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# How Microcredentials Are Revolutionizing the Higher-Education Business Model

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## Introduction

Just as coastlines demarcate boundaries where land meets water, mission statements, accreditation, Carnegie classifications, and statutory authorities demarcate boundaries for public four-year colleges and universities. While these boundaries are generally well-defined, they are not impervious to change. Just as the sandy beaches constantly move landward or seaward, the service boundaries of public four-year colleges and universities constantly evolve. This is a natural response to new opportunities, changing student populations, emerging competition, unexpected policy changes, and inevitable financial pressures.

One notable external force causing internal change is the growing influence of “microcredentials.”<sup>1</sup> These shorter-term credentials are integrating into traditional degree pathways, and trustees of public colleges and universities should examine the role of these credentials in the baccalaureate programs of their institutions. Shorter-term credentials can provide substantial benefits for public four-year institutions, including improved return on investment on baccalaureate degrees, better alignment of skills with market demands, increased transparency, and greater responsiveness to labor-market changes. These benefits are most likely to be realized when a validated market analysis is conducted, clearly identifying the competencies needed from today’s students.

Additionally, colleges and universities must use appropriate assessment tools to accurately measure whether students have acquired the intended learning outcomes, ensuring transparency and accountability to stakeholders. However, institutions must approach their incorporation into baccalaureate programs with care, making sure that their integration strategies remain student-centered and align with the core mission and objectives of higher education. Achieving a balance between academic rigor and workplace relevance is key to ensuring success.

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# Disruptions to the Higher-Education Business Model

Trustees of public four-year institutions are expected to be guardians of a public trust. Among other things, they must secure the financial sustainability of the institution and the demonstrated market value of the credentials offered. This role is executed through a series of responsibilities, including making all final legal and fiduciary decisions about the organization's business, approving the annual budget and a tuition and fee schedule, safeguarding the institution's resources and reputation, and assuring that resources are aligned with the institution's mission and strategic plan. Historically, this has meant that institutional trustees jealously guard the boundaries of their mission. This includes the range of bachelor's and higher degree programs offered, the geographic service area, target student populations, areas of research expertise, donors to cultivate and maintain, and the brand to differentiate and elevate.

Yet, extraordinary external pressures are disrupting the higher-education business model and increasingly blurring the boundaries around the "who-offers-what-and-to-whom" duty of four-year institutions. This shift means that the role of trustees is evolving to include considerations of business-model transformation.

While circumstances vary, public colleges and universities in every state are struggling with significant financial challenges. Many face deep operating deficits, limited state funding, and constraints on what students can afford. Additionally, they are burdened by financial commitments related to programs, campus maintenance, and institutional financial aid. Many have likened the pressures on today's higher-education business model to those experienced by the music and newspaper industries—which are now fundamentally different from how they were at the start of this century.<sup>2</sup>

Pressures include:

- *The shrinking of the traditional customer base.* Public four-year colleges' business models are being disrupted by increased competition for a smaller number of students. In fact, enrollment in all sectors has been declining for 12 straight years; enrollment in four-year colleges declined in 34 states from 2022 to 2023.<sup>3</sup> Population declines in the Midwest, Northeast, and rural communities writ large are accompanying financial exigency plans for public four-year colleges. In all regions, the declining birthrate has reduced the size of the traditional college-age cohort (currently, Generation Alpha). As a result, an arms race to fill cohorts on campus has led to the seaward creep of another boundary, with the commitment to serve many in-state students ebbing and the relief on caps for out-of-state student enrollment flowing.
- *Historical drops in public confidence in the value of higher education.* Gallup, which has studied trends in public confidence in all institutions over the last two decades, has observed declining confidence in higher education among all subpopulations since 2015.<sup>4</sup> While this can hamper efforts to secure increased state funding for public four-year institutions and students, the more concerning issue is the widespread belief among young adults that college is not worth the investment. The fear of accumulating debt without earning a degree discourages enrollment and undermines commitment to completion, both of which harm the long-term outlook for tuition revenue.<sup>5</sup>
- *The digital transformation in human and machine learning.* This transformation has opened up entirely new, web-based alternatives to education offered at four-year colleges. Open courses offer free access to global experts and their content, and artificial intelligence-powered



instruction and assessments provide learners immediate feedback. This approach shifts the focus from the traditional, federally accepted academic term to a more personalized, competency-based learning model that allows for a more efficient and tailored learning experience. It also possibly allows for more accurate assessments of learning, providing greater assurance to employers that students have genuinely attained the competencies advertised.

- *The rising costs of maintaining a “status quo” operation.* Increases in health-care expenses, administrative costs, and the provision of tuition discounts and financial aid all contribute to the financial strain on institutions.<sup>6</sup> These escalating expenses often exacerbate financial challenges rather than alleviate them.
- *The availability of good alternatives.* As tuition rates continue to rise faster than most families’ income growth, the demand for viable alternatives to a bachelor’s degree is growing. More community colleges are obtaining permission from the state to offer high-demand bachelor’s degrees at their institutions; this is a threat to four-year enrollment because baccalaureate degrees at community colleges save money for both the state and the student. In Florida, every community college offers at least one baccalaureate degree program. Employers in service industries offer generous starting wages (upward of \$22/hour in some regions) and training stipends to pay for alternative routes to earn a postsecondary credential. Nonprofits team with international content experts and local caseworkers to offer pathways with paid work-based learning opportunities. Their education pathways culminate in an industry-recognized credential and a good job.<sup>7</sup> Private equity and state leaders are experimenting with the development of digital learner records, which put the power of skill certification in the hands of the learner, rather than the degree-conveying institution.
- *The rise of skills-based hiring.* Employers, including state governments, are forgoing bachelor’s degree requirements in job descriptions and opting for skills-based hiring. This shift reflects a broader trend toward recognizing the value of practical skills and experience rather than assuming that a degree automatically imparts those skills. For example, in tech-related fields, coding boot camps and professional certifications can often provide necessary up-to-date knowledge more efficiently than a traditional degree program. Additionally, many industries face talent shortages, especially in rapidly evolving fields like technology, health care, and skilled trades. By focusing on skills, employers aim to tap into a broader talent pool, including self-taught individuals, those who have completed vocational training, or those with relevant work experience. This development has the potential to substantially affect college enrollments. It may serve as one of the most compelling reasons for four-year institutions to offer stand-alone and embedded microcredential programs.

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## Why Microcredentials Are for Four-Year Institutions, Too

Microcredentials are a boundary-busting innovation with the potential to reshape the landscape for learners, traditional four-year institutions, regional labor markets, and economic development strategies. Public university trustees need a solid grounding in this new marketplace that is characterized by affordable, shorter, and workforce-connected credentials.

First and foremost, the microcredential marketplace is rapidly evolving and experiencing growing demand due to the constantly changing job market. According to the World Economic Forum and IBM, the value of general career-relevant skills in the job market decreases 50% every five years; technical skills lose their value twice as fast, with a half-life of just two and a half years.<sup>8</sup>



## How Microcredentials Are Revolutionizing the Higher-Education Business Model

Microcredentials offer students the opportunity to enhance their career prospects by extending the shelf life of their skills to meet the evolving needs of the modern economy. Yet this also requires the academic community to evaluate how to keep pace with a rapidly evolving workplace.

In research conducted by HCM Strategists and EDGE Research for the Bill & Melinda Gates Foundation during the summer and fall of 2023, high school students as well as non-enrolled 18–30-year-old adults viewed courses leading to a certificate or a microcredential as more valuable than a traditional bachelor's degree from a four-year college. Notably, only 57% of non-enrolled adults in this age group see a bachelor's degree as valuable, a decrease of three percentage points from the previous year's findings.<sup>9</sup>

The way these credentials are discussed varies significantly, so we should take a moment to define “microcredentials”: educational opportunities that provide quick, targeted, skills-based job-related training in specific areas. Microcredentials are often qualifications earned in less than a year, designed to enhance existing skills or develop new ones. Upon completing short-term courses, students receive documentation similar to a diploma, certifying their newly acquired knowledge or skills. These credentials come in various forms, such as certificates, certifications, licenses, and badges, each designed to validate specific skills and knowledge. They span a wide range of industries, from technology and health care to business and the arts, addressing the diverse needs of today's job market. The programs range from short-term courses that can be completed in a few weeks to more extensive programs that take several months. Additionally, the formats are highly flexible, including online, in-person, experiential, and hybrid options, ensuring that learners can find a program that fits their schedule and learning preferences.<sup>10</sup>

While providers of these programs can include private educational organizations, employers, and online learning platforms, the main providers of short-term programs—and the primary focus of our discussion here—are community colleges and four-year colleges and universities. Overall, this variety makes microcredentials an accessible and customizable way for students to advance in their careers and stay competitive in a rapidly evolving workforce.

Several benefits are associated with microcredentials. First, they are time-efficient, allowing individuals to learn new skills or improve existing ones quickly. Second, they are cost-effective, often available at a lower cost than traditional degree programs, even though students of such courses may not qualify for financial aid. Third, they offer flexibility, with many institutions providing various scheduling options such as self-paced online courses, hybrid learning opportunities, and evening or weekend classes, accommodating students' diverse needs. Fourth, microcredential programs can significantly improve job prospects by equipping individuals with in-demand skills that can lead to new employment opportunities or career advancement.

These advantages have made microcredentials the fastest-growing type of credential in American higher education. Between 2000 and 2010, the number of microcredentials awarded increased by 151%.<sup>11</sup> This growth indicates a strong preference among students for shorter educational pathways. In the fall of 2023, enrollment in short-term programs increased by 9.9% over the previous year, following several years of growth. In contrast, traditional degree programs saw a modest increase, with enrollments rising by 3.6% for associate degrees and 0.9% for bachelor's degrees.<sup>12</sup> Approximately 3.7 million students nationwide are currently enrolled in non-credit microcredential programs; since 2010, these programs accounted for at least 41% of all credentials awarded by community colleges.<sup>13</sup> Notably, about 25% of the American workforce holds a microcredential.<sup>14</sup>



# State Incubators of the Microcredential Marketplace

Understanding state policy environments is critical for sound public university trusteeship, particularly given the fast-changing microcredential landscape and all the platforms, tools, and other factors involved. States are increasingly recognizing the significance of microcredentials and are taking active steps to support these alternative educational pathways for their residents.

HCM estimates that states have collectively spent at least \$5.59 billion on microcredential pathways to date—on student aid programs, capacity-building initiatives to provide colleges with necessary resources to create and maintain programs, higher-education funding formulas, and new research on short-term credentials.<sup>15</sup> Most of these investments were made in the twenty-first century and have been particularly concentrated from 2017 to 2024. As of now, there are 70 state-funded microcredential initiatives across 32 U.S. states. To put into perspective how rapidly this space is growing, HCM Strategists' original analysis of state investments in micro-educational pathways in June 2023 identified 59 state-led initiatives in 28 states with state funding, totaling almost \$4 billion.<sup>16</sup>

Of the initiatives that HCM has identified, nearly half (33, or 48.5%) provide financial assistance directly to students to defray program costs. Another 14 (20.5%) allocate funding indirectly to students via institutions, which then administer funds for tuition relief. Ten states provide funding to institutions to support capacity-building and develop microcredential programs aligned with local workforce needs. Six states have integrated microcredentials into their outcomes-based funding formulas. The remaining initiatives fund private providers, a student-facing pathways tool, a data framework, and research on microcredentials to inform future policy decisions.

## Louisiana's M. J. Foster Promise Program

One notable student aid initiative is Louisiana's M. J. Foster Promise Program (MJFP), which offers scholarships covering tuition and fees up to \$6,400 per academic year for adult learners.<sup>17</sup> To be eligible, students must be at least 20 years of age, have a high school diploma or equivalent, be a Louisiana resident, and agree to reside and work full-time in Louisiana for a minimum of one year after the completion of the last program of study. To qualify, applicants must also meet specific income or employment criteria, such as having a family income at or below 300% of the federal poverty level or being unemployed or underemployed for at least six months prior to receiving the grant. Students can use their funds at Louisiana's Community and Technical Colleges, Louisiana State University–Eunice, Southern University–Shreveport, and a select list of approved proprietary schools.<sup>18</sup> Recipients do not need to be enrolled in a degree program to receive the MJFP award.

Nearly 1,200 students have participated in MJFP: 81% of them women, about 50% African American, and 60% with household incomes below the ALICE Survival Budget threshold for an adult in Louisiana.<sup>19</sup> This program has been instrumental in helping underserved populations access higher education and in aiding Louisiana's goal of achieving 60% credential attainment by 2030.

In June 2023, the Louisiana State Legislature passed Senate Bill 204, signed into law by then-governor John Bel Edwards, to refine MJFP.<sup>20</sup> The bill brought three significant changes:

1. Funds are allocated to the college financial aid office using a formula similar to the Louisiana GO Grant and the Taylor Opportunity Program for Students (TOPS), ensuring closer proximity of resources to students. The Louisiana GO Grant is a need-based financial aid program designed to assist low- to moderate-income students in Louisiana who are



pursuing higher education at any of the state's public colleges or universities, regionally accredited independent colleges, or universities in the state that are members of the Louisiana Association of Independent Colleges and Universities.<sup>21</sup> TOPS<sup>22</sup> is a state merit-based scholarship program for Louisiana residents who attend one of the Louisiana public institutions, schools that are part of the Louisiana Community and Technical College System, Louisiana-approved proprietary and cosmetology schools, or institutions that are a part of the Louisiana Association of Independent Colleges and Universities.

2. MJFP changed to a first-dollar program in the first semester and a last-dollar program beginning the second semester, awarding \$1,600 per semester, with a lifetime maximum of \$6,400. A first-dollar program pays for tuition and mandatory fees first, *before* any other types of financial aid—such as federal Pell Grants, state grants, or institutional scholarships—are applied. These programs are often designed to increase college accessibility for low- and middle-income students by reducing the financial barriers to higher education. First-dollar aid provides a predictable funding source for tuition and fees, giving students and families a clearer understanding of the costs they will need to cover. By ensuring that tuition and fees are covered first, these programs can encourage more students to enroll in and complete college, knowing that the primary expense of tuition is taken care of. By contrast, a last-dollar program is a type of financial aid initiative that covers the remaining cost of tuition and fees *after* all other sources of financial aid have been applied. It essentially fills the financial gap between the total cost of tuition and the amount covered by other financial aid, ensuring that students are not left with out-of-pocket expenses for tuition and fees.
3. The new law removed the initial requirement for students to complete the FAFSA to receive financial aid for their first semester; alternatives to the FAFSA, such as SNAP and Medicaid applications, can be used to verify an applicant's eligibility. However, from the second semester onward, students are required to complete the FAFSA to continue receiving support. Previously, the FAFSA had proved to be an administrative barrier for students who lacked access to programs that could assist them in completing it. College campuses now offer support to help students navigate the FAFSA process.

### **Colorado's Incentives for Post-Secondary Education (HB24-1340)**

One of the newest microcredential aid programs is Colorado's Incentives for Post-Secondary Education (HB24-1340), which became law last year.<sup>23</sup> This program offers a refundable state income tax credit to incentivize lower-income high school students to pursue postsecondary education. Eligible students will receive a refund covering the cost of their first two years of college, intended to bridge financial gaps between tuition and the amount that students receive in scholarships and grants. The incentive applies to all for-credit credentials and degree programs at area technical colleges, Colorado Mountain College, and AIMS Community College, including microprograms of less than one year and sub-associate programs of one to two years.

The fiscal note for HB24-1340 estimates average credits of \$2,700 for students at four-year colleges, \$2,000 for technical college students, and \$1,000 for microprogram students at two-year colleges. The credit is expected to cost the state approximately \$38 million annually, funded by reductions in the Taxpayer's Bill of Rights (TABOR) refunds and the general state fund. This bill was introduced in response to declining in-state student enrollment, with many Colorado students choosing higher education outside the state. The inclusion of microcredentials aligns with Colorado's "Big Blur" strategy, which aims to integrate high school, college, and the workforce into a cohesive system.

To be sure, the program is not without potential challenges. Because funding works through a tax credit, one significant issue is that it may exclude certain students due to the requirement that participants must have filed taxes. This prerequisite could disadvantage those who, for various



reasons, have not completed their tax filings, thereby limiting their access to the benefits offered by the program. HB24-1340 will need to be monitored over time to assess its effectiveness and address any emerging issues to ensure equitable access to quality credentials for all eligible students.

Indeed, when evaluating state investments in microcredentials, two primary considerations stand out: equity and credential quality. Let's explore each of these.

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# How States Promote Economic Opportunity Through Microcredentials

Microcredentials offer a valuable pathway for improving labor-market prospects, particularly for individuals with limited time, finances, and social capital, which hinder their ability to pursue traditional degree programs. By addressing these barriers, microcredentials can enhance labor-market outcomes, allowing individuals to quickly and cost-effectively acquire new skills and competencies. These pathways can significantly improve career opportunities and economic mobility, fostering a more inclusive labor market with greater equality of opportunity.

State policies funding microcredentials should be designed to promote inclusivity and opportunity. Programs should be accessible to a broad range of people, with an equitable distribution of funding. Strong state-funded microcredential initiatives often target funding to underserved populations, including the underemployed, rural residents, displaced workers, individuals from diverse racial and ethnic backgrounds, people with disabilities, the reentry population, and low-income individuals.<sup>24</sup> The fairness of making middle- and upper-income students ineligible for certain student aid programs is a topic of debate; opinions vary based on perspectives about equity, access, and the role of public support in higher education.

Arguments in favor of making higher-income students ineligible for aid: (1) financial aid programs often have limited resources, so prioritizing students from low-income backgrounds ensures that those with the greatest financial need receive the necessary support to access higher education; (2) students from higher-income families typically have more access to resources and opportunities, making it less urgent for them to receive financial aid, compared with those from lower-income backgrounds; and (3) targeting aid to those who need it most promotes a more efficient and responsible use of public funds.

Conversely, arguments against making higher-income students ineligible for aid: (1) the “middle-income squeeze,” as middle-income families may still struggle with the high cost of college, especially in areas with a high cost of living; (2) merit-based considerations that aid should also reward academic achievement, regardless of income, to encourage and support high-performing students; and (3) assessments of need ought to be holistic, as financial circumstances can be complex and fluid, and income alone might not fully capture a family's ability to pay for college. Ultimately, the decision on whether to make middle- and upper-income students eligible for some student aid programs depends on the goals and values of the educational policy, as well as the specific economic context and needs of the student population.

Nevertheless, of the 70 state-funded initiatives identified in HCM's research on microcredentials, 25 include provisions that target distinct populations to promote their economic mobility. Many of these initiatives limit eligibility based on income, directing funds specifically to those demonstrating financial need. However, some initiatives go further by linking fund allocation



to student demographics. For example, Connecticut's CareerConneCT program, though it has expired, focused on helping underrepresented groups in the state's workforce. This included veterans, women, immigrants, individuals with disabilities, reentry populations, youth who have not completed a high school credential, and members of different racial and ethnic groups. By directing resources toward these groups, the initiative aimed to boost the state's labor market by enhancing job readiness for a greater number of individuals.

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# How States Can Protect the Quality of Microcredentials

The rapid and significant labor-market changes in the twenty-first century have disrupted established economic principles, compelling states to enhance workforce performance through policies and strategies. This includes ensuring that postsecondary education investments yield beneficial outcomes for students, the state economy, and the workforce.

The relevant question, then, for credential consumers, employers, and state policymakers alike is: How do we know that a short-term credential program is actually valuable? I.e., (1) Does the credential genuinely attest to the possession of valuable skills? (2) Is there a risk of significant quality variation because various organizations can offer such a credential? (3) Do employers trust these credentials to the extent that they enhance job prospects? (4) How do states decide which credentials are most needed and which providers and programs offer a sufficient return on investment to be considered worthwhile?

Strong state policies supporting microcredentials often limit funding to programs deemed valuable based on certain outcomes, including:

1. Employer recognition of credentials as evidence of proficiency
2. Increased employability due to employer demand or job placements
3. Wage premiums and improved economic mobility, especially for underserved populations

One common method that states use to determine which credentials are in high demand and offer the greatest potential for a high return on investment is a statewide credential value framework. These frameworks represent a concerted effort to establish a uniform set of criteria for identifying and assessing valuable postsecondary credentials across a state. They are comprehensive and can encompass not only traditional degree programs but also short-term certificates, certifications, microcredentials, and other non-degree offerings. The primary goals of such a framework are twofold: to formulate a cohesive, statewide definition of a valuable postsecondary credential; and to create an official list of high-quality credentials offered in the state that meet this established definition of value and hold substantial labor-market value.

While the criteria for determining the value of these credentials varies from state to state, they generally converge on a handful of critical aspects, such as the evaluation of employer or occupational demand for the credential, the potential of the credential to provide job opportunities and foster economic mobility, and the wage outcomes associated with it. Ultimately, a state value framework is designed to ensure that the spectrum of postsecondary educational and training options available within a state is closely aligned with labor-market requirements and is effective in enhancing the economic vitality of its citizens.



## How Microcredentials Are Revolutionizing the Higher-Education Business Model

According to original research conducted by HCM, the first statewide value framework was launched by New Jersey in 2018, soon followed by Alabama, Louisiana, Oregon, and Vermont in 2019. The subsequent years, notably marked by the Covid-19 pandemic, saw a continued expansion of this trend. Hawaii and North Carolina established their value frameworks in 2020, followed by Maine and Texas in 2021. The following year, Washington unveiled its framework, and Colorado, Florida, Minnesota, and Tennessee announced the forthcoming release of their own value frameworks in 2023. In total, HCM has identified 16 statewide credential value frameworks.

Across these value frameworks, a common standard prevails: a credential's value is assessed on a statewide basis, ensuring uniform recognition across each state. In a handful of states—such as Alabama, North Carolina, and Washington—credentials are also assessed regionally, which is meant to cater to the diverse economic landscapes within a state, ensuring that regional specificities in workforce demand are adequately understood and met.

Over half (Alabama, Florida, Hawaii, Indiana, Missouri, New Jersey, North Carolina, and Washington) of existing credential value frameworks are accompanied by a state-approved list of programs deemed high-value. Texas is poised to join this list sometime soon, following the mandate of House Bill 8.<sup>25</sup> Among these states' lists, all are overseen by designated bodies responsible for regular review and updates, all of which are composed of the states' higher-education and workforce-development agency leaders, as well as industry leaders. The frequency with which these lists are revised varies from state to state but generally reflects a commitment to maintaining current and relevant educational standards in alignment with evolving workforce demands. Three states—Alabama, Hawaii, and Washington—have instituted an annual review process for their lists of high-value credentials. Florida stands out as the only state with a biannual review cycle, ensuring a more frequent reassessment of its credential list. Missouri, Montana, and New Jersey have adopted a quarterly review process, demonstrating an even more dynamic approach to keeping their lists up to date. However, the remaining states in this group have yet to publicly disclose the frequency of their review process, indicating a potential area for further transparency and communication in the future.

To assess credential quality, states typically evaluate:

- **Labor-market relevance**, including a minimum wage threshold associated with holding a specific credential, current employment opportunities of the average program completer, current employer demand for the credential, and projected demand and job prospects.
- **Credential validation**, which includes considerations about whether employers endorse or indicate a preference for certain credentials, implying that these qualifications meet the practical and skills-based needs of the industry. Active input from employers in the development and evaluation of educational programs and credentials ensures that these qualifications are aligned with current industry standards and job requirements.
- **Accountability**, which most often comes in the form of a state's legislature or postsecondary agency requiring a report to be submitted to track student enrollment and completion, as well as to ensure institutional accountability to state educational and workforce goals.
- **Identification of costs relative to benefits**, for which a microcredential program must pass a calculated cost/benefit threshold to be deemed high-value. This cost/benefit threshold is typically calculated by projecting future earnings increases over a specified period and comparing these with the program's costs. The only state currently to make such a calculation is Texas.



Minnesota is a prime example of a state with a robust quality framework.<sup>26</sup> It focuses on job placement speed and career pathways leading to higher-paying jobs. The state mandates comprehensive reporting on participant outcomes for state-funded workforce programs, linking program data with administrative wage records to assess employment status, wage levels, and industry affiliations.<sup>27</sup> The report includes job-retention rates and disaggregated data by race, ethnicity, gender, geography, age, education, and housing status. This rigorous standard provides a foundation for evidence-based decision-making, ensuring reliable data for developing effective strategies to enhance workforce programs' value and impact.

Similarly, recognizing the value of non-degree pathways to the workforce, Colorado introduced the Quality and In-Demand Non-Degree Credentials Framework in 2023.<sup>28</sup> This framework was created to establish a unified and consistent definition of quality non-degree credentials in the state and to outline the process for designating a credential as quality. These credentials include certifications, occupational licenses, apprenticeship certificates of completion, non-credit certificates, microcredentials (including badges), and sub-baccalaureate for-credit certificates. As the variety of credentials in Colorado expands, this framework helps stakeholders understand the non-degree credential market and identify those that provide economic benefits.

To be considered a quality and in-demand non-degree credential in Colorado, it must meet four key criteria:

1. **Demand:** There must be evidence of industry demand for the credential.
2. **Evidence of skills:** The credential must demonstrate the skills that it imparts.
3. **Substantial employment outcomes:** The credential should lead to meaningful employment opportunities.
4. **Stackability:** The credential must help advance an individual's career and earnings potential.

The framework not only provides a consistent definition of quality non-degree credentials but also serves to evaluate existing credentials, identify new credentials for inclusion in the state's Career Development Incentive Program, and assess credentials for inclusion on the Eligible Training Provider List (ETPL).<sup>29</sup> The Colorado Workforce Development Council will periodically perform assessments, but the frequency with which they will do so is not yet clear.

### **Trustees and the Higher-Education Business Model**

Higher education is very, very good at chasing revenue. At the most elite levels, spending drives prestige, selectivity, and near-total market control, limited only by federal oversight. With escalating costs, external pressures, and an overall industry tendency to always seek more revenue, public four-year colleges naturally might gravitate toward expanding microcredential offerings because it is perceived as a way to replace lost income and generate marginal new income. But trustees should be cautious.

Creating microcredentials without clear labor-market value can exacerbate skepticism about the value of higher education and diminish the institution's brand for quality among the local community, business, and industry. Creating microcredential graduation expectations without intentional examination of existing pathways and the skill clusters therein can lengthen the time-to-degree for students, the direct cost of tuition and expenses, and the amount of forgone income. Collectively, the cost of adding more expectations on students ultimately extends the years it will take to recoup the investment in education.



Finally, adopting or expanding microcredential programs without market analysis on the relative price elasticity of potential students, the extent of comparable alternatives, and a transparent break-even point adds unnecessary costs to the institution.

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## Recommendations: How Trustees Can Integrate Microcredentials

Public four-year universities have an important role in creating and offering microcredentials to current and prospective bachelor's degree students. However, without careful oversight, these institutions might prioritize revenue over educational integrity, risking public confidence in the value of higher education. Trustees must ensure that their institution's strategy for integrating microcredentials is thoughtfully developed and fully aligned with its mission, strategic goals, and long-term financial sustainability. Institutions cannot be perceived as merely "print paper" for profit.

Trustees must answer six essential questions to improve the overall value of baccalaureate pathways with aligned or embedded microcredentials:

1. *How are microcredentials at our four-year institution aligned with or embedded into existing baccalaureate degree pathways?*

Microcredentials should be embedded into curricular pathways as part of an intentional strategy to focus the entire academic community on how to improve the employability of graduates. Every employer is looking for certain signals of employability. Microcredentials can be one such signal. This pathway should not be pursued to chase revenue, to chase students outside the core mission, or without thought for how adding these academic options could unreasonably slow time-to-degree. Trustees must consider how they are embedding microcredentials into existing baccalaureate pathways so that students' time-to-degree and out-of-pocket expenses are not extended. They must also know how the microcredentials that they offer equip graduates to have the necessary range to navigate complex systems, change, and lifelong learning.

2. *What centralized capacity and processes (i.e., governance) will be created to identify the market need for certain skills, the employer validation process used, and the overall quality assurance needed?*

Microcredentials are only now beginning to be part of any formal accreditation process, where quality traditionally is assessed and externally validated. Few statewide and national data sets include comparable data to assure quality. In this current state of innovation, it is necessary for the state, university system, or individual institution to have some centralized standards for microcredential development, validation, and continuation.

While developing this centralized capacity, trustees must consider:<sup>30</sup> Does the state and/or system have a definition of a microcredential? What is the institution's definition, and how does it align for comparable and transparent public communications? Who can develop microcredentials? What data are needed to provide evidence that a microcredential should be developed? What is the process to approve microcredentials? Are there different types or tiers of microcredentials to represent different levels of achievement? How are microcredentials branded? What is the process for continual quality improvement, including discontinuing microcredentials that are no longer relevant?



3. *How is this institution utilizing excellent existing content at the lowest cost?*

Faculty need not create entirely new content but can use excellent content at the lowest cost. A labor-market analysis can identify specific skills that faculty already teach in existing courses but that are not transparently communicated to employers. The same analysis can also lead to understanding where existing industry-recognized credentials can be utilized and where relevant and useful lectures, courses, textbooks, and virtual reality demonstrations already exist. Trustees can ask: How can we be assured that we have thoroughly examined the institution and its existing programs to identify where clusters of skills related to a microcredential are already being taught? Did we look elsewhere to existing, more cost-effective (even open-source) content platforms, such as Coursera and Credly? Where did we mine partnerships to explore superior existing content from national and international experts?

4. *What is the capacity of this institution to be a provider-of-choice and reliable brand for adults needing upskilling and reskilling?*

Nearly every four-year college and university in this country will need to become a better adult-serving institution. Forty million Americans today have completed some postsecondary education but do not have a credential. Further, the World Economic Forum estimates that 61% of workers will need retraining by 2027.<sup>31</sup> Microcredentials will play a critical role because of their more accessible length and cost. Trustees can ask: Who are the top-choice providers for working adults seeking upskilling and reskilling, and what can we learn from them to implement here? What partnerships with those providers have we explored (e.g., SkillStorm)? What is the speed of innovation at our institution, and how can it be accelerated to better align with the pace of business and industry? How does our brand need to adapt? Our pricing strategy? Our industry partnerships? How can we, as trustees, gain insight into microcredentialing by completing one ourselves?

5. *How can the employer- and industry-engagement process for developing, validating, and continuing microcredentials be mainstreamed across the institution's degree offerings?*

By definition, microcredentials are intended to convey the acquisition of workforce-aligned skills. Developing microcredentials at a public four-year institution can create new habits that improve the alignment of all programs with rewarding and family-supporting career paths. These habits include regularly conducting labor market-informed needs assessments, collaborating with human-resources directors, and integrating learning at work with learning in college into coherent and efficient credential paths. Trustees can ask: Which industries and employers have engaged in microcredential development? What did they tell us? Where and how is their feedback gathered regarding the microcredential graduates they hire? What are we learning, and how are we applying it?

6. *How can this institution communicate with our external stakeholders—particularly policymakers—the demonstrable ways microcredentials help keep and attract the types of jobs needed for broadly shared economic growth?*

Public colleges and universities are a public trust. Therefore, they are essential partners in the economic development, growth, and talent strategies of any region or state. Employers choose to establish businesses and expand in locations where a skills-aligned workforce is readily available. Universities can demonstrate responsive partnership through microcredentials, which can both stand alone and strengthen the relevance of existing baccalaureate pathways. Trustees can ask: How does our overall suite of microcredentials demonstrate how we are directly addressing workforce shortages in our state? Local labor-market needs? How does it equip the workforce to be prepared in industry areas where our state strives to be more competitive?



## Conclusion

Trustees must ride, rather than fight, the waves that continue to hit the coastlines of higher education and ripple to their respective institutions. Americans—particularly young adults—question the value of bachelor’s degrees. As trustees of public four-year institutions, we have an obligation to assure and convince students that the time and expenses associated with earning a bachelor’s degree at our institution will not only pay off but will improve their employability, lifelong career navigation, and earnings.

Microcredentials belong not just in the workforce, or the community and technical college sectors, but in the four-year sector. Baccalaureate-aligned and degree-embedded microcredentials can reaffirm and deepen the value of baccalaureate education by integrating core skills (e.g., digital skills and data analytics) into the humanities degree paths; and integrating soft skills (e.g., leadership, conflict communication) into technical degree paths.

Microcredentials have potential, but informed trustees need to engage to assure quality, value, and cost-efficiency. Trustees can also create guardrails to prevent mission drift, cost escalation, and a product that competes with the baccalaureate degree. Understanding the role of public four-year institutions and trustees in this fast-changing ecosystem of microcredentialing will support the longevity of baccalaureate-granting institutions and help graduates succeed after they leave college or the university.



## Endnotes

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## How Microcredentials Are Revolutionizing the Higher-Education Business Model

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- <sup>17</sup> Louisiana Office of Student Financial Assistance, “M. J. Foster Promise Program.”
- <sup>18</sup> “Approved Proprietary Schools,” Louisiana’s M. J. Foster Promise Program.
- <sup>19</sup> United for ALICE, “United for ALICE Wage Tool.”
- <sup>20</sup> S.B. 204, 2023 Reg. Sess. (La. 2023).
- <sup>21</sup> “Louisiana GO Grant,” Louisiana Office of Student Financial Assistance (LOSFA).
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