



Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

GUIDELINE ON MICRO-CREDENTIAL

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FOREWORD

Traditionally, higher education providers (HEPs) designed and delivered academic and professional programmes leading to a recognised award. These qualifications are designed to provide knowledge skills and values over 3 to 4 years of study which enable the graduates to enter the job market. Given the rapid changes in the global economy, the graduates must continue to learn new technologies and techniques throughout their lifespan to remain productive. The short and continuous professional development (CPD) courses are intended to reskill and upskill the work force in tandem with workplace changes.

However, the growth of internet has spurred the development of online and e-learning modes which have evolved into Massive Open Online Courses (MOOCs) and its many lesser known variants. MOOCs are offering high value and in-demand courses often in collaboration with ivy league universities and global technology companies to learners anywhere for free or at very low cost. The credentials awarded for successfully completing a set of units or modules by these alternative providers are popularly called micro-credentials (MC). The high cost of college degrees, the duration of study and the mode of delivery have spurred many alternative and innovative providers of higher education to come up with more attractive education opportunities.

These alternative providers branded their credentials as nanodegrees, micro-masters, and micro-credentials in contrast to the traditional university awards. Although the exuberant MOOC-based growth has slowed somewhat, these providers offer new, in-demand, shorter, personalised and online modules which attract a growing number of adult learners who seek new knowledge and skills to update their qualifications or acquire new skills to start new careers.

The HEPs in Malaysia have for a long time offered CPD and executive development courses which do not provide awards and qualifications under the Malaysian Qualifications Framework. MQA has developed APEL Access (APEL A), APEL Credit Award (APEL C) and Credit Transfer Guidelines on MOOCs to facilitate the recognition and integration of these types of learning into formal awards in higher education.

With the economy, industries and work undergoing rapid transformation, the role of the MCs have become critical in providing upskilling and reskilling opportunities to the work force. The MCs are not only viewed as supplementary to formal higher education, it can, with proper guidance, become an alternative to traditional higher education. It is with this development

and need in mind that MQA has developed a guideline for all HEPs in developing and delivering their MCs. The guideline declares MQA's support for and recognises the importance of MCs within the of prior learning space. The guideline enunciates key principles in the development and delivery of MCs which HEPs are urged to adhere. The guideline also offers the opportunity to HEPs to voluntarily seek external quality assurance of their MC development and delivery from MQA.

This guideline will, in due time, be developed into a full Guidelines for Good Practices which can address all types of MCs and providers, and integrate the MCs into the traditional awards and qualifications.

Thank you.

Dato' Dr Rahmah Mohamed
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Malaysian Qualifications Agency
March 2019

ABBREVIATION

APEL C	Accreditation of Prior Experiential Learning (Credit Award)
APEL A	Accreditation of Prior Experiential Learning (Access)
MOOC	Massive Open Online Courses
MC	Micro-credentials
HEP	Higher Education Provider
MOE	Ministry of Education
MQA	Malaysian Qualifications Agency
MQF	Malaysian Qualifications Framework
GGP	Guidelines to Good Practices
QMS	Quality Management System
SDG	Sustainable Development Goals

1.0 PURPOSE AND OBJECTIVE OF THE GUIDE

The purpose of the guideline is to provide HEPs and relevant stakeholders with information on principles and good practices in the implementation of micro-credentials. Specifically, this guideline is intended to **encourage, support and guide** all types of micro-credentials (MC) offered by HEPs.

1.1 Scope of the Guideline

This guidelines apply to any **MCs designed, developed and delivered by higher education providers (HEP)**. It is of paramount importance that this document is read together with other quality assurance documents and policies issued by the Malaysian Qualifications Agency and other related agencies. These documents include, but are not limited to:

- i. Policies on the offering of short courses outlined by MQA/MOE;
- ii. MQA Policies on Credit Transfer;
- iii. Guidelines to Good Practices: Accreditation of Prior Experiential Learning (GGP: APEL);
- iv. Guidelines on Credit Transfer for Massive Open Online Courses (MOOC); and
- v. Other relevant quality assurance documents developed by MQA/MOE from time to time.

Whilst every care has been taken to ensure the comprehensiveness of this document, MQA should be consulted on any other issues that may not be covered by this guideline.

2.0 INTRODUCTION

The conventional or university credentials like the diploma, bachelors, masters and doctorate characterised as macro-credentials have been the primary means to acquire qualifications for work, profession and further studies. These qualifications often described nationally in the qualifications framework, represent a formal recognition of the achievement of a particular body of knowledge, skills-set and related professional values through an extended period of prescribed study by a learner from an authorised HEP.

In contrast, micro-credential (MC) is a certification of learning of a smaller set of courses or modules or units which are designed to provide learners with knowledge, skills, values and

competencies in a narrow area of study and/or practice. The globalised knowledge economy demands continual and lifelong learning of all adults to remain productive. Industry and demand-driven, bite-size, personalised and opened online courses and certifications have since 2008 challenged and changed the way HEPs provide and deliver higher education. In a nutshell, it has transformed the landscape of education.

Although MCs or its many alternative references like digital badges, nano degrees, micro-masters, micro-qualifications are of a recent origin, the concept and practice of providing adult learners shorter, work or career-related and more peer and self-learning oriented modules has a much longer history¹. These offerings are popularly packaged as executive and professional development courses and are offered by private and public HEPs. These credentials or certifications are readily accepted or evaluated as part of the credits contributing to academic degree qualifications with the launch of the APEL for Credits (APEL (C)) guidelines by MQA in 2017 and recognising MOOCs for credit transfer launched in 2017. Through lifelong learning and APEL pathways, MQF supports and encourages the development of non-formal learning opportunities for the workforce.

In Malaysia, the Malaysian Qualifications Framework (MQF) includes graduate certificate and graduate diploma for Level 6 and postgraduate certificate and postgraduate diploma for Level 7. These sub-qualifications have a smaller scope (and credits) than the full qualification and are intended to be opportunities for HEPs to develop and provide new knowledge, skills, competencies and technologies suitable to the changes taking place in the industry and work. These sub-qualifications or MCs with lesser credits and shorter durations compared to a full-fledged bachelor or masters degree offered by HEPs are formally subject to accreditation requirements by MQA. It provides a multiple exit pathway for students at the MQF Level 6 and 7.

Many developments have enabled and accelerated the emergence and popularity of MCs. The knowledge economy of the 21st century intensified the demand for access to education on a lifelong basis. The millennium and SGD goals called for more access to quality education for all throughout the lifespan of citizens to address socio-economic inequality. Open and distance learning which can be delivered through various means such as e-learning, fully online education and mobile learning can be provided to a larger audience overcoming the constraint of the geographical divide. The high cost of university education

¹ Digital Credentialing: Implications of Recognition Across Borders. UNESCO, 2018. pg 8; Buban, J. (2017) Alternative Credentials. Prior Learning 2.0. Online Learning Consortium. pg.15 www.lunimafoundation.org/files/resources/alternative_crednetials.pdf. accessed on 27th Dec 2018;

and the growing disquiet about employment created a market for cheaper, shorter, targeted and industry supported credentials. The MOOCs showed that there is a huge worldwide interest in high-quality modules which learners are prepared to pay if issued with a credential for employment and university credits.

The MCs that were developed after 2013 had several new features. These MCs were offered as digital badges testifying to the achievement by the learner of some specified units of knowledge. The MCs are referred to, in many different and proprietary ways – Nanodegrees (trademarked by Udacity), Micro-Degrees (trademarked by Edevate) and Micro-Masters (trademarked by edX)². Many platforms have emerged offering different technologies to secure, maintain, manage and authenticate the MCs for the benefit of employers, universities and the learners. These digital badges are secured and portable to other platforms and can be verified online by the providers.

3.0 DEFINITION OF MICRO-CREDENTIALS

MC is a “...term that encompasses various forms of certifications, including ‘nano-degrees’, ‘micro-masters’ credentials’, ‘certificates’, ‘badges’, ‘licences’ and ‘endorsements’. As their name implies, micro-credentials focus on much smaller modules of learning than those covered in conventional academic awards, which often allow learners to complete the required work over a shorter period. In their most developed form, micro-credentials represent more than mere recognition of smaller modules of learning. They form part of a digital credentialing ecosystem, made possible by digital communications technologies establishing networks of interest through which people can share information about what a learner knows and can do (Milligan and Kennedy, in James et al., 2017).” (source: UNESCO, 2018).

The MC outlined in this guideline primarily focuses on two important aspects:

- i. digital attestation (digital badges, digital, nano degrees, micro degrees) which are secure and shareable;
- ii. records the achievement of learning of a specified set of outcomes (knowledge, skills, attitudes).

²<https://system.suny.edu/academic-affairs/microcredentials/definition> [accessed on 27th Dec 2018]

4.0 JUSTIFICATION FOR MICRO-CREDENTIALS

4.1 Lifelong learning

The 21st century is characterised by rapid and discontinuous change. To survive in such a disruptive environment, adults, workers and graduates must be agile enough to reskill and upskill to stay on, if not, ahead of the curve. The HEPs must be encouraged to design and deliver suitable short units, modules and courses on new knowledge, skills, technologies and attributes to equip the masses for the new economic challenges.

4.2 Alternative

The 3 to 4 years university education degree, while still important, requires a longer time to complete which is a challenge for working adults to enroll and complete the programme. In fact, some quarters have prophesied the demise of the university degree on the basis that it is too expensive, takes too long, not competency-based, not industry focused and just-in-case curricula. MCs offer a more dynamic, competitive, demand-driven, shorter and less expensive alternative to the traditional degree. HEIs can, through these shorter and focused credentials, tap into a different market of students and workers who are less inclined to enter in a 4-year university degree. Such credentials can also offer lower cost options to acquire the required knowledge, skills and competencies allowing the learners to enter the labour market sooner and pursuing further credentials if their career or professional interests warrants it.

4.3 Access

Where MCs are offered by a wide range of providers and through flexible design and delivery, people have greater access and choice in availing themselves of higher education opportunities. Online and digital delivery can bring the benefits of these courses to people near and far. With rapidly improving internet access and broadband speed, more people can enjoy better quality and industry-focused learning to improve their careers.

4.4 Stackability

Through MCs, people can acquire knowledge and skill-sets based on their needs, at their own pace and from a HEP of their choice. The accumulation of MCs and credits can be

tendered to HEPs for credit transfer based on a credible and transparent outcomes-based process subject to existing policies.

4.5 Recognition of Non-Formal Learning

MQF allows for the recognition of all forms of learning in seeking entry into academic qualifications described in the MQF. MCs, which testify to successful attainment of specified outcomes, can be considered through the APEL C process for credits in academic programmes offered by HEPs.

5.0 PRINCIPLES OF A GOOD MICRO-CREDENTIALS

In supporting the HEPs in developing and delivering MCs, it is imperative that all HEPs consider and apply the following principles to ensure maximal value for all related parties i.e., learners, employers, universities, regulators and quality assurance bodies.

The following are the basic principles in designing or developing a credible MC.

5.1 Outcome-based

Micro-credentials should articulate the overall MC and constituent module outcomes i.e., knowledge, skills, attitudes or competencies clearly and in a measurable manner. The attainment of the outcomes should be demonstrated through suitable assessment methods and reported in a user-friendly manner.

5.2 Personalised

To the extent possible, the providers must design MCs which allow the learners to select units/modules/courses that cater to their needs, interests and work within the context of the overall objectives and approval of the MC. The mode of delivery, the pace of learning and assessment methods should be appropriately personalised for optimal learning.

5.3 On-demand/industry driven

Micro-credentials should be designed and delivered in response to demands of the learners or employers or industries for shorter and focused skill-sets, knowledge and technologies which are required for upskilling and reskilling of the workforce to be ready for the 4th

industrial revolution or personal development. Engagement with industries and employers is crucial to ensure currency, relevancy and value of the MC.

5.4 Secure and shareable

The MCs should ideally be based on technologies that preserve the identity of the learners and protect the certifications from misuse or alterations to ensure user trust. The MCs should be shareable across social media platforms via email, blogs and resumes.

5.5 Transparent

The providers of MCs should furnish complete information on the units/modules/courses in a readable and easily accessible form covering course objectives, outcomes (knowledge, skills and attitudes), mode of delivery, hours of learning (if applicable), content, assessments, credits etc. to the learners and other authorised users for purposes of evaluation and recognition.

5.6 Naming the Micro-credentials

MCs offered by any HEPs should be appropriately named based on the purpose, delivery, content, assessment and scope. The titles should not in any way conflict with any qualification titles stipulated in the Malaysian Qualifications Framework.

6.0 EFFECTIVE MANAGEMENT OF THE MICRO-CREDENTIALS

6.1 Quality Management System

An effective Quality Management System (QMS) covering all aspects of managing the development, design, delivery, assessment, monitoring, review and improvement should be established and maintained by the HEPs. The QMS must be formally assigned to a designated unit and personnel. The MC provider must constantly seek feedback from the learners as part of their continuous improvement plan. All records of the learners and their achievements must be properly maintained and secured for future validation.

6.2 Collaboration

Where HEPs offer MCs with and through collaborators who are HEPs or non-HEPs, such arrangements must be formalised through a Memorandum of Agreement (MOA) and the principal HEP must demonstrate effective oversight of the content and delivery of the MCs so that the quality of the MC is upheld for all learners.

7.0 QUALITY ASSURANCE

Quality assurance provides confidence to learners and all other users of the credential i.e., employers, universities, recruiters etc., that the courses or modules in the MC adhere to the good principles in the development, design, delivery, assessment, overall management and enhancement of the courses or modules.

Providers of the MCs **can voluntarily seek external quality assurance** of the quality management system (QMS) i.e., systems used in the development, design, delivery, review and enhancement of MCs from MQA. MQA will carry out a **quality audit** exercise based on this guideline and the HEP's QMS to provide a report on the HEP's effectiveness in the design and delivery of the MCs. The quality audit by MQA will provide confidence to stakeholders that all internal and external requirements relating to the MCs are met by the HEP.

8.0 RECOGNITION OF MICROCREDENTIALS

There are **two ways** by which MCs can be recognised by HEPs for further studies.

8.1 Credit Transfer

MCs which offer courses or units from accredited programmes can be submitted by the learners for credit transfer consideration to any HEP. The HEP must evaluate the MCs and may grant credits to MC holders subject to the maximum credit transfer allowed under MQA Guidelines for Credit Transfer for MOOCs.

HEPs offering MCs comprising of courses or modules from accredited programmes must include such deliveries within the scope of the internal and external review of the accredited programmes to ensure comparability of the courses and seamless credit transfer.

8.2 Accreditation of Prior Experiential Learning (APEL)

The MQF recognises the importance and value of nonformal and informal learning in higher education. Accordingly, MQA has developed the APEL (C) guidelines which permit nonformal and informal learning to be evaluated and accorded recognition or credit. The learning acquired through MCs other than the type described in 8.1, can be submitted to recognised APEL (C) centres for evaluation.

Where the aims, outcomes, content, delivery and assessment of the modules that make up an MC are clearly documented, accessible and trusted, the HEPs are able to evaluate and grant credits up to 30% of the credits of the programme the learner is seeking entry into.

Please refer to **Appendix 1** for further clarification of the credit transfer mechanism for freestanding MCs (MOOC-based) and MCs offering courses from accredited programmes.

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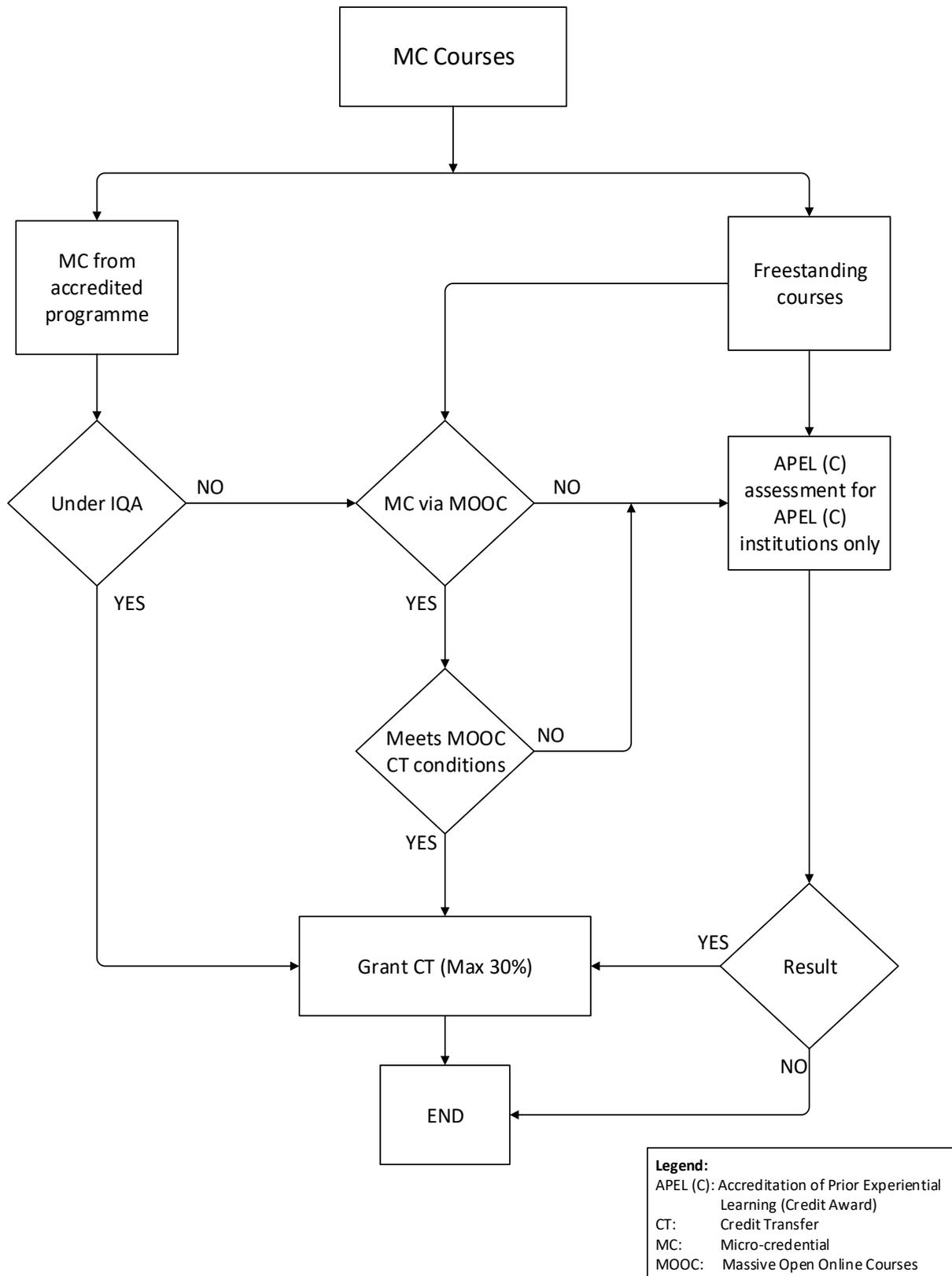
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CREDIT TRANSFER FOR MICRO-CREDENTIALS



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