Creating new professional credentials for changing workforce needs

By John Bardo

We live in revolutionary times. Today we are in the midst of what is termed the Third Industrial Revolution, which is characterized by the rapid increase in digitization and a much broader, less hierarchical information flow.

While we are still trying to digest the impact of these major changes to the economy and society, we are now on the cusp of the Fourth Industrial Revolution, which will be driven primarily by the widespread distribution and adoption of transformative new technologies in artificial intelligence, job automation and ubiquitous connectivity between devices.

Because of the changes in society and work life driven by these technological revolutions, higher education is under great pressure regarding its roles in providing learning opportunities for people at all stages of life and career.

For decades, higher education has talked about the need for *lifelong learning* to enrich career prospects and quality of life. But today it is not enough to give this concept lip service. The speed and complexity of the changes that we all are experiencing requires not just what used to be termed *continuing education,* but options for *continuous education* as well.

Continuing education has often meant going back to school once or twice, post-college, to obtain new skills or knowledge. Continuous education is the expectation that technology-driven change is going to require that formal education is part of every era of a person's life.

Success in this reimagining of professional education requires that it be just-in-time and delivered in bite-sized chunks, so that busy people can upgrade their skills, obtain new knowledge, and continue to develop both their professional and soft skills in an age when it is increasingly rare for people work for a single company or to have a single career during their lifetimes.

Therefore, it is critical that continuous education be exportable. That is, it needs to be of recognized quality, not totally tied to a specific employer, and designed to meet the needs and goals of the individual. It also needs to provide avenues for the individual to grow intellectually, while improving his or her competitiveness. These requirements challenge every aspect of our current system of higher education.

Further, while there is a strong consensus that the United States needs to substantially increase the number of people with post-secondary education and training credentials to meet the persistent demands of the world that we live and work in, our existing semester-based structure creates significant barriers to nontraditional students. We used to think that anyone

outside of the 18-22-year-old undergraduate was *nontraditional*. At many schools, including WSU and WSU Tech, the nontraditional students have always been an important part of the student body.

The only way to meet this increased need for continuous education is to flatten the availability of high-tech training to make it accessible to all regardless of income, life situation, geographic proximity to an educational institution or family obligations. For many people we serve, committing to 15-week courses of study and completing programs that may take years to achieve, are simply not feasible.

To address both, universities and other higher education institutions are developing new mechanisms for delivering education and documenting its quality. These are generically known as "micro-credentials," meaning that they are shorter in duration than traditional degrees; more focused; and can be rapidly adapted to meet whatever emerges next as a result of the revolutions underway.

At Wichita State University, we are addressing the future of higher education by creating micro-credentials that are of high quality (they meet all educational accreditation standards), they are offered in small, bite-sized chunks, and they are priced according to the market that they are trying to address. This combination of time requirements, cost and focus make them much more available to people who have previously found higher education beyond their life capacity.

The mini-credentials approach allows busy professionals to continuously upgrade their skills. They appear on the student's transcript, which means that they are exportable, and, over time, they increasingly will become a basis for students to be able to complete new forms of college degrees that are future focused.

The basic building block for WSU's micro-credential model is called a **badge**. At WSU, a badge is a credit-bearing short-course that, if successfully completed, generates 0.5 or 1.0 credit hour and awards a digital credential for public display. The badges, when attached to a LinkedIn profile for example, provide a positive signal to potential employers about skills you've acquired.

Because badges are tied to credit hours, they are subject to all Higher Learning Commission (HLC) regional accreditation standards, which provides quality assurance. Currently, badges are only available to students who are not degree-seeking, but the university is exploring a model for making badges and other micro-credentials available to degree-seeking students. Badges can provide important job-based skills for students majoring in the liberal arts, and for students in professional majors, badges can provide documentation of liberal learning skills and knowledge so important both for effective citizenship and career development.

Badges straightforwardly document skill development, and they can be "stacked" into broader **certificates**. An academic certificate is a micro-credential composed of multiple components such as badges, credit by exam, traditional courses, apprenticeships, internships, evaluated credit for prior learning, or any other form of education that meets accreditation standards. Certificates are completion documents that appear on the student's transcripts and are, therefore, exportable and allow the student to document quality learning.

Shorter term credentials, such as graduate certificates, provide a readier entry point for students who may not be in a position to commit to a full graduate program of two or more years. And, some areas of the University are exploring stacking certificates in such a way that they would result in either an undergraduate or graduate degree. This approach allows the individual student to document progress toward a degree and provides that student with an "interim credential" that can make her or him more competitive.

It also allows students to pursue degrees that combine many areas of study into unique programs that both address the student's interests and the emerging situations in the economy and society.

At the graduate level, the University is offering badges and certificates and is exploring development of **mini-masters' programs**. A mini-masters can take many forms. For example, faculty members in a program could identify massive open online courses (MOOCS) that are available at low or no cost to the student to guide learning in an area. The learning could then be validated following standard credit by examination processes that have been used by the University for decades.

It also may be possible for faculty members to help guide students through the MOOC for a fee. Additionally, badges, and other forms of credit that meet accreditation standards could be combined to create a nine-to-twelve credit hour mini-masters to document student advanced learning. In principle, passing the mini-masters with sufficiently high grades may also represent an alternative admissions standard to traditional graduate programs.

Innovation and change have overtaken higher education. Universities that do not keep up and address the future will find it increasingly hard to attract students and meet their mission. At WSU, we are continuously innovating to provide meaningful, high quality, accessible educational opportunities to address the needs of the people of this region and the state of Kansas. WSU: student centered, innovation driven.