

The State of Stackable Credentials: Trends and Challenges

By Mary Beth Lakin and Tara Underwood

As educational institutions, industries and other organizations develop career and education pathways through stackable credentials, credential holders, employers, students and communities are often confused about navigating the stackable credentialing process. This article highlights some promising models from across the nation as the industry driven momentum for stackable credentials continues to increase in the labor market.

An emerging shift in the availability of experienced and qualified workers has caused various industries to consider how to maintain a labor pool in such a dynamic and growing economy. Due to the mass exodus of baby boomers retiring over the next several years, a new protocol on how to recruit and maintain skilled and educated employees is now at the forefront of many leaders' and human resource directors' minds. With only 30 percent of young people earning a bachelor's degree by age 27,¹ researchers from the Lumina Foundation have keyed in on the enormous need for a more educated, talented and technologically-savvy workforce and have created Goal 2025.² The goal of Lumina Foundation is to ensure 60 percent of Americans hold a high-quality post-secondary degree, certificate or other credential by the year 2025.³ The Department of Labor (DOL) has proposed a solution of industry-recognized stackable credentials with a clearly defined system of competencies linked to employment opportunities and advancement in careers.⁴ As a result, there are developing practices to address the growing need for portable and connected stackable credentials for varied populations across the United States.

Many stakeholders share interest in stackable credentials, including the K-12 community, the higher education community, various career and technical education organizations, industries, students, certification grantors and third party validators. Credential seekers have a multitude of questions: Where can credentials be used and for what purpose - in the classroom, on the job, or in the community? Is a credential, such as an associate degree or badge, a valuable tool for getting a job or advancing a career? Could one credential lead to getting another needed credential? How do credentials stack?

The lack of guidance or accessible, integrated information is especially challenging for those

looking to earn credentials that could benefit them in their work and communities. In addition, the economic returns vary based on the certificate's field of study, whether the certificate holder works in field, and the demographics of the certificate holder.⁵

What delineates the stackable credential from traditional educational pathways of high school diploma to college degree? Stackable credentials are framed as a "sequence of credentials that can be accumulated over time to build up an individual's qualifications and help that individual move along a career pathway to further education and different responsibilities, and potentially higher paying jobs."⁶ This sequencing of credentials offers career pathways for individuals at all levels, from the GED® credential holder to the graduate student at mid-career. Viewed from a wider lens, stackable credentials can provide lateral, latticed, nested and other connections, as well as the sequenced 'build' or 'stack' connections.⁷

These credentials are developed based upon the technological and customer service needs of the industry such as health care, manufacturing, information technology and other careers. The general method of earning stackable credentials include the process of (1) obtaining a high school diploma, (2) earning an associate degree to stack and (3) making progress toward a credential at a higher level, the bachelor's degree. In horizontal stacking, a credential earner gains certificates in related fields that would prepare them for specific jobs. For example, an IT systems administrator may have earned a certificate in CompTIA, a Microsoft Certified Solutions Expert (MCSE) and Cisco Certified Network Associate (CCNA).⁸ Certificates might also be "stacked" to meet requirements for an academic credit bearing certificate or degree program, as part of a prior learning assessment option offered by a college or university.

Challenges

How do states decide ways in which to support their citizens in the earning of credentials?

Unfortunately, there is a great deal of confusion about credentials among a wide range of stakeholders including users, employers and institutions. With the overabundance of credentials in the market—degrees, diplomas, certificates, licenses and badges—it is no wonder. For example, there are now over 26,000 educational programs in the United States that offer certificates.⁹ With the United States' secondary education system being driven by individual states and local districts, it is difficult to establish a more comprehensive system of stackable credentials to extend portability for learners and workers within and across states.

The number of organizations that are qualified to train and provide certificate programs continues to grow. In addition, community colleges, traditional colleges and universities are beginning to offer similar options to individuals that would like to pursue additional training and apply the stackable credential approach to education for career advancement purposes. With a myriad of programs, there is little transparency for participants regarding credential connectedness or value.¹⁰ The risk with our current approach is the lack of an integrated system to support learners and workers at different points in the life cycle who step in and out of work and education.

Many of the challenges relate to finding ways in which to comprehensively integrate existing standards and systems. Different standards and metrics for industry and education credentials must be cross-walked and aligned. Fragmentation resulting from siloed work within and across institutions must be decreased, including the disconnect between educational offerings that provide academic credit and those that do not. Quite a few colleges and universities still do not have policies and practices in place to apply prior learning, such as industry certifications and military training equivalent to college-level learning, to academic credentials. And, employers sometimes invest in their own internal training rather than recognize skills and knowledge gained in other settings.

Emerging Practices— State/Industry Modules

Institutions and states are beginning to consider and experiment with an appropriate mix of learning experiences that could make up modules for

stackable credentials, including classroom instruction, online formats, and experiential learning, such as internships and apprenticeship programs. Such experiences become embedded within credentials. In 2011, one industry-led initiative, Skills for America's Future, expanded with a goal to improve industry partnerships with community colleges to maximize workforce development strategies, job training, and job placements for students interested in obtaining their skills and credentials in this manner.¹¹ The American Hotel & Lodging Educational Institute developed the Hospitality and Tourism Management Program in 2013 and 2014. This two-year program introduces high school students to the hospitality and tourism industry, a high-growth career sector with a need for qualified employees.¹² Students enrolled in this program are able to earn a Certified Hospitality & Tourism Management Professional designation.¹³ The Manufacturing Institute has created a Skills Certification System in which certifications are granted in a stackable nature in order to have the skills and knowledge recognized by the industry to be used towards college credit.¹⁴ With embedded credentials, students enrolled in a community college in Oregon or a technical college in Wisconsin can gain the skills and knowledge they need to qualify for entry-level jobs as well as continue to earn credits, competencies and credentials. Stackables are more valuable for these students as they afford opportunities to progress in both the workforce and the college classroom.

State governance and policy context influence innovation in the creation and application of stackable credentials. Glasgow (2014) points out that the differences in statutory authority and governance arrangements in states creating stackable credentials requires soft leadership strategies, such as technical assistance, to persuade and build consensus for change and more direct policy and funding guidance.¹⁵ Kentucky's policies, for example, allow colleges to award fractional credit for its educational offerings and create modules for class-based and online courses in high-demand occupational programs. The state of Wisconsin has provided a percentage of funding to support technical colleges, contingent on achievement of identified criteria and to increase each budget year.¹⁶ Minnesota's FastTRAC Adult Career Pathways is an initiative that assists many of those in underserved populations and first generation college students with the collaborative efforts of

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many state agencies and the Greater Twin Cities United Way.¹⁷

Higher education institutions and systems across many states are facilitating a range of strategies and tools to enhance pathways through stackable credentials, including assessment of prior learning, lattices, public/private partnerships, and employer engagement.

Credit for Prior Learning Options: Prior learning, from third party validation of industry and military training to national certification exams and individualized assessment of competencies, can be “stacked” to help learners complete a credential or move to the next level. Knowledge and skills gained from prior learning in the military, through an apprenticeship program, or in the workforce could be translated and transferred to the academic setting or workplace and “stacked” to help the individual advance. This strategy alleviates the disconnect between academic credentials and credentials without academic credit.

One current experiment, through the U.S. Department of Education’s Educational Quality through Innovation Partnerships, allows low-income students to access federal financial aid and enroll in programs through non-traditional training providers, including coding and software boot camps, employer training, and online education vendors, in partnership with eight colleges and universities.¹⁸ These experiences are mapped to academic credentials, from certificates to bachelor’s degrees.

Lattices: States and colleges are creating foundational “lattice” certificates that students can use as launch pads for multiple pathways in related occupational fields. One example is Rogue Community College’s Basic Health Care certificate program in Oregon.¹⁹ Such programs help high school students and other populations explore careers before committing to a program of study. A two to three term certificate, it prepares students for entry level positions and offers a range of electives from a variety of specialty tracks with opportunities for earning additional certificates or as a bridge to degree programs.

Public-private Partnerships: Created through initiatives such as the National Coalition of Certification Centers, public-private partnerships provide training, assessment and certification models in areas such as transportation, energy, aviation, manufacturing and horticulture for partners interested in stackable credentials.²⁰ One example is the Ivy Tech Community College Northeast’s partnership

with Fiat Chrysler Automobile to train automotive technicians. Students at the Indiana college are provided with paid internships, awarded academic credits for the training, and offered strong leads for employment.

Employer Engagement: Milwaukee Area Technical College’s IT program has embedded certifications that validate industry skill requirements, as well as certification requirements. Three certificates may stand alone or build on one another to earn a technical diploma, which can also stack to an associate degree and eventually lead to a bachelor’s degree from a partner institution. MATC’s program is one example of clear, stackable pathway programs offered across the Wisconsin Technical and Community College System. These programs help learners stay employed while earning credentials and keep up to date in a rapidly changing field.²¹

One Industry Model: Stackables in the Health Care Industry

The shortage of workers in the health care industry has continued to grow over the years. In addition, there is an anticipated mass retirement of the U.S. workforce with the growth in the elder population.²² It is projected that within the next 10 to 20 years there will be a significant need in a variety of health-related careers. Not only is this shortage relevant to the statistics associated with the availability of skilled and knowledgeable physicians and nurses, but it is also a reflection of the deficit of individuals that work in a variety of allied health professions that serve in supportive roles for the overall functionality of a health care organization. Examples include jobs that require specific technical skills related to x-ray procedures, electronic medical records and phlebotomy. To meet this imminent need in the health care industry, opportunities associated with stackable credentials may be more enticing to those with little to no post-secondary education, as well as to states looking to more quickly reduce workforce shortages. To aid in this effort, the Workforce Investment Act has helped fund and facilitate new regional workforce partnerships in health care and other growth industries.²³

According to the national Survey of Income and Program Participation, health care certificates represent nearly half of all certificates awarded in 2010 (46 percent), but they represent 57 percent of certificate awards at for-profit institutions. By comparison, 37 percent of certificates awarded at public institutions and 39 percent at private

nonprofits were in health care fields. Examples of health-related careers that utilize the stackable credential progression include: nurse aids, home health aides, phlebotomy technicians, surgical technology, clinical laboratory, health information and occupational therapy.²⁴

Many individuals that represent minority populations or those living in rural locations are beginning to take advantage of the stackable credential opportunities. Latino attainment of credentials in health fields increased 161 percent for certificates, 44 percent for associates, 74 percent for bachelor's degrees and 38 percent for doctoral degrees.²⁵ In addition, health care is the largest certificate field and largely represented by females.²⁶

Looking Ahead

Stakeholders in both education and industry are advocating for, and taking steps to build pathways to credentials across multiple populations, including those at risk of dropping out of high school or college, military service members transitioning to the civilian workplace, and older adults wishing to return to the workplace.

The current system does not serve communities and their residents well.²⁷ Connecting Credentials, managed by the Corporation for a Skilled Workforce and supported by the Lumina Foundation, is a national campaign to improve the credentialing system, especially for learners. With 112 co-sponsoring organizations, the initiative has focused on five key areas: common language, quality assurance, employer engagement, data technologies and credentialing pathways.²⁸

In the U.S., students are most often guided to go to college for bachelor degrees. Williams Symonds et al. notes in *Pathways to Prosperity* that to “regain our leadership in education, we must adapt a broader approach, one that puts far more emphasis on development of a world-class, rigorous system of multiple pathways.”²⁹ Creating alternative career pathways that align sequenced learning with on-the-job training may be more beneficial to learners and workers across the life cycle. Stackables potentially offer those learners and workers flexible entry and exit ramps to work and education, incentives for returning to learning, and career mobility.

Notes

¹ Carnevale, Anthony P., Nicole Smith, Jeff Strohl, and Center on Education and the Workforce Georgetown University (2010). “Help Wanted: Projections of Jobs and Education Requirements through 2018.” *Georgetown University Center on Education And The Workforce*

² Lumina Foundation, “Goal 2025,” https://www.luminafoundation.org/goal_2025.

³ Merisotis, Jamie. *America Needs Talent: Attracting, Educating & Deploying the 21st-Century Workforce*. New York, NY: RosettaBooks, 2015

⁴ Bryan Albrech, “Growing the Economy by up-Skilling the American Worker,” *Techniques: Connecting Education & Careers* 86, no. 8 (2011).

⁵ Carnevale, Anthony P., Stephen, J. Rose, Andrew R. Hanson, and the Center on Education and the Workforce ““Certificates: Gateway to Gainful Employment and College Degrees. Executive Summary.”” *Georgetown University Center on Education And The Workforce* (2012)

⁶ U.S. Department of Labor, Department of Labor and Training. December 10, 2010. *Training and Employment Guidance Letter*. No 15-10. https://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=2967.

⁷ Ganzglass, Evelyn. March 2014. *Scaling “Stackable Credentials” Implications for Implementation and Policy*. Center for Economic and Social Policy. <http://www.clasp.org/resources-and-publications/files/2014-03-21-Stackable-Credentials-Paper-FINAL.pdf>.

⁸ Utah System of Higher Education, “What Is ‘Reverse Transfer’ and a ‘Stackable Credential’?,” <http://higheredutah.org/what-is-reverse-transfer-and-a-stackable-credential/>

⁹ McCarthy, Mary Alice. October 2014. *Beyond the Skills Gap: Making Education Work for Students, Employers and Communities*. New America Foundation: <https://www.luminafoundation.org/files/resources/beyond-the-skills-gap.pdf>.

¹⁰ Lumina Foundation. June 2015. *Connecting Credentials: Making the Case for Reforming the U.S. Credentialing System*: <http://connectingcredentials.org/wp-content/uploads/2015/06/MakingTheCase-6-8-15.pdf>

¹¹ Albrech, Bryan. *Growing the Economy by up-Skilling the American Worker*. *Techniques: Connecting Education & Careers* 86, no. 8 (2011): 16-19.

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¹² American Hotel and Lodging Educational Institute. High School Program. [https://www.ahlei.org/Programs/High-School-Program-\(HTMP\)/](https://www.ahlei.org/Programs/High-School-Program-(HTMP)/). Retrieved January, 2017.

¹³ Elizabeth Johnson, ““Opportunities Abound in Fast-Growing Hospitality Industry”,” *Techniques: Connecting Education & Careers* 90, no. 1 (2015).

¹⁴ Lane, Patrick. Strategies for Success: Promising Ideas in Adult College Completion. Policy Exchanges. Adult College Completion Network, 1-12. Western Interstate Commission for Higher Education: Lumina Foundation, 2012.

¹⁵ Evelyn Ganzglass and Center for Postsecondary and Economic Success Center for Law and Social Policy (CLASP), “Scaling “Stackable Credentials”: Implications for Implementation and Policy,” *Center For Postsecondary And Economic Success* (2014).

¹⁶ Ibid.

¹⁷ Administration for Children & Families and Office of Family Assistance, “Stackable Credentials and Career Pathway Opportunities for Tanf Participants,” ed. Webinar Transcript, U.S. Department of Health and Human Services (n.d.).

¹⁸ U.S. Department of Education. *Fact Sheet: ED Launches Initiative for Low-Income Students to Access New Generation of Higher Education Providers*. August 16, 2016.

¹⁹ Ganzglass and (CLASP), “Scaling “Stackable Credentials”: Implications for Implementation and Policy.”

²⁰ Albrecht, Bryan. “Growing the Economy by up-Skilling the American Worker.” *Techniques: Connecting Education & Careers* 86, no. 8 (2011): 16-19.

²¹ Ganzglass and (CLASP), “Scaling “Stackable Credentials”: Implications for Implementation and Policy.” *Center For Postsecondary And Economic Success* (2014).

²² Hunter, Jan. “The Strategic Imperative for Investing in the Health-Care Industry’s Frontline Workforce.” *Employment Relations Today*, 27-32.

²³ Ibid.

²⁴ Carnevale, Anthony P. Stephen, J. Rose, Andrew R. Hanson, and the Center on Education and the Workforce. Certificates: Gateway to Gainful Employment and College Degrees. Executive Summary. Georgetown University Center on Education and The Workforce.2012.

²⁵ Santiago, Deborah and Taylor, Morgan Stackable Credentials Critical to Increasing Latino Success, *The Evolllution*. June 26, 2015.

²⁶ Carnevale, Anthony P., Stephen, J. Rose, and Andrew R. Hanson. Certificates: Gateway to Gainful Employment and College Degrees. Executive Summary. *Georgetown University Center on Education And The Workforce*.2012.

²⁷ Austin, James T., Mellow, Gail O. Rosin, Mitch, and Seltzer, Marlene B. Portable, Stackable Credentials: A New Education Model for Industry-specific Career Pathways. Jobs for the Future. November 28, 2012.

²⁸ Lumina Foundation. Connecting Credentials: Building Learning-Based Credentialing Systems. <http://connectingcredentials.org/> Retrieved January, 2017.

²⁹ Symonds, William C., Robert Schwartz, and Ronald F. Ferguson. 2011. Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century. Cambridge, MA: Pathways to Prosperity Project, Harvard University Graduate School of Education.

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