



MICRO- CREDENTIALS: EMERGENCE AS A VIABLE ALTERNATIVE IN EDUCATION

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Abstract

The COVID-19 pandemic has been an evolutionary force in higher education - in more ways than just making information and communication technology the vehicle for learning. It has resulted in a sea-change in the way the future of higher education is perceived by all the stakeholders. Even before the pandemic - many countries including the U.S. and our own country were witnessing what may well be called 'a bubble' in the higher education sector - implying that degrees and higher education are getting so expensive that it is almost impossible to recover the expenses incurred in acquiring the degree within a reasonable period of time. The increasing trend of piling student loans and rising unemployment does not bode well for higher education as it is traditionally conceptualized. Further, there is often a considerable gap in employability and the needs of the employer. In several economic sectors - we have seen the corporate world take over the training to fill the employability gap. Bubbles, as we know too well - have a propensity to burst. Micro- credentials are a relatively new trend in education which has gained momentum as the pandemic progressed. This conceptual paper explores the emergence of micro- credentialing as a viable alternative pathway to meaningful learning and reviews some of the current trends and literature in the field.

Keywords: *Credentialing, micro- credentials, alternative pathways, badges*



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Introduction

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stakeholders. Even before the pandemic - many countries including the U.S. and our own country were witnessing what may well be called 'a bubble' in the higher education sector - implying that degrees and higher education are getting so expensive that it is almost impossible to recover the expenses incurred in acquiring the degree within a reasonable period of time. The increasing trend of piling student loans and rising unemployment does not bode well for higher education as it is traditionally conceptualized. Further, there is often a considerable gap in employability and the needs of the employer. In several economic sectors - we have seen the corporate world take over the training to fill the employability gap. Bubbles, as we know too well - have a propensity to burst. Microcredentials are a relatively new trend in education which has gained momentum as the pandemic progressed.

What are micro- credentials?

Micro- credentials are, literally, small credentials. According to Bloomboard which is a leading online platform for enabling educator advancement through micro- credentials, they are a form of micro- certifications acquired based on competency in one specific skill at a time. In this particular context, these can be earned online or offline, or in a blended way through submitting a portfolio of evidence created through practice. An associated term often used is a **'stackable credential' which includes micro- credentials** that can be accumulated over a period of time to build up qualifications and help the person progress on a pre-defined career or education pathway.

Micro- credentials are often associated with workplace learning and recognition. DeakinCo, a unit of Deakin University, Australia claims that purely academic business degrees are not necessarily an indicator of workplace capability, and have proposed a new model of workplace education and accreditation. For this the first step is evaluating and recognising existing skills and capability as workplace credentials. These mini-qualifications demonstrate skills and experience in a particular subject area. Micro- credentials are also termed as nanodegrees and can be awarded for a range of soft and hard skills. They have been used as a way of transferring credit across programmes.

Micro- credentials are an evolution from the 'digital badges' - one of the early promoters of which was Open Badges, created by the Mozilla Foundation in 2013 According to Tsai (2014) digital badges are a game changer as a credentialing tool will surely compel us to re-conceptualise education as we know it.



The OECD (2020) has published a working paper on the emergence of alternative credentialing and suggests that the definitions of credentialing vary widely in different regions of the world. One thing, however, which is common to all the definitions is the implication that the micro-credentials align or articulate with a related credential of wider scope (International Council for Open and Distance Education, 2019). Some of the defining characteristics relate to the delivery mode which may be flexible, self-paced with varying durations, using diverse validation processes and covering a wide range of skills. The report includes the Swayam platform in India initiative as one of the top five providers along with Coursera, edX, Future Learn and Udacity.

Education service providers and universities

While it is a trend in certain countries such as the U.S. to have online education service providers offering micro-credentials - some countries like Australia are pioneering 'stacking' of micro-credentials into degrees (Ross, 2021). It is interesting to note that micro-credentialing finds mention in the website of the Department of Education, Skills and Employment of the Australian government which makes a specific mention of supporting micro-credentialing in the training system. The department states that credentialing provides vocational education and training options in more flexible ways of learning, and can be used as building blocks towards full qualifications. Two of the prominent reviews - one an expert review of Australia's Vocational Educational and Training System and the other a review of the Australian Qualifications Framework, recommended that clear policy guidelines need to be formulated to permit the recognition of micro-credentials for credit.

One can see this policy reflecting in the efforts of almost all the leading universities in Australia which are now promoting micro-credentials. Deakin University has a catchy tagline on the micro-credentials section of the website - 'Upskill in your downtime' with units taken from real Deakin degrees. The University of Melbourne states under the Pedagogy and Curriculum Innovation Section on its website they claim to be exploring their use as a means of certifying attainment of specific learning elements of learning.

The diverse use of micro-credentials are compelling the higher education sector to rethink the value of their traditional degree certification and credentialing practice and its reform. Robust, scalable and innovative approaches involving emerging technologies will soon go a long way in validating the credibility of the new system



in comparison with traditional degrees.

The literature is replete with reports relating to the implementation of micro- credentials in the higher education context, but very little information about actual research studies. Further, the literature on micro- credentialing in India is thin, even though many Indian students are engaged in acquiring micro- credentials from across borders .

Use of micro- credentials in professional development of teachers

The literature informs us of a few cases of innovative use of micro- credentials in in-service teacher education and professional development of educators. The Friday Institute of Educational Innovation at the NC State University developed 15 micro- credentials related to Learning Differences through a collaborative effort with its partners. These micro- credentials consist of three stacks related to Working Memory, Executive Function, and Motivation intended to enable teachers to integrate the ideas in their classrooms. The core design elements used in the pilot study were competency-based self-directed learning, job-embedded skills with a demonstrated impact on actual classroom practice. Among the other lessons learned from the study, it was found that online platform and instructional design had a key role to play. The study raises several questions including its possible use for teacher licensure, and possibilities for use in degree-level programmes.

DeMonte (2017) conducted a study on use of micro- credentials for teachers by three states in the U.D. which were early adopters. Lessons shared by these three states suggest that having an articulated purpose for the credentials is key and stated their purpose to be personalized learning related to the profession and an alternative mode for teacher licencing. Starting off with targeted small pilot programmes, offering a bit of ‘voice’ and ‘choice’ to the teacher, keeping a score of the micro- credentials and good communication between stakeholders contribute to the effort.

Some proponents of micro- credentials wish to create a shift towards professional development as a competency- based system with individualized opportunities for teachers which align with the requirements of the school. Horn & Arnett (2017) raise concerns about establishing a firm link between micro- credentials and enhanced student learning outcomes.

French & Berry (2017) reiterate that four characteristics characterise the micro- credentialing approach from time-honoured professional development practices - in that, they are based on actual skills and competencies, individualized, responsive to demand and form an easily



shareable 'currency'.

The Flip Side of 'credentialing'

Naval Ravikant, CEO and co-founder of AngelList opines that schools and universities are mainly about 'credentialing'. If they were exclusively about education, then the internet would have made them obsolete. Ravikant believes that employers who are not obsessed with traditional credentialing can 'arbitrage' the gap to their advantage (Ferris, 2017) by employing talented people with non-traditional credentials and experience. There is a definitive move away from false credentialing in the more meritocratic industries, such as technology start-ups. In his own words, the tools for learning are abundant, it is the desire for learning that is scarce. Ravikant predicts that industrial-education will see its end in the near future as 'auto-didacts' and self-learners are leveraged by technology. In due time, rational employers will soon be accepting more efficient credentialing. (Jorgenson, 2020). With the COVID-19 pandemic, and the impact on the economy in several parts of the world, that time has now come.

Even though the term 'micro- credential' is not usually used in India - the popularity of micro-credentialing and nano-degrees is gaining momentum within our own country. The pandemic has led many youth from our country to undertake such courses and MOOCs and work towards upskilling and general professional development. Today, recognised credentials from across geographies come at competitive prices as compared to degrees from some of the private universities in our country. We are yet to see innovative uses for micro- credentialing in our own universities - but we know too well that it doesn't take too much time for the tide to turn. Micro- credentialing is emerging as a solution for issues faced in higher education. It remains to be seen whether a system based on it will be validated as a University degree. Micro-credentials will likely lead to reform in vocational and higher education policies and practices. Time will tell if its potential is overrated or else it evolves as a viable alternative to the somewhat inefficient and sometimes expensive system of degrees in higher education which currently exists.

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