



**Reflection:**  
**It's probably better to eat an elephant one bite at a time**

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Traditionally, qualifications have been gained at schooling level after two years of study at senior secondary level, or after three to four years of study at a college or university. However, the elephant in the room is the growing concern about the costs of such study (both direct real costs and in terms of the opportunity costs of not being in employment) as well as the extent to which traditional whole qualifications match with immediate needs in the real world. There is, therefore, increasing interest in the use of micro-credentials to improve employment prospects and to address specific skills gaps (Brown et al., 2021). For example, The World Economic Forum report on The Future of Jobs (2020) indicates that 50% of all employees will need reskilling by 2025 in areas such as problem-solving, self-management, working with people, and technology use and support. More recently, a report by The International Commission on Financing Global Education (2023) indicates that without some kind of change in the way things are done, up to 825 million young people will become adults without the skills needed to succeed in life.

Micro-credentials could potentially help to address several other challenges to current education and training provision such as low student retention, current mandatory requirements, which act as barriers to access further education and training, delays in feedback on assessment tasks, life commitments, which limit time available to undertake full qualifications, and students who drop out of a full qualification but have no evidence of what they have managed to achieve, among other things (Learning Agents, 2021). With respect to the latter, the UNESCO Institute for Lifelong Learning (2015) argues the need for flexible ways also to recognise, validate, and accredit



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non-formal and informal learning, and micro-credentials could be a way to address this need.

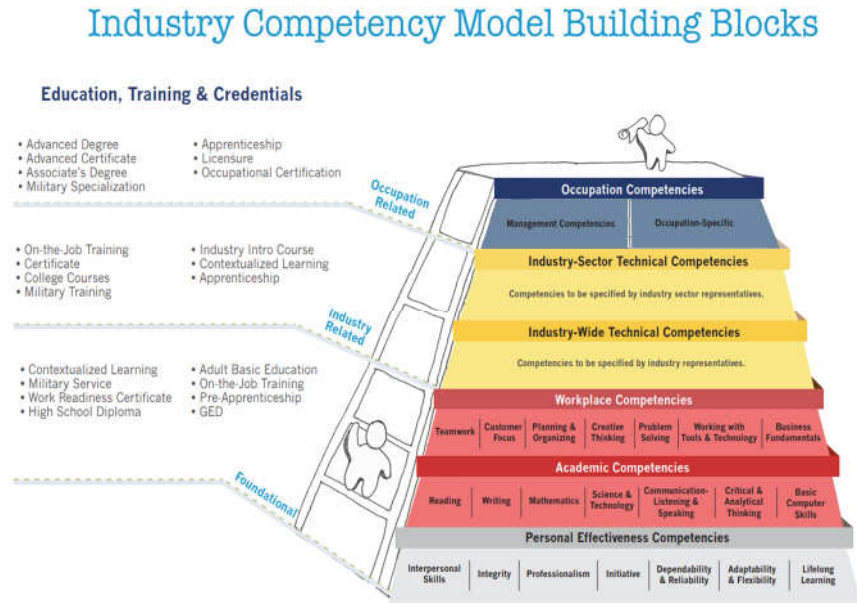
While UNESCO has started a conversation about the nature of micro-credentials (Oliver, 2022), Mishra (2022) observes that there is currently no common international definition. A comparison of emerging frameworks in Australia (Australia Government, 2021), Canada (Colleges & Institutes Canada, 2023), and New Zealand (New Zealand Qualifications Authority, 2018), confirms both similarities and differences in the ways in which micro-credentials might be understood and implemented. However, Rossiter and Tynan (2019: 3) identify the following three common aspects:

- the acquisition of small units of learning, skills or competencies, which have a distinct value in the workforce or for professional needs;
- verification by a recognised and trusted issuing authority (such as an educational institution or industry body); and
- the issuance of a digital artefact, such as a digital badge, as an alternative to a traditional attestation of learning, such as a formal transcript.

Many countries have in recent years adopted competency-based curriculum approaches to ensure that learners can apply what they have learned in authentic real-life contexts. This implies the need to move beyond knowledge acquisition (knowledge competence), to using that knowledge to do something (practical competence), and to go on learning and adapting as situations change (for example due to technologies – what could be termed reflexive competence). Measuring applied competence – as a combination of knowledge, practical and reflexive competences imply a more robust assessment strategy than the typical two- to three-hour end of course written examination paper.

There is also need to think about how we can build learning pathways from small units of learning for which badges might be offered towards micro-credentials, which could be recognised by workplaces as just-in-time learning achievements, and how these might aggregate up in time to formal programme and course credentials – which could

be construed as a strategy for eating an elephant one bite at a time. The US Department of Labour (n.d) provides a useful graphic illustration of how this might be done:



**Figure 1: Industry Competency Model (US Department of Labor)**

One example of how such a framework might be constructed is provided by the Khan Academy, where learners can earn digital badges and map their progress immediately against set learning objectives. Having engaged with the Khan Academy Maths resources as a tutor supporting a cohort of young people to improve their Maths skills towards completing an industry entry-level Maths test, the author observed the impact of providing immediate feedback, awarding of badges, and enabling self-mapping of progress on learners' engagement. Many learners were able to concentrate on developing their Maths skills for five to six hours a day to re-attempt the industry entry-level tests they had previously failed.

During the COVID-19 pandemic, the Commonwealth of Learning began offering several MOOCs to assist teachers with emergency remote teaching and to explore the potential of open, flexible, and

distance learning. Not all teachers complete all MOOCs, but the courses are designed in ways that also recognise partial completion and allow for different forms of evidence to be shared and discussed, thus creating a more individualised learning experience. We have found that where these badges are complemented by Ministry support and recognition for continuing professional development points, we can also substantially improve retention and completion (Mays et al., 2021).

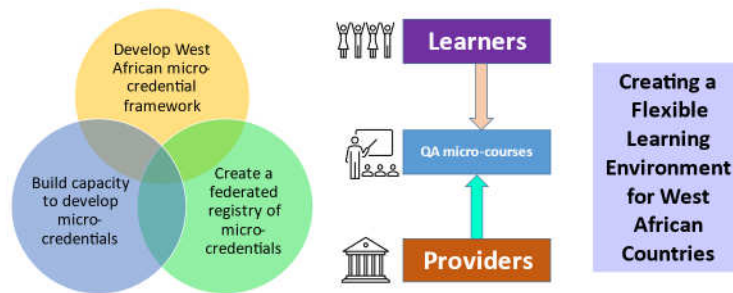
The UK Open University's Future Learn initiative has gone a step further by offering micro-credentials, which can be counted towards full open university qualifications.

However, despite the potential, there are some challenges. Reflecting on the early use of micro-credentials in Canada, Contact North (2022) observes the following issues which need to be addressed:

- Compliance
- Linkage between evidence and outcomes
- Appropriateness of assessment
- Whether real needs gaps are being addressed
- Whether micro-credentials are being recognised for recruitment
- Portability
- Return on investment
- Sustainability
- Competition (incl. across borders)
- Equity of access.

Assuming we can address issues like the above, and learn from the early work in the field (see West & Cheng, 2022), it would seem there is potential to use micro-credentials to help build a more flexible learning environment for West African countries, as illustrated below:

## Where to from here?



Adapted from: Mishra, 2022

**Figure 2: Building a micro-credential ecosystem**

Seeking to build such an ecosystem suggests we need to ask the following kinds of questions:

- Is there a role for micro-credentials in West African countries?
- If yes:
- Is a regional framework possible?
- What strengths/existing practices could we build upon?
- What weaknesses would we need to mitigate?
- What opportunities could we exploit?
- What threats would we need to manage? (Mays, 2023).

Key to a strategy to build a regional ecosystem will be building networks of like-minded stakeholders (Varadarajan, et al., 2023).

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