used, and even links to digital forms of evidence such as documents or videos. Digital badges have been linked to improvements in course completion, average assessment scores, and learning progression. The digital credential trend is rapidly being adopted in the labor marketplace, as leading global organizations like IBM, Microsoft, Oracle, AICPA, GED, AHIMA, and many others from various industry sectors have embraced open badges for their verified learning and professional credentials. In the last two years, millions of badges have been accepted by learners in more than 120 countries.

The transparency and trust offered by these new forms of verified recognition may lead to changes in institutional reputation (or in business terminology “brand value”) at a significantly greater speed than in the past. Policy- and tenure-bound institutions may find it difficult to redirect existing faculty and staff to produce outcomes-driven learning design and to conduct the assessments that will allow them to compete in this arena. More astute organizations may do so and find their reputations climbing quickly, especially among potential employers of their graduates.

Non-traditional Offerings

Non-credit training courses or programs are becoming increasingly popular, with 70% of respondents offering them. Ninety-four percent reported offering at least one type of non-traditional offering. Non-credit offerings are often the source of innovation in higher education institutions. Because they are offered outside the traditional academic degree channels, non-credit offerings can be created more quickly, often in response to the needs of local or regional employers, quickly addressing local skill gaps.

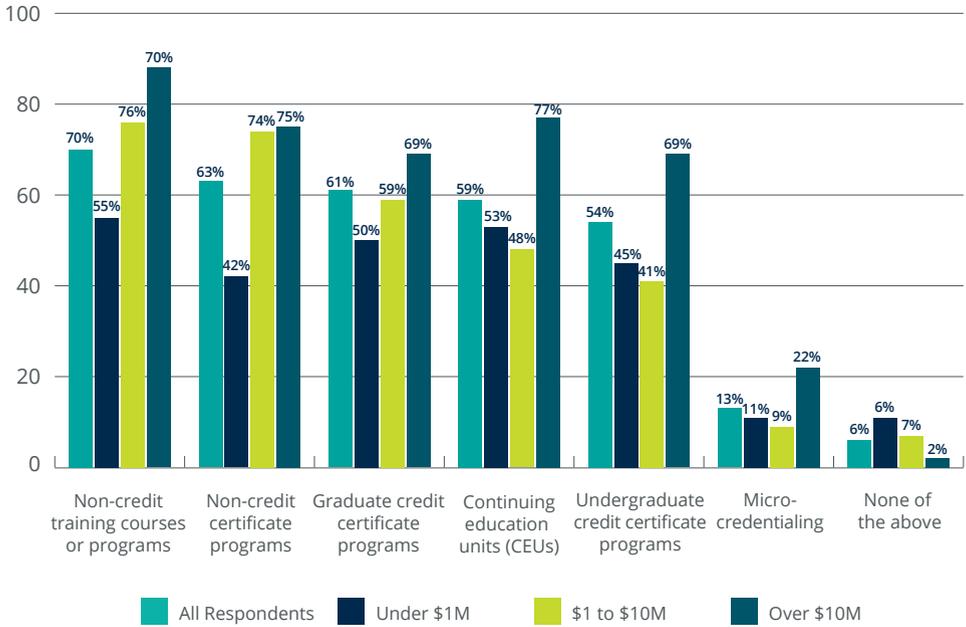
Non-traditional Offerings



The increasing popularity of non-traditional offerings will lead to a rise in alternative credentials that communicate program outcomes to external audiences, and has potential to attract more non-traditional learners through the network effect of sharing credentials across professional networks. Although micro-credential programs are the smallest and newest variety of non-traditional offerings in the mix, all forms of non-traditional programs are beginning to use verified digital credentials (open badges).

Institutions with higher revenues are more likely to offer non-traditional programs than those with lower revenues. This could be because they serve learner populations spanning more professions and containing more learners who already possess higher-level degrees and are seeking additional credentials as professional differentiation, or are preparing for a shift in careers.

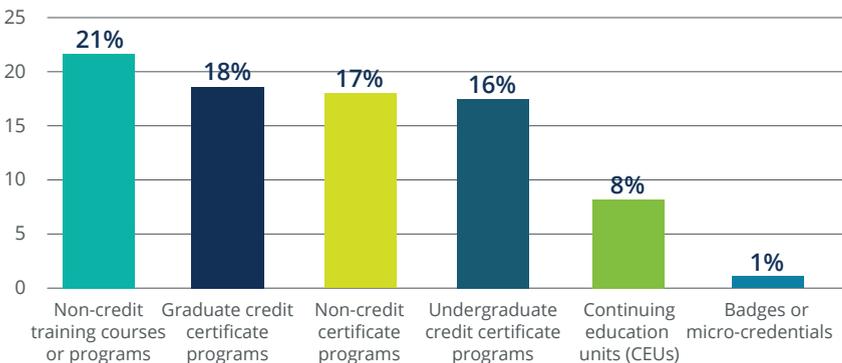
Offerings by Unit Revenues



Impact on Revenues or Planning Revenues

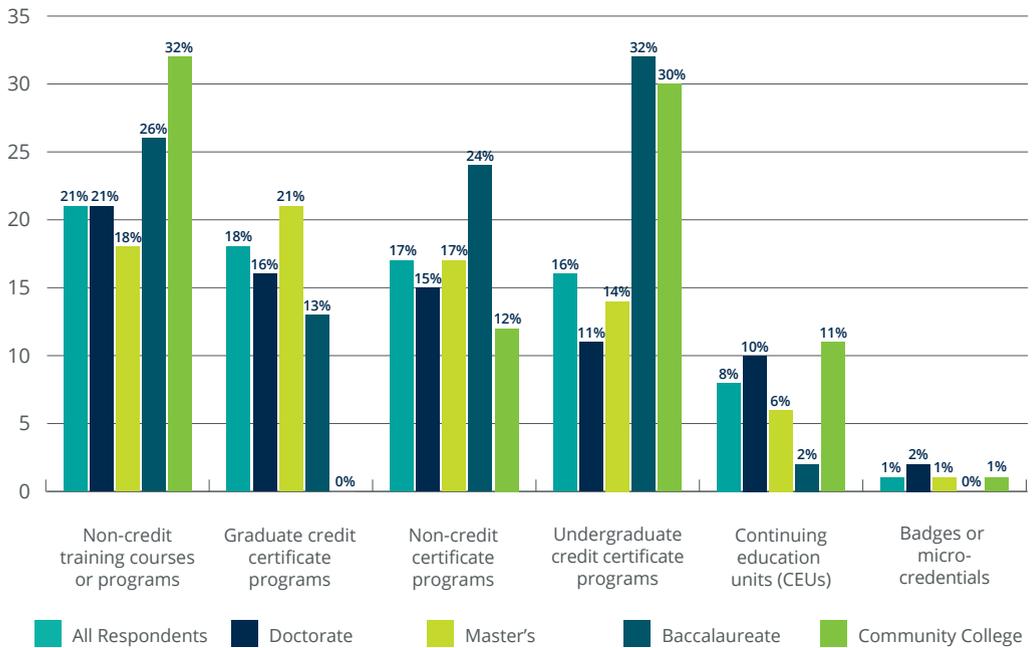
With the exception of micro-credentials, which are gaining in popularity but have not yet become widely accepted by employers, non-traditional course offerings are generating a significant amount of revenue for institutional units that provide alternative credentials. On average, non-traditional course offerings were responsible for 81% of respondents' unit revenue.

Percentage of Unit Revenue From Types of Alternative Credential Programs



Units that belong to baccalaureate colleges are particularly dependent on generating revenue from non-traditional course offerings. On average, 97% of a baccalaureate college's unit revenue comes from non-traditional course offerings. This is significantly higher than doctorate-granting universities (75%), master's colleges or universities (77%), and community colleges (86%).

Percentage of Unit Revenue From Types of Alternative Credential Programs (average by type of institution)

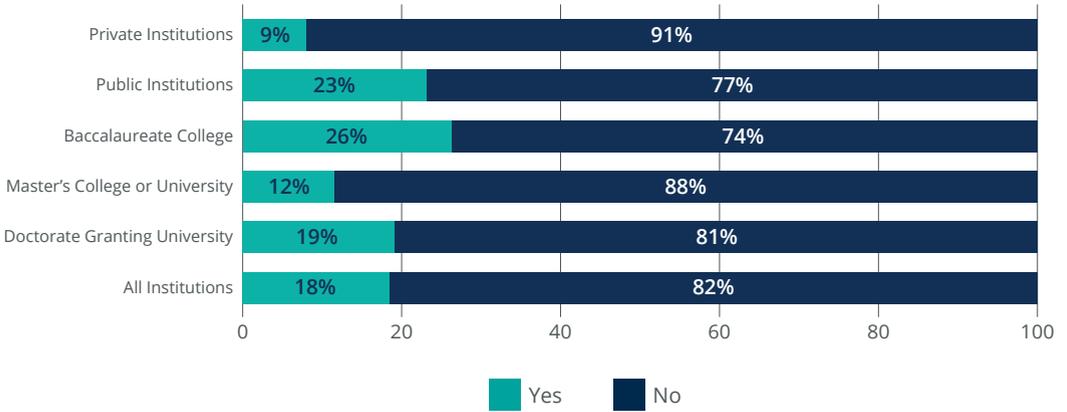


Badges and Micro-credentials: Connection to Business and Industry

In today's highly competitive global market, both employers and potential employees are looking for any advantage they can find to give them an edge on their competition. As a result, micro-credentialing programs have seen a dramatic increase in popularity over the last few years, a trend that is projected to continue.

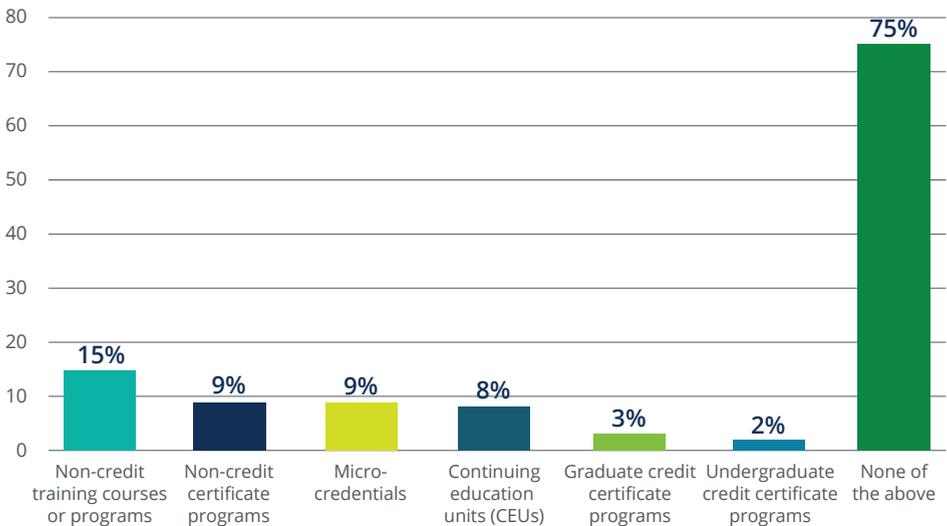
Although badging and micro-credentialing are on the rise, these types of programs are often still in their infancy and many institutions have yet to embrace them. The 2016 survey conducted by UPCEA and Pearson revealed that only one in five institutions currently offers badges, with the percentage of institutions doing so varying widely by institution type. Over a quarter (26%) of baccalaureate colleges reported offering badges, significantly higher than master's colleges or universities (12%). Public institutions (23%) were more than twice as likely to offer badges as private institutions (9%).

Do You Offer Badges?



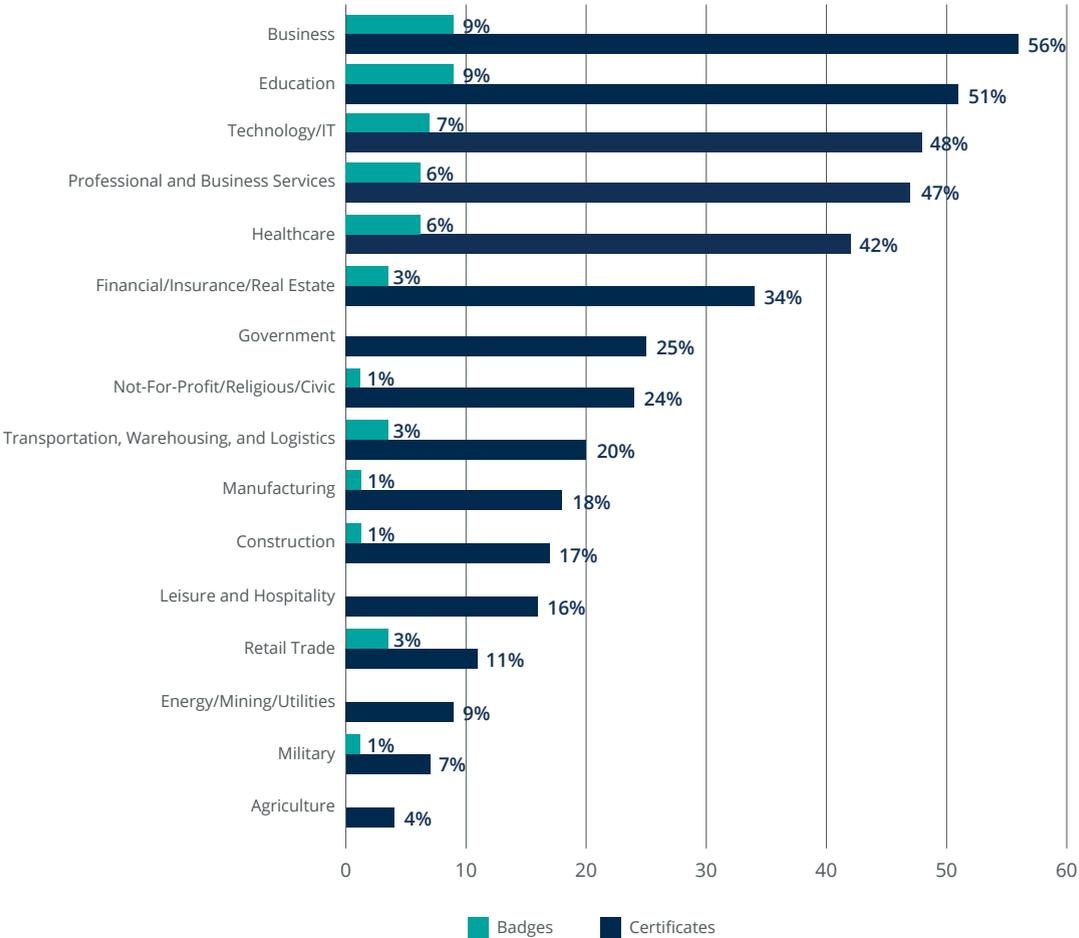
Only 15% of institutions that do offer badges provide them in association with non-credit training courses or programs which may make it difficult to assess their actual financial contribution. Badges, in several ways, are like courses. Revenues generated by individual courses are not tracked because learners are generally taking the courses in pursuit of degrees. The same is generally true with micro-credential badges, which are often components of certificate or degree programs. For this reason, the assessments of revenue produced by badges may have been rolled into revenues associated with certificates.

Do You Issue Badges or Digital Credentials for Any of the Following?



Institutions offered more certificates and badges to learners in the business sector, with 56% offering certificates and 8.5% offering badges designed for business. The second most targeted sector for both certificates and badges is education, with 51% of institutions offering certificates and 8.5% offering badges. (This correlates to the strong support for digital badges from Digital Promise and other professional teacher organizations.) Though certificates related to every industry listed in the survey were offered, no institution reported offering badging in courses or programs related to agriculture, energy/mining/utilities, government, or leisure/hospitality. By comparison, in industry, the IT and business sectors are the leading adopters of verified digital credentials in the form of badges, followed by healthcare and advanced manufacturing.

Industries For Which Institutions Offer Certificates or Badges

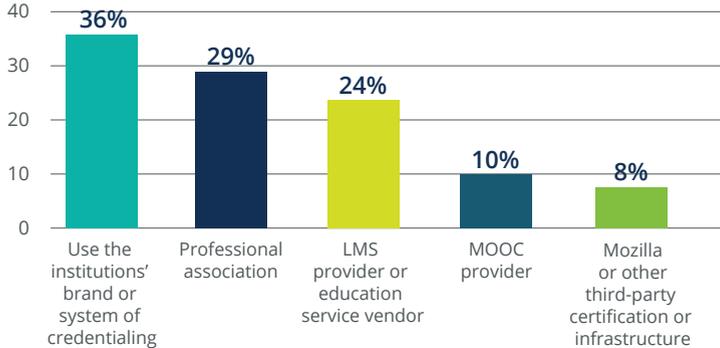


As more businesses embrace digital badging for internal professional development (such as the [IBM Open Badge Program](#)), institutions of higher education may be more inclined to follow. There may be significant opportunity to attract career changers and others through competency-based, digitally-badged series or certificates in collaboration with employers. For example, if a university collaborated with leading school districts and professional associations to add digital badges signifying abilities identified as valuable in the classroom, more teachers may enroll and student, parent, and employer satisfaction might increase.

Branding

The greatest number of institutions award credentials through their brand or system of credentialing (36%) while over a quarter (29%) use a professional association. Because brand recognition is a primary driver of trust in digital credentials, significant opportunities for university-industry co-branding around partnered programs are expected to emerge.

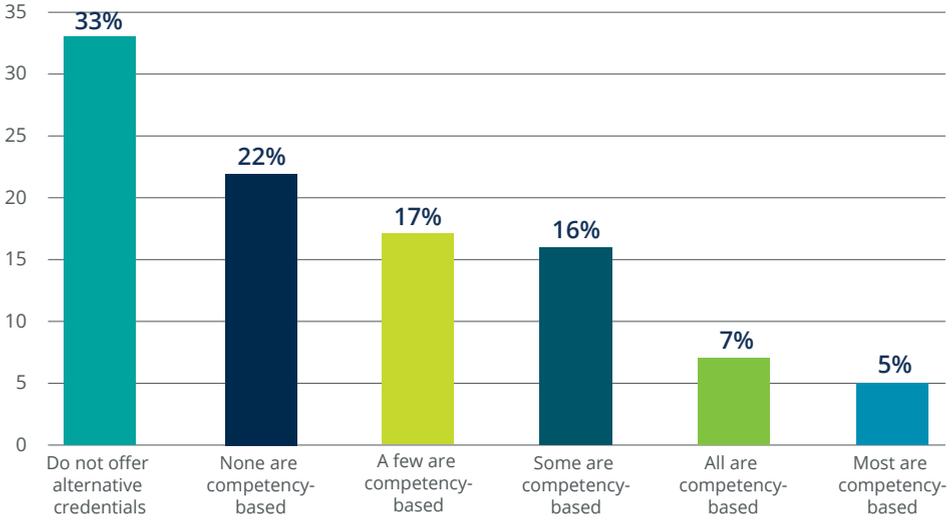
Do You Award Credentials With or Through Any of the Following?



Competency-based Programs

Twenty-two percent of institutions offering alternative credentials offer only credentials that are not competency-based, and only 12% of institutions offer mostly or all competency-based credentials. This is reflective of the emerging role of competency-based programs and the gradual acceptance of alternative accreditation models.⁴

Are Alternative Credentials Offered By Your Unit Competency-based?

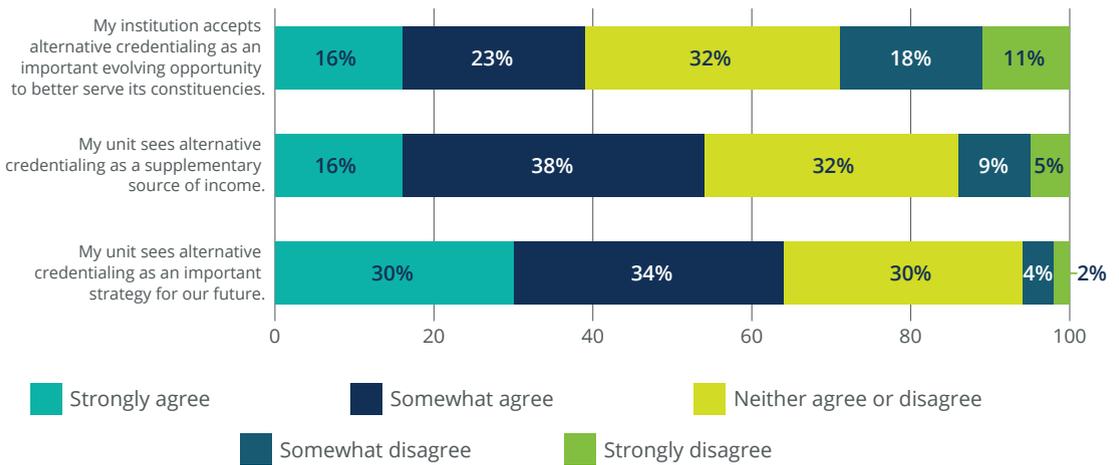


⁴ Both competency-based education and direct assessment are subjects of current [US DoE experimental sites](#) initiatives

Attitudes and Perceptions Toward Alternative Credentialing

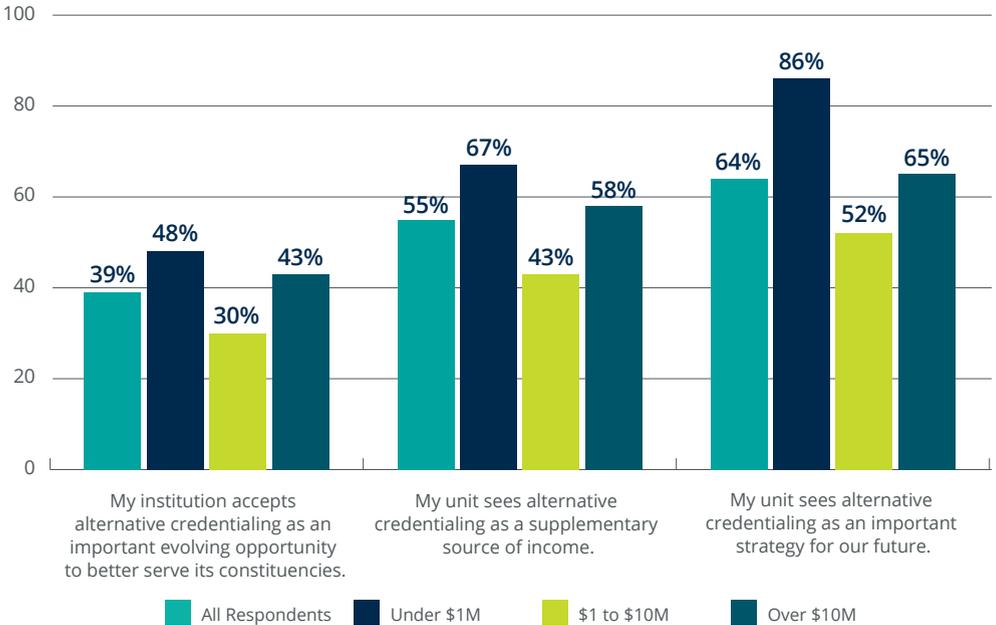
The overall attitude and perception towards alternative credentialing is increasingly positive with 39% either strongly or somewhat agreeing that their institution accepts alternative credentialing as an important evolving opportunity to better serve its constituents. Sixty-four percent strongly or somewhat agree that their unit sees alternative credentialing as an important strategy for their future, while only 6% disagree.

Alternative Credentialing Attitudes and Perceptions



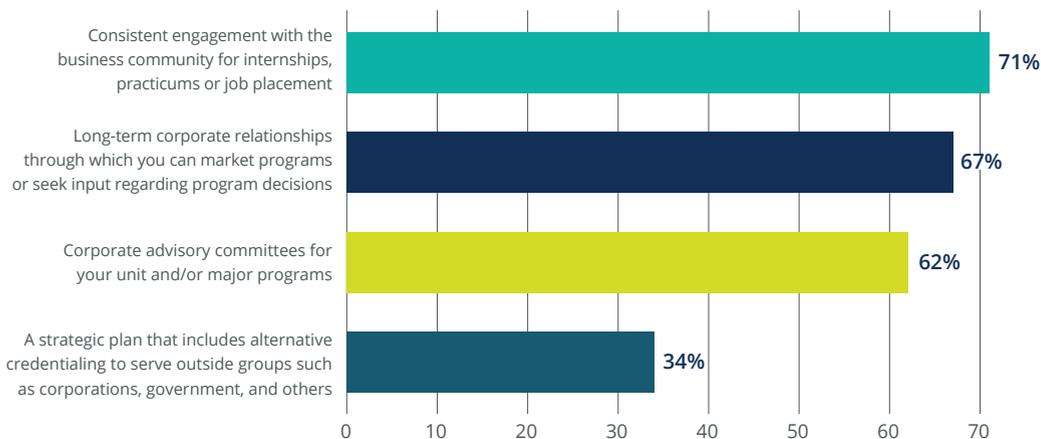
Units with lower revenue typically have a more favorable opinion of alternative credentialing. Two-thirds of units whose revenues were under \$1 million dollars see alternative credentialing as a supplementary source of income and 86% see it as an important strategy for their future, perhaps due to the differences in the constituents served.

How Strongly Do You Agree or Disagree with the Following ?
 (% Strongly or Somewhat Agree By Unit Revenue)



Only 34% of all units have a strategic plan that includes alternative credentialing to serve outside groups even though over half have engagement and relationships with the business community. This may reflect the notion that alternative credentialing is a new and emerging form of engagement with business communities, corporate partners, and advisory groups.

Corporate Engagement



The Future of Badging and Alternative Credentials

The future of alternative certification and credentials appears bright, particularly when represented in the form of digital badges (sometimes referred to as “micro-credentials” or “connected credentials”). However, this aspect of learning’s bright future may be captured by more adroit private-sector organizations unless colleges and universities increase the speed with which they adapt and evolve to meet the changing learning needs of businesses and working professionals, adding new programs and approaches such as competency-based education and micro-credentials. Emerging professional education models present a series of challenges that traditional institutions of higher education may be unable or unwilling to accept, and that will take time to develop given the university culture. In the meantime, institutions continue to benefit from certificate programs, which may soon slide from the list of “alternative” programs, as this report and others question whether these certificate programs—even online certificate programs—can be considered “alternative” now that the majority of institutions offer them and find them to be essential.

Alternative credential learning programs should also be considered in the wider discussion around “unbundling the diploma,” or even around unbundling university-based education.⁵ Michael Barber, Jeff Selingo, Ryan Craig and others consider the current environment as a “perfect storm” of forces that is changing the teaching and learning landscape. These factors include 1) increasing costs associated with higher education; 2) a population that is now **“buying songs rather than albums”** (p. 13) and may increasingly

⁵ Much has been written lately about these trends. See Barber, et.al. [An Avalanche is Coming: Higher Education and the Revolution Ahead](#), Selingo, [College \(Un\)bound](#), or Craig, [College Disrupted](#).

look for a more modular set of products from providers of learning experiences; and 3) a series of new technologies fueled by a new high in the level of investment capital in the EdTech industry. These forces combine with increased levels of dissatisfaction in the traditional product to generate predictions of significant change, as **96% of provosts feel universities are doing a good job of preparing graduates for success in the workforce, while only 14% of Americans and 11% of business leaders strongly agreed that graduates have the necessary skills and competencies to succeed in the workplace.** This disconnect, which some have termed the “Skills Gap” suggests some additional questions. For instance, is the traditional college degree adequately addressing economic needs? Should the mission of today’s comprehensive universities expand to include more modular credentials that still provide rigor but better meet the changing needs of today’s expanding learner population and employers?

UPCEA’s member institutions have historically been leaders in innovating new forms and formats for higher education. College and university continuing and professional education leaders have always been among the first to recognize trends affecting professionals, including shorter non-degree certificate programs focused on developing career knowledge and skills. Likewise these programs have been involved in the discussion around prior learning assessment and credit for prior learning. In the emerging landscape of alternative credentials, these traditional areas of expertise can be competitive advantages for continuing education programs.

Alternative credentials are likely to play an important role in the changes ahead and in the future of higher education. The predicted changes appear to indicate a bright future for learners and learning, and for institutions able to maintain rigorous degree programs while embracing new, more granular, market-responsive programs that directly address employer skill gaps. The adoption of verified digital learning credentials by employers and institutions of higher education has taken longer than some expected, but it is now underway, and wider adoption appears inevitable. In the end, the value of each credential—and the reputation of the issuing university—will correspond to the on-the-job value of credential earners.

Methodology

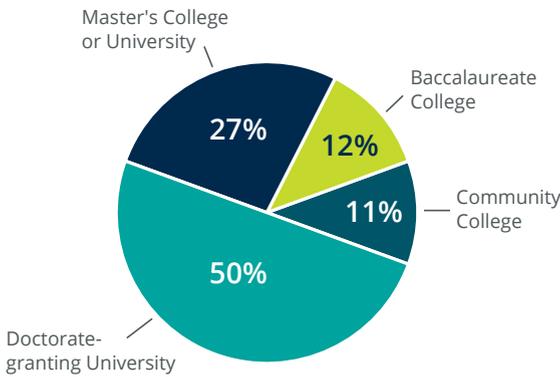
UPCEA and Pearson collaborated to determine the current marketplace for alternative credentials. From February 18 through March 10, 2016, a survey was conducted gauging institutions' current alternative credentialing programs with 324 individuals responding to the survey. For the purposes of this paper, individuals and institutions not fitting the profile of the UPCEA population were removed. The segment that remained consists of 190 institutions and had a margin of error of plus or minus 6.5%.



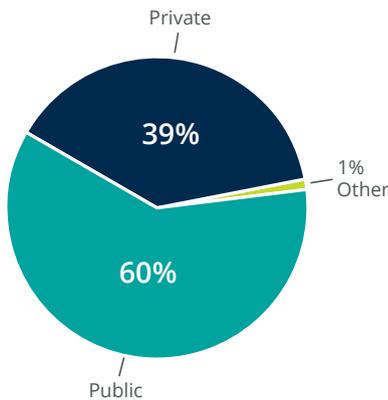
Study Demographics

Half of the individuals who responded to the survey and in the continuing and online education segment classified their institution as a doctorate-granting university, and 27% classified theirs as a master's college or university. The majority profiled (61%) are public institutions.

How Would Your Institution Be Most Appropriately Classified?

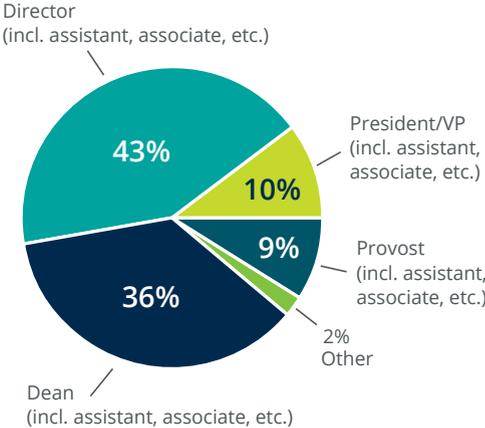


Is Your Institution Public or Private?

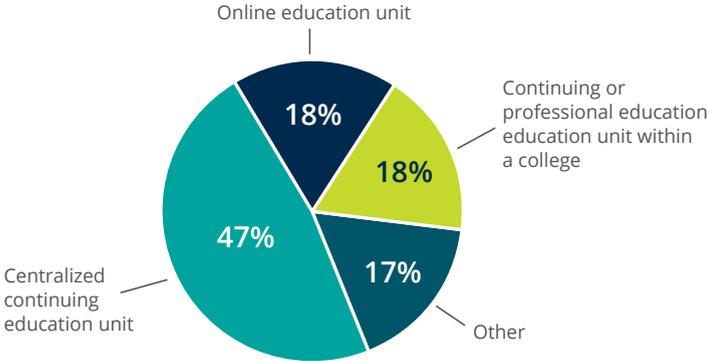


Respondents identified themselves as directors (42%) or deans (36%). Just under half (48%) described their unit as a centralized continuing education unit, typically grossing between \$5 to \$25 million spread consistently between all revenue categories.

What is Your Title?



How Would You Best Describe Your Unit?



What Is Your Unit's Gross Annual Revenue?



About the Authors

Jim Fong is the Founding Director of UPCEA's Center for Research and Consulting, now the Center for Research and Marketing Strategy. Prior to UPCEA, he held leadership positions at Penn State Outreach (education). Mr. Fong regularly teaches graduate and undergraduate courses online and on-campus at Drexel University, Penn State University, Framingham State University, and Duquesne University.

Peter Janzow is an open badge evangelist and the Senior Director, Business and Market Development for Pearson's badging platform, Acclaim. In the rapidly changing labor economy of the 21st century, his work is dedicated to helping workers get credit for what they know and what they can do, unlocking new opportunities and improving their lives through learning. Mr. Janzow received a history degree from Knox College and has earned digital badges representing various professional learning achievements delivered through formal and informal learning providers. He has actively contributed to education for many years in roles that include executive management, global market development and entrepreneurship for educational publishing and technology companies. Mr. Janzow is a former Director of the American Society for Engineering Education.

Dr. Kyle Peck is the Co-Director of the Center for Online Innovation in Learning and Professor of Education and Research Fellow in the Learning, Design, and Technology program at Penn State University. Dr. Peck's current focus is on innovations in education, including digital badges and Massive Open Online Courses (MOOCs). He received his Master's in Education/Reading from the University of Colorado, Boulder, as well as his Ph.D. in Educational Psychology/Educational Technology. Dr. Peck is a co-author of two books, has written more than 40 book chapters and journal articles, and has presented his work in 12 different countries.



