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Alternative Credentials Brief

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The Context of Alternative Credentials

The past several years have seen a proliferation of new credentials, which range from badges and [boot camp certifications](#), to micro-degrees and MOOC certificates. Although broad and [vibrant interest](#) in alternative credentials might be new, similar credentials have existed and offered value to students and workers for decades. For instance, technology certifications from many companies and vendors such as Microsoft or Cisco have long granted credentials that result in job opportunities, professional advancement, and salary increases.

Many certificates are associated with continuing and professional education and the need to maintain some form of professional credential/license in fields such as nursing and education, for example. CU has offered a variety of these certificates for many years. Additionally, CU offers numerous undergraduate and graduate level certificates acknowledging focused study within the context of a normal degree or as standalone offerings at the graduate level.

In February 2016, faculty in CU Denver's Business School voted to offer 6 transfer credits to learners who complete their data warehousing for business intelligence MOOC specialization and enroll in their information systems masters degree program.¹ This decision to offer transfer credit and the previous examples underscore the fact that alternative credentials² are and, in some cases, already have been part of the fabric of CU's educational offerings.

The most common method for gaining college credit outside of traditional course work is through Prior Learning Assessment (PLA). PLA includes the AP, IB, CLEP and DSST exams, challenge exams and portfolio evaluation. However, with the exception of challenge exams and portfolios, these pathways are not typically part of the alternate credential discussion.

In order to distinguish pre-college PLA credentials from alternate credentials, we will use the following definition: alternative credentials are validations of skills and learning, other than a postsecondary degree or a certificate linked to a degree, the purpose of which is to provide value to the credential earner in the marketplace.

For centuries, U.S. colleges and universities have offered 4-year undergraduate degrees that tend to be indirectly related to a specific job, are awarded after only a significant period of time and are binary: that is, either a student completes all requirements for a degree and receives the degree or, if even one credit is missing, receives nothing.

In comparison, industry has long trained workers for in-demand skills, offering credentials that have a direct connection to a particular job, that are offered as smaller chunks of certified learning, and that are often "stackable" to provide a deeper or broader credential. Stackable courses or credentials counter the typical binary nature of a degree by offering certifications of learning or skills with the completion of a pre-designated chunk of content: a course, or a few short courses in a related field. Students do not have to wait until all requirements for a degree are met before receiving a certificate of learning, but instead can receive them after a much shorter period of study. Stackable credentials could eventually be combined to be the equivalent of a degree. Although the terminology is still fluid, stackable credentials, microcredentials, and microdegrees are roughly the same.

¹ <https://www.cu.edu/article/data-warehouse-specialization-mooc-offers-transfer-credits>

Discussions of alternative credentials lie at the heart of a persistent and growing critique of traditional higher educational institutions' ability to meet workforce needs, especially because the cost to students for a 4-year degree has grown dramatically over the past several decades. The increasing attention paid to alternative credentials brings to the fore questions such as what constitutes a postsecondary education and what role universities in particular should play vis-à-vis workforce development.

The National Discussion

Alternative credentials have garnered federal attention in the past few years, both on the Senate floor and in the Department of Education.

In 2014, Florida Senator Marco Rubio introduced the [Alternative Qualifications for Federal Employment](#) bill, which was not enacted, to recognize alternative credentials for employment. Colorado Senator Michael Bennet later partnered with Senator Rubio to sponsor the [Innovation in Higher Education Bill](#) (S. 2111), which would allow both traditional institutions and alternative providers to access federal financial aid funds if they promote and verify student success outcomes in programs that lead to degrees or certificates through “course bundles,” or to an industry-recognized credential. See news articles [here](#) and [here](#) to learn more about the bill, which has been referred to the Committee on Health, Education, Labor, and Pensions (no other recorded action as of April 2016).

In 2015, [private lenders](#) began offering loans to students to attend some coding bootcamps, and the federal government was soon to follow with an experiment in providing financial aid to students in non-traditional programs. The Department of Education announced in October 2015 its [Educational Quality through Innovative Partnerships \(EQUIP\)](#) pilot program, which encourages partnerships between colleges and universities and non-traditional providers to develop joint, postsecondary programs. The DOE also intends the program to test whether offering Title IV funds to students in jointly-offered programs increases equity and provides those students with needed skills, knowledge, and training for employment.

October 2015 also saw a national summit on credentials, part of the [Connecting Credentials](#) initiative. Over 80 education, government, industry and foundation organizations are partnering with the Lumina Foundation to address a highly fragmented ecosystem of alternative credentials, in part by developing a credentials framework and recommendations for validation of credentials.

In short, the genesis of the current “credentialing craze” can be traced to the confluence of several trends: an increased interest in online badges and competency-based learning in general, a perceived skills gap for college graduates (and a corollary questioning of the value of a traditional degree), an economy that increasingly requires “upskilling” for many workers, and the consistent criticism that traditional degree programs take too long, are too expensive and inflexible, and do not meet the needs of today’s learners.³ Two recent examples that evidence the market value of alternative credentials include the government of Singapore’s decision to pay for its citizens’ MOOC certificates in high-demand, high-skills fields (see blogpost [here](#)),⁴ and a study that shows a 38% average salary increase for graduates of coding boot camps (see coverage [here](#) and [here](#)).⁵

³ See [Making the Case for Reforming the U.S. Credentialing System](#).

⁴ <http://blog.coursera.org/post/89063045827/singapore-government-builds-training-program>

⁵ <https://www.edsurge.com/news/2015-10-26-coding-bootcamp-graduates-report-38-salary-bump>, <https://www.quora.com/Are-programming-bootcamps-lying-about-their-average-graduate-salaries>. A

Who's Doing What: Higher Education

Many postsecondary institutions offer alternative credentials either as an extension of an institutional mission (e.g., outreach, experimentation in teaching and learning) or in response to legislative mandates or other political pressure. While many higher education thought leaders have responded favorably to universities entering the field of alternative credentials, even deeming them part of the [inevitable](#) revolution in postsecondary education,⁶ [others](#) caution that “granular credentials...can lead to reductionism and over-vocationalization” of higher education.⁷ Still others question the quality of credentials that can be earned in a short period of time and view such programs as credentialing running amok (see [this Chronicle article](#) on Utah’s technical colleges counting minimal coursework as a completed credential).⁸

A quick scan of alternative credentials offered by local and peer institutions illustrate the breadth of options and experimentation in the United States.

- MIT offers an inverted-admissions degree program in supply chain management, which allows students to complete and gain credentials for a semester of graduate level courses before seeking admission to MIT. Even if students are not accepted for matriculation, they receive a “micromasters” credential. Because this micromasters is a piece of the full masters degree program, it represents an unbundling of the degree. This program is offered online, as a MOOC on the EdX platform.⁹
- In partnership with Coursera, the University of Illinois offers a MOOC-based iMBA and a [stackable masters degree in computer science with emphasis in data sciences](#). The total cost of the combined stackable specialization certificates in both programs is significantly less than the cost of a corollary, traditional masters degree at Illinois.
- Hundreds of universities offer non-credit-bearing certifications through MOOC (massive open online course) providers. Learners receive a certificate for the completion of a course or a series of courses in a particular topic, such as those offered by [Coursera](#) in data analysis or finance. These courses are increasingly shorter than a traditional semester or quarter, although an entire specialization may not be, and increasingly offered as on-demand or self-paced.
- Many universities offer non-credit, non-degree badging programs that validate mastery of a particular skillset. Colorado State University is highlighted for its skills-based [digital badge programs](#) in sustainability management and master gardening.¹⁰ The Colorado Community College System recently announced a program in which students can earn [skills-related badges](#) through traditional coursework or on-the-job training. The University of California Davis has implemented a [badging project](#) for its students in the university’s Agricultural Sustainability Institute. SUNY and Open SUNY have created

quick scan of popular boot camps indicate lengths of 9-19 weeks, at least one with a combination of remote and on-site learning.

⁶ <http://www.nytimes.com/2015/03/08/upshot/true-reform-in-higher-education-when-online-degrees-are-seen-as-official.html>

⁷ Sandeen, C. “Three Trends Worth Watching for Continuing Education Leaders,” Higher Education Today Blog, May 5, 2014. American Council on Education. <http://higheredtoday.org/2014/05/05/three-trends-worth-watching-for-continuing-education-leaders/>.

⁸ http://chronicle.com/article/Cranking-Out-Credentials-/234228?cid=at&utm_source=at&utm_medium=en&elq=b058aa779c944a1b9c60c9c7cd761b53&elqCampaignId=1856&elqaid=6912&elqat=1&elqTrackId=99c8174673904807b5bf24d10c09a5fd

⁹ See information about the MIT micromasters [here](#) and a news article [here](#).

¹⁰ <http://www.online.colostate.edu/badges/>

badging programs for [students](#) who wish to show their skills in evaluation, information ethics, and metacognitive reflection and for faculty who serve as [SUNY Fellows](#).

- A few universities offer technology boot camps, either in partnership with a vendor ([Concordia University](#) and LearningHouse), as a bridge to a traditional major ([University of Seattle](#)), or for state-specific workforce development ([Rutgers University](#)).
- Seven universities (Georgia Institute of Technology, Northwestern University, the University of Washington, the University of California's Davis, Irvine and Los Angeles campuses, and the University of Wisconsin Extension) have announced plans to create the [University Learning Store](#), a "joint web portal for microcredentials," which will feature online content, assessments, and tutoring.
- Metro State University in Denver offers [stackable courses and credentials](#) in its advanced manufacturing program. Some courses and credentials are coordinated with programs from community college partners to ease transfer of community college courses into the "stack." The courses and credentials stack to enhance a career path and/or a path to a bachelor's degree.

Providers in the Alternative Credentials Space

Several providers, including private companies, offer and validate credentials. See [A Gallery of Credentials](#) in The Chronicle for a list that includes [Coursera](#), [Lynda.com](#) and [Khan Academy](#), all of which provide content to learners, and [Degreed](#), which provides a platform for tracking formal and informal online learning. Players in the badging space include Mozilla's [OpenBadges](#) initiative, which provides software and an open technical standard to create, issue, and verify digital badges, and [Credly](#), which offers similar services, with for-fee options for badge-granting organizations. Very recently, [researchers from MIT's Media Lab](#) are exploring ways to use the blockchain technology that underlies Bitcoin as a way to store and track education credentials. Blockchain technology can be thought of as a permanent, unalterable, digital "ledger" of transactions (or, potentially, credentials) that is a distributed database. For a skeptical view of blockchain technology, and therefore its use in education, see Audrey Watters' extensive post [here](#).

Examples of Alternative Credentials at the University of Colorado

- All of the University of Colorado's [MOOCs on the Coursera platform](#) offer learners the option of purchasing verified certificates as evidence of their satisfactory completion of a course or [specialization](#). In addition, the information systems program in CU Denver's Business School offers 6 transfer credits to learners who complete their data warehousing for business intelligence MOOC specialization, and are accepted into and enroll in their information systems masters degree program, which underscores the local value of MOOC credentials.
- Continuing Education on the Boulder campus offers [non-degree-associated certificates](#) in such areas as advertising, digital media, speech language pathology, and technology integration in the world language classroom. Boulder's Environmental Center offers an [Online Sustainability Program](#) that results in non-credit certificates in business or community sustainability management.
- CU Denver's Business School offers several [non-credit certificates](#) in business analysis, ERP software, lifecycle of oil and natural gas, and project management.
- *A more thorough review of campus pilots and initiatives is needed to understand CU's alternative credentials offerings.*

How CU Could Engage with Alternative Credentials?

- Create an inventory of alternative credentials offered across CU and gauge interest in further experimentation in this area.
- Convene a system-wide workshop on alternative credentials for faculty and administrators.
- Use [Connecting Credentials' list of questions](#) to begin strategic, local discussions about the role of alternative credentials at CU.
- Engage in the national Connecting Credentials discussion; send CU delegates to upcoming convenings.
- Reach out to peers at the University Learning Store.
- Understand State interests and directions in alternate credentials
- Understand limitations of stackable certificates
- Explore any limitations associated with HLC accreditation
- Bring leaders from postsecondary institutions who have more experience in alternate credentials to visit our campuses.
- Perform pilot studies on the fiscal implications of alternate credentials.
- Consider providing funding for badging pilots.

If You Read One Thing Besides This Brief, Read This:

The Chronicle's special report "The Credentials Craze" from September 2015, <http://chronicle.com/specialreport/Next-The-Credentials-Craze/2>.

Well, You Should Read This, Too:

The Lumina Foundation's "Connecting Credentials: Making the Case for Reforming the U.S. Credentialing System." <https://www.luminafoundation.org/files/resources/making-the-case.pdf>