CLOSING THE TALENT GAP: A PROPOSED MICRO-CREDENTIAL MODEL IN MALAYSIAN FORMAL EDUCATION

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Received: 05/12/2023 **Accepted:** 17/12/2023

ABSTRACT

The global talent gap is a consequence of skills mismatch among job seekers. Although micro-credentials appeared to be a potential solution to narrow the talent gap, it is unclear how they can be effectively implemented in a structured academic pathway. The purpose of this study is to explore the potential of a proposed micro-credential model for formal education via the Accreditation of Prior Experiential Learning Micro-credentials (APEL.M), to support the talent gap challenges faced by companies in Malaysia. The study used a qualitative case study method with data collected mainly from a focus group discussion among relevant faculty heads, administrators, and senior management team members. The findings indicated that despite potential challenges and issues towards implementing the new micro-credential model, the proposed model is significant for policymakers, higher education providers, and industry stakeholders interested in addressing the talent gap and creating alternative pathways to formal academic qualifications.

Keywords: Micro-credentials, talent gap, MQA, APEL.M, formal academic qualification pathways, higher education providers.

INTRODUCTION

The COVID-19 pandemic and economic and geopolitical instabilities have made the past three years challenging. The World Economic Forum's 2023 Future of Jobs report predicts that by 2027, 83 million jobs will be lost globally, while close to 70 million new ones will be created (World Economic Forum, 2023). This situation implies employees need to improve their skills to adapt to shifting norms. The report also highlights that the huge talent gap is a significant obstacle for companies looking to transform their business model.

The talent gap is a mismatch between job seekers' skills and employers' requirements, caused by technological advancements, changing job needs and skills shortages in specific fields (World Economic Forum, 2023). This gap can lead to unfulfilled job openings and talent shortages in major industries, significantly impacting the economy. The global talent gap is a growing concern for many organisations and industries worldwide. In the current dynamic and often disruptive business environment, companies struggle to meet the demand for new skills and competencies. Agrawal et al. (2020) reported that companies are adopting hiring, reskilling, contracting, redeploying or releasing employees to address the talent gap. Additionally, 87% of surveyed companies revealed they are currently experiencing or expecting workforce skills gaps within the next five years, due to the shifting market, technology trends and changing talent needs.

As a result, closing the talent gap has become a priority for many companies, but they lack strong capabilities in curriculum design of their skills-building programmes. The high 10% unemployment rate among Malaysian youths is caused by a mismatch of skills with industry demand (Tay, 2023), and even existing technical and vocational education and training (TVET) is outdated. Employer focus more on job seekers' skills than academic qualifications or working experience (Yuen & Pfordten, 2023).

Therefore, to address the talent gap and ensure that the workforce is equipped with the skills needed for the future of work, companies and higher education providers (HEPs) must adopt innovative approaches. One potential solution is micro-credentials, which provide targeted training in specific skills and high-demand competencies (Brown et al., 2021). The World Economic Forum (2023) predicts employers will increasingly turn to alternative credentials, such as micro-credentials, to identify and evaluate job seekers. This study will explore the potential of micro-credentials in addressing the talent gap, focusing on developing a new micro-credentials model for formal academic qualifications. The new model supports the challenges companies face in building their own skills building or reskilling programmes by offering on-demand micro-credential courses that are shorter, affordable and more flexible. These courses are sub-certifications that can lead to a pathway for formal academic qualifications.

LITERATURE REVIEW

The Emerging Micro-Credentials

The growing popularity of micro-credentials is due to various factors such as the changing nature of work attributing to the need for continuous upskilling and reskilling, and the demand for more accessible, flexible and affordable education options. Unlike macro-credentials such as diplomas and degrees that represent a comprehensive interrelated skillset (Lim et al., 2018; Randall & West, 2020), micro-credentials are alternative credentials that form complementary components can lead to formal academic qualifications (Oliver, 2019), short, specific courses that recognise a person's individual skills proficiency (Che Ahmat et al., 2021; Clements et al., 2020; Pickard et al., 2018), where industries can utilize these short courses to reskill and upskill their workers (Lim et al., 2018). Micro-credentials enable learners balance work and life challenges with learning needs so that their learning experience is meaningful (Ponte & Saray, 2019), authentic, autonomous, and sustainable (Peacock et al., 2020).

Micro-credentials are oftentimes known as digital badges, professional certificates or short courses (Peacock et al., 2020; Raish & Gross, 2021). While digital badges are usually used as evidence of achieved credentials (Lim et al., 2018), their application is limited if there is no recognition and validation from professional bodies or academic qualification agencies (West et al., 2020). To address this concern, the Mozilla Foundation introduced an Open Badge Infrastructure that enables micro-credentials to be recognized among different systems (Fanfarelli & McDaniel, 2019), thus removing barriers between formal, informal, and professional education (Clements et al., 2020; Raish & Gross, 2021).

Nonetheless, employers often questioned the significance of micro-credentials especially if they do not meet an industry-recognized learning pathway (Randall & West, 2020; Selvaratnam & Sankey, 2021). Despite this, micro-credentials are predicted to be a critical part of future higher education policy (Wheelahan & Moodie, 2021). Extant research on micro-credentials mostly focused on its adoption, implementation and strategies of sustaining micro-credentials in HEPs (Hunt et al., 2020; Selvaratnam & Sankey, 2021; Varadarajan et al., 2023) and its value in skills building, reskilling and upskilling (Hunt et al., 2020; Young et al., 2019).

The Opportunities and Challenges of Micro-Credentials

Micro-credentials have gained popularity recently due to their potential benefits and opportunities. According to Che Ahmat et al. (2021), micro-credentials offer flexibility in design and delivery, allowing learners to control their professional development and customize their learning pathways. They are also demand-driven, cost-effective and can help learners enter the workforce faster. A series of stackable micro-credentials in Malaysia can lead to a formal academic qualification, provided the Malaysian Qualifications Agency's micro-credentials regulations and guidelines are complied with. However, some challenges must be addressed, especially in the Malaysian context. These include handling the huge influx of online learners (Alias, 2020), institutional readiness (commitment on financial and non-financial support, facilities, and infrastructure), awareness and acceptance of micro-credentials (Che Ahmat et al., 2021), the lack digital skills and knowledge among HEP educators, and limited resources in developing micro-credential courses (Che Ahmat et al., 2022). Overall, the current study on the new micro-credentials model for formal academic qualifications can act as a practical guideline for future micro-credentials implementation, filling the knowledge gap and promoting the benefits of this innovative educational approach.

Micro-Credentials in Malaysia

In Malaysia, micro-credentials implementation among HEPs has gained momentum due to the Malaysian Qualifications Agency (MQA's accreditation guidelines and policies since 2019. According to information from the Malaysian Qualifications Agency (MQA) website and the Enhancement Themes (2022) webinar, micro-credential guidelines for Malaysia were introduced in 2019 under "Continuous Professional Development". Phase 2 in 2020 established "Guidelines to Good Practices: Micro-Credentials", while Phase 3 in 2022 launched "Guidelines to Good Practices: Quality Verification of Stand-alone Micro-Credentials". These policies consolidate short, non-credentialed courses under the Malaysian Qualifications Framework to offer flexible, lifelong learning opportunities and ensure no one is left behind. HEPs and training providers are responsible for implementing and adapting the programmes to their internal processes while aligning with MQA requirements (Sugathan et al., 2021).

As of April 21, 2022, 67 HEPs have unbundled 648 accredited programmes into 11,763 micro-credential courses (Enhancement Themes, 2022). The high number of micro-credential courses implies that with proper guidelines and policies, HEPs are more confident in unbundling their programmes according to the MQA requirements. The new MQA stand-alone micro-credentials policy expands the market to training providers and industry players (Chua, 2022), and APEL.M (Accreditation of Prior Experiential Learning with Micro-Credentials) was introduced in early 2023 as a pathway for learners to access academic programmes even if they do not meet entry requirements (see Figure 1).

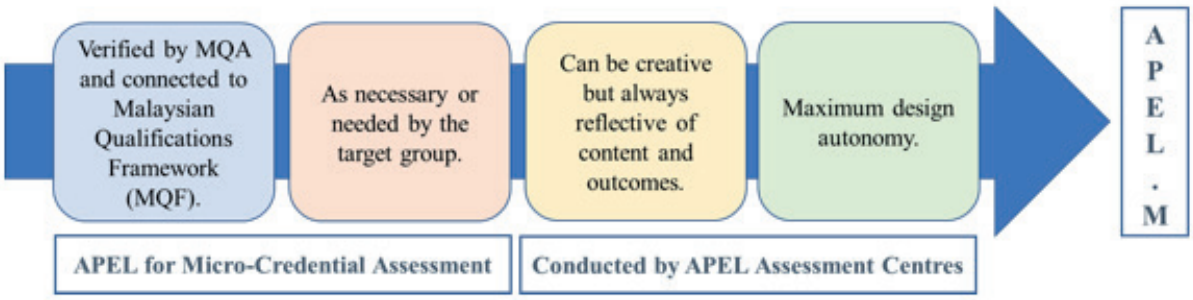

Figure 1. Overview of APEL.M Good Practices Guideline (Adapted from Enhancement Themes, 2022)

Furthermore, the Human Resource Development Corporation (HRD Corp), under the Ministry of Human Resources, collaborated with the Ministry of Higher Education to introduce the first industry-based micro-credential initiative in 2022. From an industry perspective, micro-credentials support employees in gaining expertise through short, bite-sized learning certificates and recognition of non-traditional career paths (HRD Corp, 2022). As of 2022, HRD Corp has approved 11,493 micro-credential courses, while 13,224 applications await approval (HRD Corp, 2022). This large number of micro-credential courses reflects the government's commitment to narrow the talent gap and encourage innovative means of llifelong learning through the micro-credential initiative.

Even though micro-credentials have the potential to bridge the talent gap, research on micro-credentials in Malaysia is still in its infancy stage (Che Ahmat et al. 2022; Kumar et al., 2022). A literature review search revealed limited studies on micro-credential implementation in Malaysia. For instance, Lim et al. (2018) presented six potential ways of implementing micro-credentials for undergraduate programmes at a private university, while Che Ahmat et al. (2021) provided an overview of micro-credentials, examined their challenges and benefits, and shared UiTM's (a public university in Malaysia) micro-credential framework. Sugathan et al. (2021) conducted a desk review on micro-credential implementation in three top public universities in Malaysia. Kumar et al. (2022) explored pre-service teachers' perceptions of micro-credentials used to address online learning challenges during COVID-19 pandemic. Despite positive reactions towards micro-credentials, these teachers lack awareness of the micro-credentials' professional value. Che Ahmat et al. (2022) conducted a qualitative study with micro-credential content developers at a public university, highlighting their understanding of micro-credentials and lack of digital skills and resources affecting the development of micro-credentials.

Based on these extant studies, micro-credential research in Malaysia has been limited to concept papers or case studies based on private or public universities. However, none of the studies has focused on the experience of open and distance learning (ODL) universities like Wawasan Open University (WOU), which has a robust online learning platform to offer flexible, affordable and accessible micro-credential courses to learners. WOU's Centre for ODL Experiences (COLE) supports its internal course developers to improve the learner experience and engagement, minimizing challenges related to digital skills and knowledge that were mentioned by Che Ahmat et al. (2022). Additionally, none of of the extant studies share a clear micro-credential model model that benefits the industry and the individual learner by closing the talent gap and acquiring formal academic qualifications. Therefore, there is a research gap and an opportunity to explore the role and impact of micro-credentials in a broader context (Che Ahmat et al., 2022; West et al., 2020).

METHOD

The study used case study as the research method due to its usefulness in exploring the "how" and "why" of a phenomenon (Yin, 2014) and as a result, enable an understanding of that particular phenomenon situated in a wider context (Yazan, 2015). In particular, the phenomenon of interest in this study refers to the new micro-credential model for formal academic qualifications situated under the context of the Wawawan Open University. The new model focuses on the progression from micro-credentials to formal academic qualifications, including identifying suitable micro-credential courses, and pathways to formal academic qualifications.

The research questions of the study focus on the following:

1. What are the factors to consider when developing a new micro-credential model with academic qualification pathways?
2. What are the issues and concerns to consider when developing and implementing the new micro-credential model with academic qualification pathways?
3. What does the new micro-credential model look like?

Data Collection Process

The following activities are carried out in stages to address the research questions and establish the basis for the new micro-credential model with academic qualification pathways:

Stage 1. Analyzing Documents and Designing the New Micro-Credential Model

Two representatives, who are the Head of School of Digital Technology and the Dean of School of Science and Technology, reviewed the requirements of the MQA and APEL.M guidelines and designed a first draft of an unbundled micro-credential model leading to formal academic qualifications, while at the same time, meeting the industry needs.

Stage 2. Conducting Focus Group Discussion with Faculty Heads and Administrators

A focus group discussion was conducted to get feedback on the first draft of the new micro-credential model and to discuss potential challenges and constraints. All Heads of School, Head of WOU Academy, Director of Marketing & Regional Centre Operations, and the Head of Quality and Government Relations were included in the focus group.

Stage 3. Finalizing the New Micro-Credential Model

Based on the feedback gathered during the focus group discussion, appropriate actions were taken to establish a finalized version of the new micro-credential model with academic qualification pathways.

Stage 4. Getting Endorsement from Senior Management

Senior Management reviewed the new micro-credential model and validated it to be pilot tested on two programmes, namely Bachelor of Software Engineering (Honours) (BDSE) under the School of Digital Technology and Bachelor of Technology in Electronics (Honours) (BTEL) under the School of Technology and Engineering Science.

Research Participants

The current study was conducted with nine research participants, all of whom were purposively selected based on their experience and willingness to design the new micro-credential model. The four faculty heads from differenc schools, including School of Business and Administration, School of Education, Humanities and Social Sciences, School of Digital Technology, and School of Technology and Engineering Science, were among the key research participants. Additionally, five other research participants, including the Head of WOU Academy, the Director of Marketing & Regional Centre Operations, the Head of Quality Assurance and Government Relations, and two senior management team members, were also invited to share their insights on the potential benefits and challenges of implementing the new micro-credential model, as well as to validate its design.

Data Analysis

The data collected from all the various data collection stages, hugely from the focus group discussion, were analyzed using qualitative content analysis which involved coding and categorization of data, and comparison and conclusion of data patterns that emerge from the information gathered (Cohen et al., 2018). To ensure validity and reliability, the data evidences were also compared and contrasted with existing literature.

FINDINGS AND DISCUSSION

The study's findings are structured according to the research questions.

Factors to Consider when Developing a New Micro-Credential Model

Based on the outcome of the Stage 1 of Analyzing Documents, two important factors that need to be considered when developing a new micro-credential model are as follows:

1. Learners can join the academic programme via APEL.M after completing a minimum of 50% of credits via micro-credential courses
2. A flexible learning approach is endorsed for delivering micro-credential courses, encompassing Open and Distance Learning (ODL) as well as hybrid models.

As a result of this finding, a new generic micro-credential model was designed (see Figure 2).

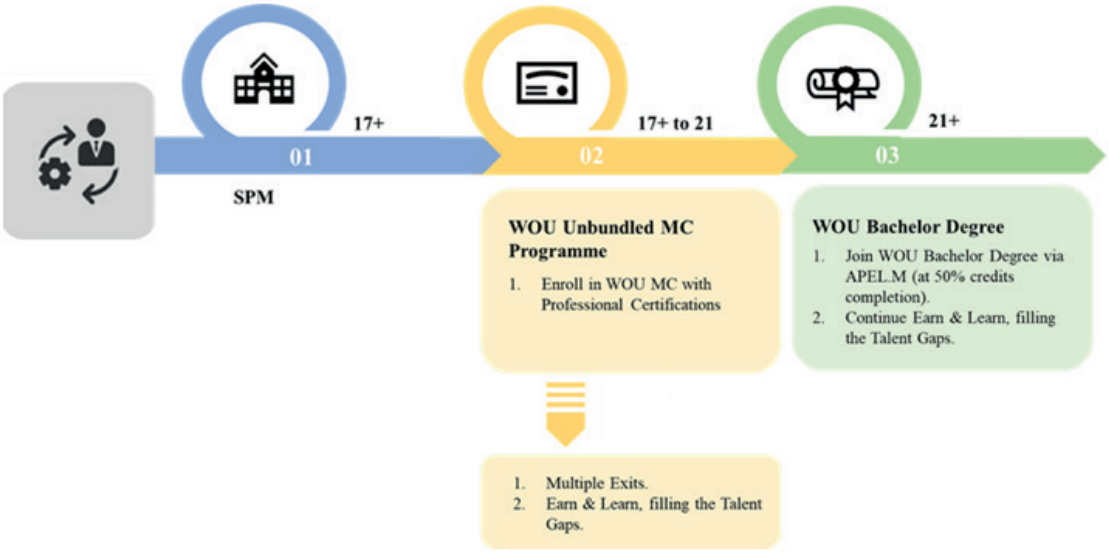

Figure 2. The Generic Micro-Credential Model

Figure 2 illustrates the outline of the WOU New Micro-Credentials Model, which was developed based on an initial focus group discussion. In the Malaysian education system, SPM refers to the Sijil Pelajaran Malaysia, a national examination taken by learners upon completing their secondary education. WOU recognizes the potential of individuals aged 17 and above who have completed their SPM, and in response, has introduced a distinctive programme called the WOU Unbundled Micro-Credential programme.

The WOU Unbundled Micro-Credential programme is specifically designed to provide learners with the opportunity to pursue professional certifications alongside their studies. It offers a flexible learning experience with multiple exit points, allowing learners to select certifications that align with their career goals and exit the programme once they have attained those specific certifications. This approach enables learners to obtain industry-recognized qualifications at a young age, equipping them with specialized skills that enhance their employability.

Upon successful completion of the WOU Unbundled Micro-Credential programme, learners are provided with the option to transition into WOU's Bachelor's degree programme. This transition is facilitated through the APEL.M pathway, which allows learners to join the Bachelor's degree programme once they have completed at least 50% of the required credits for the degree. This opportunity enables learners to continue their education and further enhance their knowledge and skills in their chosen field.

Throughout their journey in WOU's Bachelor's degree programme, learners are strongly encouraged to continue earning and learning to bridge talent gaps within their chosen fields. This approach ensures that learners not only acquire theoretical knowledge but also develop practical skills that are highly valued by employers. By integrating academic learning with real-world experience, learners become well-rounded professionals who are well-prepared to tackle the challenges of the job market.

Issues and Concerns to Consider when Developing and Implementing a New Micro-Credential Model

Some of the issues and concerns raised during the Stage 2 of Focus Group Discussion with Faculty Heads and Administrators regarding the development and implementation of micro-credentials were similar with those indicated in past studies (see Table 1).

Table 1.

Issues and Concerns from Focus Group Discussions

Emerging Theme	Issue & Concern	Remarks
Industry	• Lack of recognition.	• Build confidence in value and credibility of micro-credentials as an alternative academic qualification pathway.
Public	• Lack of public and parental acceptance.	
Marketing	• Length and duration of unbundled certifications.	• Design or improve the micro-credential model with professional certifications comprising limited number of courses.
	• Acceptance of professional certifications by parents.	• Work towards industry recognition of professional certification.
Quality	• Compliance with MQA and APEL.M requirements.	• Award professional certifications under WOU Academy.
Academic	• Lack of foundational knowledge for unbundled courses in a degree programme.	• Offer bridging or remedial classes to strengthen learners' foundation.
Learner	• Financial constraint	• Develop strong funding mechanism.

Industry and Public: Lack of Recognition and Acceptance

A specific concern raised was the potential lack of industry recognition, which could cast doubt on the value and relevance of these micro-credentials, and consequently, impact learners' career prospects. Similarly, there was a concern about the need for public and parent acceptance. The focus group recognized that the concept of micro-credentials might be met with scepticism or a lack of understanding among the general public and parents. In Malaysia, parental acceptance is particularly crucial as they often play a pivotal role in deciding their children's future studies. These concerns align with previous studies that have highlighted challenges associated with the unfamiliarity of the public with micro-credentials (Che Ahmat et al., 2021) and the lack of formal recognition (Varadarajan et al., 2023). Notably, even pre-service teachers may not fully grasp the value of micro-credentials for their profession (Kumar et al., 2022). Addressing these concerns requires effective communication and outreach efforts to raise awareness and build confidence in the value and credibility of micro-credentials as a viable alternative pathway for education.

Marketing: Duration of Micro-credentials and Parental Acceptance

Several things need to be considered from the marketing aspect. One of them is the length and duration of the unbundled certifications. It was highlighted that the unbundled certification's duration should not exceed one year for better learner retention and completion rates. Furthermore, it is crucial to ensure that parents accept these certifications, as they will be the ones who ultimately decide if their children will enrol in a particular programme. To improve the micro-credential model, it is also necessary to create professional certifications that comprise a limited number of courses. This will make it easier for learners to complete the certifications and make them more appealing to parents. Another point revealed during the focus group discussion is the need to work towards industry recognition of the professional certifications as it will help create a standard for what is considered "professional" and make it easier for learners to find jobs upon completion of the certifications.

Quality: MQA Compliance

The concern raised for quality is regarding the need to ensure quality and compliance with MQA and APEL.M requirements. Here, the focus group suggests that WOU Academy should award the professional certifications. These certifications are designed to meet industry standards and provide students the necessary skills and knowledge to suceed in their future careers.

Academic: Lack of Foundational Knowledge

During the focus group discussion, an additional concern was raised regarding the knowledge gap that SPM school leavers may face when entering micro-credential programmes. The focus group shared their apprehension about whether these learners would have sufficient knowledge and preparation to handle the academic rigour at the higher education level. This concern highlights the importance of ensuring that learners transitioning from secondary education to micro-credential programmes are adequately equipped with the foundational knowledge and skills required for higher education. Addressing this concern becomes critical to facilitate a smooth transition and provide an effective learning experience for these learners. It is noteworthy that this particular concern was not previously addressed in existing micro-credential studies.

Learners: Financial Constraints

Financial considerations and the sustainability model for learners were also highlighted as a concern. The focus group acknowledged that ensuring accessibility and affordability of micro-credential programmes would require careful attention to financial aid options and sustainable funding mechanisms. Of particular concern were the potential financial difficulties faced by SPM school leavers, especially those from lower income groups (B40). Recognizing this, the focus group highlighted the importance of developing a robust financial framework through collaboration between universities, industry partners, and the government. Such collaboration would help overcome the cost barrier and facilitate the participation of a diverse range of learners in micro-credential programmes. It is worth noting that this concern differed slightly from the findings of Che Ahmat et al. (2021), who highlighted the financial readiness concerns of HEPs in developing and implementing micro-credential programmes.

The New MC Model with Academic Qualification Pathways

Based on the document analysis, focus group discussion with faculty heads, members and administrators, and feedback given during the endorsement approval process, the new micro-credential model was validated and finalized for two academic programmes of Bachelor of Software Engineering (Honours) (BDSE) and Bachelor of Technology in Electronics (Honours) (BTEL) to be pilot tested for unbundling according to the new micro-credential model.

These two programmes contain courses that can provide learners with specific skills and competencies needed by industry players operating in an automated and digitized business landscape (Agrawal et al., 2020; Brown et al., 2021; Tay, 2023; Yuen & Pfordten, 2023). The BDSE and BTEL models were launched in May and September 2023 respectively.

The BDSE Model

For the BDSE model (see Figure 3), learners can enroll in WOU's unbundled micro-credential courses and complete three professional certifications. This pathway is designed to be completed within one year of full-time study. By successfully completing these certifications, learners will acquire the necessary skills and knowledge to work as Junior Full-Stack Software Engineers.

Upon completing their first year of studies, learners have the option to either exit or continue with further education. For those who choose to continue, the next pathway suggests a longer duration of the study, approximately two years, during which they pursue four additional professional certifications through WOU's unbundled micro-credential courses. The outcome of this pathway is attaining the Certified Professional

Diploma in Software Engineering. To progress further, learners have the possibility of joining WOU's BDSE programme through the APEL.M process. This option allows for continued skills development and addressing talent gaps through the "Earn & Learn" approach.

Figure 3. The BSDE New Micro-Credential Study Pathway Model

The BTEL Model

Figure 4 clearly illustrates how different academic programmes within the WOU Unbundled MC programme operate and lead to different exit points that align with the programme and industry requirements.

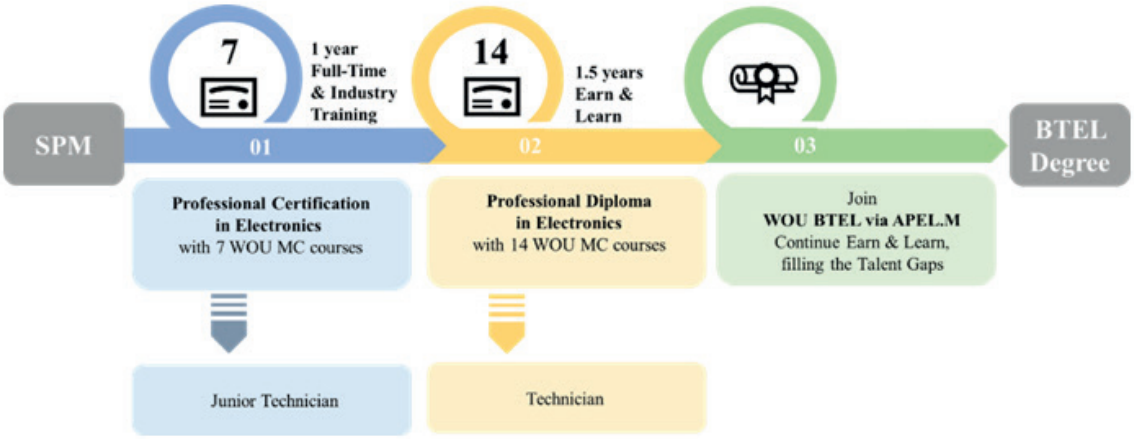

Figure 4. The BTEL New Micro-Credential Study Pathway Model

In contrast to the BDSE Micro-Credentials Model which enables learners earn up to seven professional certifications upon completion of the WOU Unbundled MC programme, the BTEL Micro-Credentials Model leads to the acquisition of two professional certifications upon completion. After a careful evaluation, the BTEL academic team has selected seven essential courses for Junior Electronic Technicians, which are delivered during the first year of study after SPM examinations.

Similarly, learners who opt for the BTEL model can either exit after their first year of studies or continue their academic journey towards earning the Professional Diploma in Electronics. This requires the completion of an additional 14 unbundled MC courses. Upon successfully obtaining the Professional

Diploma in Electronics, learners are equipped to work as technicians. Finally, the planned model provides an opportunity for learners to obtain an MQA formal academic qualification by joining the BTEL programme via the APEL.M process.

LIMITATIONS AND FUTURE RESEARCH

The current case study has three limitations. First, the current study is based on a single case study from an ODL university in Malaysia. Due to the limited sample size, the findings of the study cannot be generalized. However, the findings and discussion would be able to provide future researchers with a good reference on developing micro-credentials. Moreover, practitioners from other Higher Education Providers would be able to benchmark against and improve on WOU's new MC model with academic qualification pathways. Second, the micro-credentials model is still fairly new and tested on two formal academic programmes, the model's effectiveness cannot be ascertained yet. Third, although the micro-credentials model has been theoretically shared with WOU's industry panel members, the model's practicality for the industries has yet to be examined. As such, the current case study could be extended for future research on the effectiveness of micro-credentials in helping learners gain specific skills and competencies required to be successful in the job market. In particular, this research could evaluate micro-credentials' impact on learners' job prospects and career progression. Additionally, future research could focus on validation of micro-credentials by the industry. This research area is important as with the growing popularity of micro-credentials, having insights into how much industry players value micro-credentials and how they use them in their hiring decisions will be extremely useful for HEPs and the job seekers or learners.

CONCLUSION

In conclusion, this study highlights that micro-credentials plays a crucial role as a potential solution to address the local and global talent gap. The new micro-credentials model developed in this study provides a flexible, affordable, and accessible pathway for individuals to acquire specific skills and knowledge, leading to formal academic qualifications through APEL.M. The implementation of this model can benefit policymakers, educational institutions, and industry stakeholders by providing a flexible and cost-effective way to acquire skills and knowledge. While the study identified some challenges, the model serves as a useful reference for future implementation. With the launch of the BDSE model and upcoming launch of the BTEL model, this study can contribute to bridging the talent gap in Malaysia and potentially serve as a model for other countries to address the global talent gap. Based on WOU's experience, the following are some recommendations for ODL universities interested in implementing micro-credentials:

First, establish strong academic-industry collaborations. ODL universities should conduct research to have a better understanding of the specific on-demand skills and competencies in the job market. This action will help ensure micro-credentials offered are relevant and of value to learners. Additionally, working closely with industry experts to develop and design micro-credentials will ensure that micro-credentials offered are aligned with industry needs and demands.

Second, focus on quality. ODL universities should establish clear learning outcomes for individual micro-credentials so that learners know what they will gain from completing the micro-credential. Also, universities will be able to assess the effectiveness of their micro-credentials. Besides, clear guidelines and standards are needed to ensure consistency and quality across various micro-credentials. It is important for ODL universities to ensure that the micro-credentials offered are aligned with accreditation standards, especially if they are stackable towards a larger degree programme.

Third, have strong support systems and promotion. ODL universities should develop a clear pathway for learners to progress through the various micro-credentials so that they can build their skills and competencies over time and stack them into an accredited degree programme if they wish to. In order to help learners successfully complete their micro-credentials, universities should develop strong learner support systems such as access to tutors or resources. ODL universities should promote the value of micro-credentials to learners and employers so as to allay any concerns on their quality and recognition. Specific skills and competencies that learners will gain from completing each micro-credential should be highlighted during the promotion.

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