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In both the Workforce Innovation and Opportunity Act and the Every Student Succeeds Act, postsecondary credentials are defined as coming from four categories: state and federal licensures, apprenticeships, college degrees and industry credentials. These four categories are also mentioned in the draft of the Perkins reauthorization. Looking at this from a legislative perspective, it appears there is agreement on accepted categories for postsecondary credentials.

In regard to high school reform in the United States, there have been successes with a wide variety of pathway approaches and models, such as HSTW, career academies, and linked learning, that are being implemented for career and technical education (CTE) programs that deliver industry-based credentials linked to careers often in collaboration with employers (Visher & Stern, 2015). A recent report released by the National Center for Education Statistics (2016), *Employment Status of Postsecondary Completers in 2009: Examination of Credential Level and Occupational Credentials*, shows that U.S. workers with an earned *occupational* credential had the highest rate of employment in 2009 compared to students who earned an *academic* credential alone. In the United States, we are also seeing industry-based credentials as a means for secondary-to-postsecondary credit transfer or as a basis for articulation.

What do these facts point to? It's that the CTE community in the United States has embraced credentialing. Credentials help recognize a student's achievement; they can clarify which technical skills and knowledge a student possesses; and they can provide an employment advantage in some regions. Credentials can also benefit the educational or training entity by validating the content of a technical curriculum or program of study and by using student outcome data for instructional or program improvement.

Is this a U.S. phenomenon, or is this same interest occurring in other nations? The Asia Society, NOCTI and Nocti Business Solutions have provided some examples that would indicate that global interest in credentials is indeed growing.

International Standards

NOCTI and its sister company, Nocti Business Solutions (NBS), both have some knowledge of international credentialing experience. For example, both deliver industry credentials for the Manufacturing Skills Standards Council (MSSC), a certification organization. For many years MSSC has delivered certifications in the United States to thousands of individuals for both Certified Production Technician (CPT) and Certified Logistics Technician (CLT). As a result of industry need for core technical skills, MSSC has recently begun to research opportunities in other countries. Considering the globalization of economies, MSSC has focused its initial inquiries on the implementation of both the CLT and CPT certifications.

NBS also delivers credentials internationally for SME (formerly the Society for Manufacturing Engineers), which predicts that by 2025, there will be 2 million unfilled manufacturing jobs in the United States alone (n.d.). This underscores the need to not only provide education and training in manufacturing-related industries, but it also means that we need to look at filling this void from other sources. One of those sources could be outside our borders, and a credential that is compliant with an international standard—such as ISO/IEC 17024:2012—which helps organizations bring uniformity to personnel certification. Validation of skills helps ensure that those who qualify for a credential meet global standards, which is especially important in specialized occupations where workers are likely to be mobile (Gasiorowski-Denis, 2012).

Examples From Around the World

In looking for other examples of global certifications, we can turn to the Global Cities Education Network (GCEN), which is run by Asia Society's Center for Global Education. This learning network of 10 cities from North America and the Asia-Pacific region comes together to study common challenges in education and share solutions. One of the main foci of the network is to look at best practices in CTE systems around the world.

In regards to credentials, GCEN has observed:

- Ontario, Canada provides students in grades 11 and 12 the opportunity to focus on a specific career path prior to placement in an apprenticeship. Upon finishing the degree, they earn a seal on their diploma identifying them as a specialist high skills major (SHSM), and they also earn valuable industry credentials. All SHSM earn CPR, first aid, and Workplace Hazardous Materials Information System qualifications, as well as qualifications specific to their career pathway. As just one example, Hospitality and Tourism students can earn safe food-handling certifications.
- Australia has arguably the best framework for vocational education certification—the nationally aligned Australian Qualifications Framework. Students begin with foundational knowledge and skills, which could earn them Certificate I, showing they have entry-level skills. As they progress, they learn industry-specific skills, earning further certifications. For instance, a Certificate II focuses on skills for experienced employees and those earning a Certificate III have supervisory skills (Fitzgerald, 2015).
- England is encouraging apprenticeships for 16- to 19-year-old students who participate in simultaneous numeracy- and literacy-related classroom learning in their career area that leads to a vocational award. The challenge they face, similar to the United States, is that businesses do not participate in large enough numbers to make this initiative effective.
- Switzerland's secondary school students are given many CTE pathway options. Students earn industry credentials by spending two to three days each week engaged in hands-on learning via apprenticeships with a specific company (Singmaster, 2015a). In July 2015, the U.S. Department of Labor signed a joint declaration of intent to make this model more prominent in the United States (Gurchiek, 2015).
- Singapore: Students at the Institutes for Technical Education earn certificates that are recognized by industry. Students also have the potential to move on to further educational opportunities.
- Developing countries are aware of the need to provide their students with industry-recognized credentials. The government of Papua New Guinea has a national qualifications framework that works in tandem with industry (Paka & Baird, 2013); students at technical colleges earn certificates aligned to this framework (; Singmaster, 2015b). Those not enrolled in formal educational training can also go to a nationally run trade testing center to be tested and granted certificates and recognition for the skills they have acquired—no matter where they learned them from.

Conclusion

These examples demonstrate an increased appetite for credentials, perhaps because these nations are home to global companies where workers may find themselves part of a virtual global team. Our examples also indicate the growing interest in, and perhaps need for more companies and associations to consider alignment with globally recognizable standards like ISO 17024:2012 (Gasiorowski-Denis, 2012).

With qualification frameworks, as well as quality of education and skills, varying greatly by country, recognizing credentials that are not aligned to globally recognized standards is difficult. From our perspective, a focus on technical competence using a globally accepted system of credentials will help both business and our future workforce.

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REFERENCES

Fitzgerald, K. (2015, April 29). Australian education gives all students skills for the workplace (web log comment). *Educationweek.com*. Retrieved from http://blogs.edweek.org/edweek/global_learning/2015/04/australia_education_system_giving_all_students_skills_for_the_workplace.html

Gasiorowski-Denis, E. (2012, July 24). New and improved ISO/IEC 17024 standard for personnel certification programmes. *ISO.com*. Retrieved from http://www.iso.org/iso/home/news_index/news_archive/news.htm?refid=Ref1625

Gurchiek, K. (2015). *U.S.-swiss collaboration planned for apprenticeships*. Retrieved from <https://www.shrm.org/ResourcesAndTools/hr-topics/talent-acquisition/Pages/US-Swiss-Apprenticeships.aspx>

National Center for Education Statistics. (2016). *Employment status of postsecondary completers in 2009: Examination of credential level and occupational credentials*. Washington, DC: U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2016/2016107.pdf>

Paka, W.S. and Baird, J. (2013). *Aligning the Papua New Guinea national qualifications framework, Quality Assurance, Policy Directions and Regional Frameworks* (PowerPoint slides). Retrieved from <http://inqaahe.heeact.edu.tw/index.php?r=site/download&category=1#.WDXqb3eZNE4>

Singmaster, H. (2015a, April 29). Why we need apprenticeship programs for high school students (web log comment). *Educationweek.com*. Retrieved from http://blogs.edweek.org/edweek/global_learning/2015/07/why_we_need_an_apprenticeship_program_for_high_school_students.html

Singmaster, H. (2015 b, June 11). Vocational education critical to emerging economies (web log comment). *Educationweek.com*. Retrieved from http://blogs.edweek.org/edweek/global_learning/2015/06/vocational_training_as_an_education_solution_in_emerging_economies.html

SME. (n.d.). *About SME workforce development efforts*. Retrieved from <http://www.sme.org/wfd/>

Visher, M. & Stern, D. (2015). *New pathways to careers and college: Examples, evidence, and prospects*. New York, NY: MDRC. Retrieved from http://www.mdrc.org/sites/default/files/New_Pathways.pdf