FLEXIBLE LEARNING PATHWAYS IN MALAYSIAN HIGHER EDUCATION: BALANCING HUMAN RESOURCE DEVELOPMENT AND EQUITY POLICIES

REPORT FOR THE IIEP-UNESCO RESEARCH
'SDG4: PLANNING FOR FLEXIBLE LEARNING PATHWAYS IN HIGHER EDUCATION'

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ABBREVIATIONS

2u2i	Two years in university, two years in industry academic programme
4IR	Fourth Industrial Revolution, and in relation to Industry 4.0
AeU	Asia e University
AI	Artificial intelligence
APEL	Accreditation of Prior Experiential Learning
APEL (A)	Accreditation of Prior Experiential Learning for Access (provides access to academic programmes)
APEL (C)	Accreditation of Prior Experiential Learning for Credit Award
CAP	Critical agenda project
COPTA	Code of Practice for TVET Programme Accreditation
DOSM	Department of Statistics Malaysia
DPCCE	Department of Polytechnic and Community College Education
EPRD	Education Planning and Research Division
FGD	Focus group discussion
FLPs	Flexible learning pathways
HEP	Higher education provider
iCGPA	Integrated cumulative grade point average
INTI	INTI International College Penang
IoT	Internet of things
ISCED	International Standard Classification of Education
JPK	Jabatan Pembangunan Kemahiran (Department of Skills Development)
JPKK	Department of Polytechnic and Community College Education
JPT	Jabatan Pendidikan Tinggi (Department of Higher Education)
LLL	Lifelong learning
LIH NKRA	Low Income Households – National Key Results Area
HEIs	Higher education institutions
MBOT	Malaysia Board of Technologists
MDGs	Millennium development goals
MEA	Ministry of Economic Affairs
MEB(HE)	Malaysia Education Blueprint 2015–2025 (Higher Education)
MEF	Malaysian Employers' Federation
MOE	Ministry of Education
MOHE	Ministry of Higher Education
MOHR	Ministry of Human Resources

MOOCs	Massive open online courses
MQA	Malaysian Qualifications Agency
MQF	Malaysian Qualifications Framework
MTUN	Malaysian Technical University Network
MyRA	Malaysia Research Assessment
NEP	New Economic Policy
NHESP	National Higher Education Strategic Plan
NKRA	National Key Result Areas
ODL	Online distance learning
OUM	Open University Malaysia
PHEI Act	Private Higher Education Institutions Act
PSPTN	National Higher Education Strategic Plan
PTPTN	Student Loan Fund Corporation
PWD	Persons with disabilities
RPL	Recognition of prior learning
SDGs	Sustainable development goals
TEVT	Technical education and vocational training
UiTM	University Teknologi MARA
UNIRAZAK	University of Tun Abdul Razak
UTHM	Universiti Tun Hussein Onn Malaysia
UUCA	Universities and University Colleges Act
WOU	Wawasan Open University

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FOREWORD

The Commonwealth Tertiary Education Facility (CTEF) is pleased to present this publication, which offers evidence-based research that focused on flexible learning pathways and their implementation in Malaysia. The International Institution for Educational Planning - United Nations Educational, Scientific and Cultural Organization (IIEP-UNESCO) has provided an excellent framework to study flexible learning pathways at the country level, and for a comparative perspective with other seven countries from the different regions – Chile, Finland, India, Jamaica, Morocco, South Africa and the United Kingdom.

Malaysia has many initiatives to support the implementation of flexible learning pathways through its Accreditation of Prior Experiential Learning (APEL), Open Distance Learning (ODL), Massive Open Online Courses (MOOCs), and micro-credentials. In the context of the Sustainable Development Goals (SDGs), in particular SDG 4, there must be more policy focus on the equity groups (disadvantaged and the marginalized groups). These should encompass access, teaching and learning experiences, the environment at the institutions, and also completion and transition to the workforce. Current and Post-COVID-19 would demand a creative and innovative approach to designing and implementing strategies for flexible learning pathways in Malaysia. The study reported in this book was conducted in a pre-COVID-19 era, therefore, when reading this book, it is important to relate and reflect the findings and recommendations to the current predicament. Others should then follow through with further research on what we have accomplished in this IIEP-initiated study.

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EXECUTIVE SUMMARY

Malaysia's higher education system is highly centralized, with a set of legislations to govern and monitor public universities and regulate the private higher education sector. The latest discourse, the Sustainable Development Goals (SDGs), particularly SDG4, pitted against existing policies on lifelong learning, presented an opportunity to assess practices at the institutional level. In the national context, there is a need to confirm the extent to which the linkages between national policies on lifelong learning, strategies, instruments, and institutional practices in terms of flexible learning pathways (FLPs) have benefited non-traditional learners, disadvantaged and marginalized groups. Hence, this research aims to investigate how FLPs have benefited particularly the bottom 40 per cent of households (B40 households), disadvantaged and marginalized groups, persons with disabilities, and also women in Malaysia.

FLPs in the context of this research refer to pathways that lead to a qualification based on the concept of a recognition of prior learning, mainly involving but not limited to the recognition of work experience. To address the above question, this study investigated the effectiveness and benefits of FLPs from the three following perspectives:

a) Pathways for getting into higher education (access regardless of age and other qualifications obtained in the past);
b) Pathways for getting through higher education (progression and transferability);
c) Pathways for getting out of higher education (completion and transition to labour market or further studies).

This research adopted a qualitative approach to address the research questions. The primary data collection involved interviews with stakeholders at the Ministry of Higher Education (MOHE), the Malaysian Qualifications Agency (MQA), the Malaysian Employers' Federation (MEF), and the Ministry of Human Resources (MOHR). At the two universities selected for in-depth study, Universiti Teknologi MARA (UiTM) and Wawasan Open University (WOU), researchers held interviews with top management, deans and heads (or equivalent roles) in charge of data, quality assurance, and counselling and guidance services. Focus group discussions (FGDs) and phone interviews were held to solicit information from the alumni and currently enrolled students. The primary data were then organized and analysed, enabling the researchers to identify important thematic patterns to address the research question. Secondary data collection procedures involved desk research, an analysis of the results of IIEP's *International Survey*, and a review of official plan documents and guidelines.

The major findings of the research may be summarized as follows: first, the original national policy on lifelong learning for human resource development has evolved to focus on access

to higher education for equity groups; second, national stakeholders were of the opinion that the national policy on lifelong learning and FLPs as implemented by the Ministry of Higher Education has increased access to higher education among equity groups; third, at the institutional level, FLP implementation and practice were primarily about compliance with little opportunity for creativity, resulting in tensions between national stakeholders and institutions and also within institutions; and fourth, the fact that at both national and institutional levels only qualitative data were available for analysis means that the benefits of FLPs for equity groups remain incompletely explored.

In the effort to make FLPs using APEL, ODL, MOOCs, and micro-credentials into the backbone of increasing access to higher education and subsequent progression, the following recommendations are put forward:

National policy framework on integrated data management systems
A national policy framework on data management systems should include details of the students in HEIs. More importantly, it should address disadvantaged groups with more detailed levels or categories, and be inclusive and comprehensive in nature.

Dedicated entity focusing on equity groups within the MOHE
A dedicated entity that focuses on equity groups should be established at the national level to realize the objective of FLPs for disadvantaged groups. This entity needs to be linked to the institutional level for overseeing and monitoring the implementation of policy objectives in terms of the relevance, appropriateness, and innovative nature of practices at HEIs, according to the established MQA framework.

Flexible learning support systems for disadvantaged groups
The instruments and practices of FLPs at the institutional level need to be innovative and creative to cater to the different needs of people with disabilities (PWD) and other disadvantaged groups, for example single mothers. The support system should include all three dimensions of FLPs, namely the pathways for getting into HEIs, getting through the HEI system, and getting out of HEIs at the other end, including job prospects in the labour market.

With respect to three interpretations of FLPs, the recommendations were as follows:

Pathways for getting into HEIs
An innovative instrument for PWD groups entering HEIs through alternative admission pathways like the APEL (A) needs to be created. The Aptitude exam for APEL (A) needs to cater to the needs of PWD. This is not a 'nice to have' but rather a 'must have' item in Malaysian higher education.

Pathways for getting through the education system

In 2002 the (Inclusive) Open Education Resources (OER) was introduced by UNESCO at the Forum on 'The Impact of Open Courseware for Higher Education in Developing Countries'. The OER is an open sharing educational resource, a new global phenomenon which eventually became part of the resources for teaching and learning strategies in education institutions. Malaysia needs to explore this OER to ensure inclusive and equitable access to education for all.

Pathways for getting out of HEIs and joint labour sectors

One of the major concerns is the security of job prospects in the labour market for disadvantaged groups after graduation. Current students and alumni of FLPs are already employed. However, the concern is more with respect to PWD groups and the job market. There is no data to show how they have fared in this area.

CHAPTER 1: INTRODUCTION OF THE STUDY

1.1. Background information

The expansion of higher education in Malaysia has primarily catered for the demands of traditional learners. Interest among many working adults to further their education and obtain formal recognition of their professional experiences has been acknowledged since 2005, with some public universities such as Universiti Teknologi MARA (UiTM) offering part-time programmes, and others such as Universiti Sains Malaysia (USM) offering distance or off-campus programmes. Based on the experiences of these pioneering public universities, in 2006 the Malaysian Government introduced the Open Entry Policy, making it possible to gain entry to higher education institutions without the required academic qualifications but instead based on learning experience. This policy of 'non-restrictive entry requirements for a degree programme, applicable to adults who possess learning experience which can be assessed and matched against the learning outcomes of an academic course' (OUM, 2019) has led to the establishment of the Open University Malaysia (OUM) and Wawasan Open University (WOU) in the mid-2000s. Universities adopting open entry policies began to implement new instruments such as the Accreditation of Prior Experiential Learning (APEL), massive open online courses (MOOCs), and micro-credentials. All of the above fall under the broad definition of flexible learning and according to Mueller et al., (2018) it enables students to gain access and flexibility based on at least one of the following dimensions, namely, time, place, pace, learning style, content, assessment, or learning path.

From an institutional perspective, flexible learning also implies a change in the way teaching and learning is organized. For example, the content must be made available in such a way that students can access it anytime and anywhere (Mueller *et al*., 2018). In the Malaysian context, flexible learning pathways (FLPs) are aimed at attracting those without the academic qualifications to enter higher education, primarily through APEL. These are non-traditional learners, defined as adult students enrolled in both formal and informal studies. Arguably, the demand from traditional and non-traditional learners to gain access to higher education could be explained in terms of the role of academic qualifications in providing opportunities to obtain better jobs, higher earnings, better career prospects, and social mobility (Khazanah Research Institute, 2016.). In 2010, student enrolment in higher education in Malaysia was approximately 1.1 million. In 2018, it grew to approximately 1.3 million, with a little more than half of this number in the private higher education sector. Since the data are not available, it is not possible to ascertain what proportion of this growth in enrolment in the whole system has been due to the availability of new alternative pathways. In fact, the IIEP's *International Survey* has confirmed that in the case of Malaysia and with respect to flexible learning pathways no data was collected on a regular basis. However, among the universities that are offering ODL, for instance, the intake based on

this alternative pathway at Open University Malaysia (OUM), Universiti Teknologi MARA (UiTM), Universiti Sains Malaysia (USM), Universiti Putra Malaysia (UPM), and Universiti Teknologi Malaysia (UTM) has been significant.

This section discusses the context and relevance of FLPs in the development of Malaysia's higher education, particularly in providing access to higher education. At this critical stage in the development of the Malaysian higher education system, it is timely to investigate whether policies such as lifelong learning, recognition of prior learning, and instruments for implementing FLPs have made higher education more accessible to the bottom 40 per cent of households (B40), the disadvantaged, the marginalized, and persons with disabilities. If accessibility to higher education of these groups has indeed increased, are they equally successful in learning outcomes and progression to the labour market?

1.2.   Context and scope

It is important to note that in Malaysia the demand for higher education goes in parallel with the demand for highly skilled and knowledgeable workers. It is anticipated that jobs related to cyber security, big data, data protection, artificial intelligence, and robotics will see a huge surge in demand (Aishah, 2019) as Malaysia begins to implement strategic initiatives in the context of the Fourth Industrial Revolution (4IR). The 4IR is generally described as the advent of 'cyber-physical systems' involving entirely new capabilities for people and machines, and involving artificial intelligence and robotics. Indeed, 4IR-related technology may provide some of the solutions for flexible learning.

The 4IR poses a challenge for Malaysia, particularly in terms of how people with disabilities, the disadvantaged, and other equity groups fit into the national framework for the 4IR, which is technology intensive. In 2018 the Ministry of Higher Education communicated its strategic initiatives under the broad theme of Higher Education 4.0, aiming to produce competent and skilled workers for 4IR. Admittedly, however, the proportion of skilled workers is still low in the Malaysian workforce. Of the total working population of approximately 15.6 million in June 2019, 27.8 per cent are skilled, 59 per cent are semi-skilled, and 13.2 per cent are low skilled (DOSM, 2019). There is thus a need for the majority of the working population to have their qualifications upgraded and their skills and knowledge enhanced to align with the future 4IR scenario.

It will be even more critical to consider the learning needs of disadvantaged or marginalized groups and those intending to return to higher education with lower than the required academic qualifications for admission into higher education institutions. The 4IR may not be an appropriate context to investigate FLPs in Malaysia, as its scenario only concerns the importance of advanced technology for high academic achievers and their progression to

the future labour market (IPPTN, 2018). This scenario needs to incorporate advanced technology that can enhance flexible learning among the disadvantaged if it is to be relevant to research on equity groups in Malaysia.

Alternatively, this case study on FLPs in Malaysia can be viewed in the context of the implementation of the UN's sustainable development goals (SDGs) and Education 2030. Specifically, in terms of SDG4 on Quality Education, the agenda is to ensure inclusive and equitable quality education and to promote lifelong learning and flexible learning pathways for all. This calls for stronger linkages between formal and non-formal structures, recognition, validation, and accreditation of the knowledge, skills, and competencies acquired through both non-formal and informal education.

In the context of the implementation of SDG4 and its connection with FLPs, it is important that the planning and implementation of the policy should be comprehensively studied and documented. As such, pertinent questions requiring answers based on empirical evidence are:

a) What are the enablers that ensure the flexibility of non-traditional students, people with disabilities, disadvantaged and other equity groups in entering, re-entering, progressing through, and completing their higher education?
b) What are the barriers at the system, institutional, and individual levels that can restrict non-traditional students, people with disabilities, disadvantaged and other equity groups from accessing and moving flexibly through higher education?

To address the above-mentioned questions, the scope of this research covers policies related to and the implementation of FLPs such as lifelong learning and recognition of prior learning (RPL). Relevant instruments through which these policies manifest are open and distance learning (ODL), Accreditation of Prior Experiential Learning for Admission (APEL A), Accreditation of Prior Experiential Learning for Credit Transfer (APEL C), massive open online courses (MOOCs), and micro-credentials. The current higher education plan, the Malaysia Education Blueprint (Higher Education) 2015–2025 or MEB(HE) 2015–2025, which was based on the Eleventh Malaysia Plan 2016–2020, focuses on lifelong learning aimed at enabling Malaysians to meet the changing skill demands of a high-income economy, and maximizes the potential of individuals who are currently outside the workforce through reskilling and up-skilling opportunities. In addition, the Eleventh Malaysian Plan 2015–2020 has emphasized the need to strategically plan for the needs of the B40 and other equity groups in the higher education system.

1.3.   Focus and objectives

The two overarching foci of this Malaysian case study are as follows. First, the research seeks to document and provide evidence of the planning and implementation of policies and practices for flexible learning pathways (FLPs) in both the national and institutional contexts. Second, based on the practices at the institutional level, the research seeks to highlight lessons learned and ways forward to ensure the benefits of FLPs for non-traditional learners and equity groups in the future.

The objectives of the project are as follows:
a) To identify policies, regulatory frameworks, instruments, and practices that support FLPs in higher education;
b) To analyse how effective these policies, regulatory frameworks, instruments, and practices are in establishing FLPs and building closer linkages between and within higher education sectors, institutions, and programmes;
c) To assess how FLPs influence equity in terms of providing access and ensuring the progression, transfer, and completion of a higher education degree and transition to the labour market among those identified as disadvantaged groups;
d) From the lessons learned in this study, to identify the enablers and factors lacking in the implementation of FLPs in higher education.

1.4.   Methodology

1.4.1. Research approach and design

This research adopted a qualitative approach to address the research questions, as data were not always available to undertake a quantitative analysis of the effectiveness and benefits of FLPs, especially among equity groups. The research team adopted a research strategy that followed closely the research guidelines designed by IIEP for conducing country case studies. This research guideline enabled the Malaysian research team to plan, execute, and monitor the progress of the research.

1.4.2. Case study

The case study approach was adopted to examine relationships between determinant factors and outcomes and to collect evidence from multiple sources. This enabled the study to conduct a more in-depth analysis on the effectiveness of policies and instruments in building FLPs, and how these in turn have influenced equity in higher education. It also enabled the study to identify the factors that may have facilitated or hindered the effectiveness of policies and instruments for FLPs.

For the in-depth study, a public university, Universiti Teknologi MARA (UiTM), with a long history of catering for both traditional and non-traditional learners from disadvantaged (indigenous) groups, and a private university, Wawasan Open University (WOU), which was established specifically for open entry and online and distance learning (ODL) among working adults, were selected. Distance learning for part-time learners was implemented at UiTM long before open entry was accepted as a matter of policy in 2005. UiTM is an example of a conventional public HEI offering a separate ODL programme. WOU is a private, charity-based HEI dedicated to ODL, but in 2019 it began to offer both ODL and conventional programmes.

1.4.3. Data sources and collection

Data for this study were collected from several sources such as literature surveys, document analysis, statistics from MOHE and government agencies, interviews with national stakeholders, and top management, deans, and alumni and enrolled students at UiTM and WOU.

Primary data sources
The primary focus of the interviews was to find out how national policies are translated into institutional practices, and the measures that higher education institutions themselves have put in place to facilitate FLPs. The respondents selected at the national level will be listed in *Chapter 3*.

Initial contacts were made with top management of the Ministry of Higher Education and HEIs, drawing their attention to the introduction letters from IIEP-UNESCO in relation to the research project. Potential respondents from the Ministry of Higher Education, the Malaysian Qualifications Agency, the Ministry of Human Resources, the Malaysian Employers' Federation, and the two HEIs were subsequently identified and approached officially. Interview dates were set, and the interviews were conducted by the researchers.

The interview protocol was explained to the respondents prior to the interview. Respondents were informed that the interviews would be transcribed, and that they would be requested to verify and endorse quotes that would be used in the report. Subsequently, the interviews were conducted according to the interview protocol provided by IIEP-UNESCO. Each interview session was audio-recorded and later transcribed verbatim. The cleaned interview transcripts were checked by the interviewers for their trustworthiness through triangulation of multi-source data (i.e. interviews, policy documents, and IIEP's *International Survey*.

Secondary data sources

Desk research involved literature surveys, accessing relevant websites, and compiling and scrutinizing statistics from official government sources and universities.

1.4.4. Data analysis and interpretation

Qualitative data analysis

Each researcher received three or four transcripts for independent coding according to the seven predetermined categories covering policies and objectives, actors, supporting instruments, key practices, monitoring and implementation, evaluation, and priorities for the future. The coded transcripts were merged by the main qualitative data manager into an ATLAS.ti unit. ATLAS.ti is a Computer Assisted Qualitative Analysis Software (CAQDAS) package that was adopted to facilitate data analysis and data management/data organization based on the study's research designs, namely narrative research with interviews and focus group discussions. A research team meeting was held to scrutinize, refine, and finalize the codes, categories, and themes of the qualitative data. The qualitative analytic procedure in this project involved thematic analysis and content analysis.

Thematic analysis

After all the codes and themes had been created, the thematic analysis started by: (1) importing the interview file transcriptions into ATLAS.ti; (2) document management and organization; (3) importing the list of codes and themes into ATLAS.ti; (4) creating quotations within each document and assigning relevant codes to a theme; (5) visualizing the data-driven findings through creating data-level and theoretical-level networks; and (6) creating reports to share the findings.

Content analysis

Regarding content analysis, 'word clouds' were created for each document and quotation. This technique focused on the frequency of the words used in each document. For instance, in a document containing an interview with a single respondent, if the frequency of the word 'internationalization' is higher than that of other words, this word will appear bigger in the word cloud, indicating the importance of this word within the body of the document.

Data interpretation

Data interpretation was based on the triangulation of several sources of data, including a literature survey, interviews, policy documents, and IIEP's *International Survey* findings on FLPs in Malaysia. Based on the transcribed texts of the interviews with stakeholders and universities, quotations that were relevant for the writing of the reports were listed and then submitted to the respondents for their verification and approval.

1.5. Report structure

This report comprises five chapters. Chapter 1 provided a general overview of the study, its objectives and methodology. The next *Chapter 2* offers an overview of the Malaysian higher education system. It covers salient features of the higher education system including the wider context, the size of the higher education sector, the governance of higher education, sources and allocation of funding, degree structures and admission to each level, the modalities of education delivery, and equity groups. *Chapter 3* is on the system-level approaches for supporting FLPs, followed by *Chapter 4* that presents FLPs in practice at the institutional level. The final *Chapter 5*, offers information from multiple sources analysed in a comparative manner to bring out the interplay of policies, strategies, instruments, and practices related to FLPs. The last chapter closes with some conclusions and recommendations for the effective implementation of FLPs in the future.

CHAPTER 2: OVERVIEW OF THE NATIONAL HIGHER EDUCATION SYSTEM

2.1.   Introduction

Major events have influenced the development of the Malaysian higher education system, particularly in terms of Malaysia's socio-economic mosaic and political dynamism. Because of a lack of detailed data and information prior to 1963, this overview focuses on the period after the formation of Malaysia in that year. Even so, the present higher education system is the outcome of legislations that were enacted since the 1990s. Before 1996, higher education in Malaysia was in a state of *laissez faire.* While there were laws on the establishment of companies supporting higher education institutions, there was no regulatory regime with respect to the operation of these institutions. The public higher education sector was, to some extent, self-governing, with supervision by the MOHE based on the Universities and University Colleges Act 1971.

This study is based primarily on desk research and the results of the IIEP's *International Survey on Policies, Instruments and Practices for Developing Flexible Learning Pathways into and throughout Higher Education – Malaysia* administered by IIEP. As this research is about Sustainable Development Goal 4 (SDG4) calling for lifelong learning (LLL), the recognition of prior learning (RPL), and flexible learning pathways (FLPs) with a focus on access to higher education and outcomes for disadvantaged and marginalized groups, and persons with disabilities, our discussion will be confined to an overview of relevant policies, strategies, and instruments targeting these groups.

2.2.   Socio-economic and political context

To understand the development of the higher education system in Malaysia, it is important to have some understanding of the socio-economic and political background of this multi-ethnic and multi-cultural nation. On the surface, Malaysia's socio-economic mosaic and political structure have not changed significantly since 1963. However, the details of the nation's population dynamics are important as they show interesting shifts (see *Figure 1*). The Department of Statistics Malaysia (DOSM) estimates that the total population of Malaysia was 32.6 million in 2019. Of this total, 6.7 per cent was categorized as elderly (above 65 years), 70.0 per cent was in the age group of 15 to 64 years, and 0-to-14-year-olds accounted for 23.3 per cent. The elderly group in the population increased by 0.2 per cent since the last estimate in 2018, and as a result the old-age dependency ratio increased from 9.3 per cent in 2018 to 9.6 per cent in 2019. Meanwhile, for the younger age group the ratio has reduced from 34.1 per cent (2018) to 33.3 per cent (2019).

Figure 1. Percentage population by age group, Malaysia, 2018 and 2019
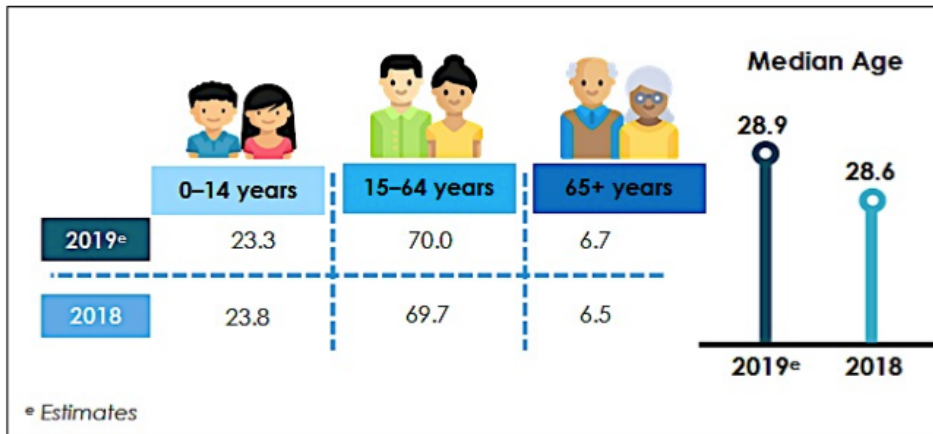
Figure 2 shows that in terms of gender, the female population was 48.9 per cent in 2018, increasing to 49 per cent in 2019. In 2019 the male population was still estimated to outnumber females; the male population was estimated to have increased from 16.7 million (2018) to 16.8 million. Similarly, the female population was estimated to have increased from 15.7 million (2018) to 15.8 million. These estimates changed the male/female sex ratio to 107/100.

Figure 2. Population by gender, Malaysia, 2018 and 2019
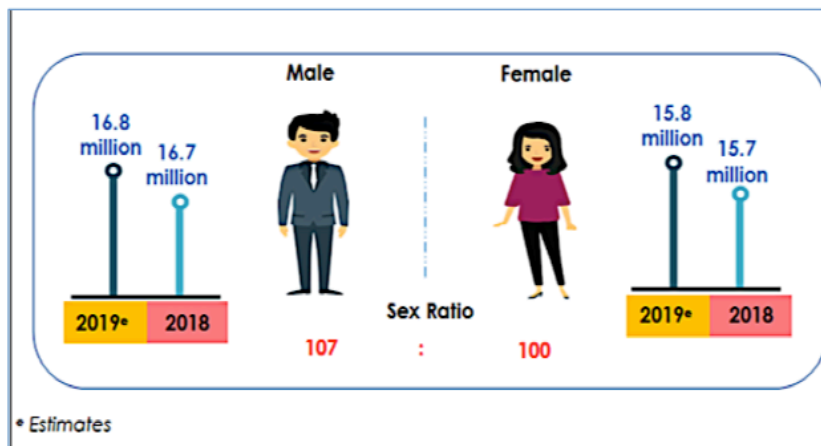
The Department of Social Welfare Malaysia reported that as of 2017, 453,258 persons were registered as Persons with Disabilities (PWD), with PWD in the physical category representing the highest percentage (35.2 per cent), followed by those with learning disabilities (34.8 per cent), those who were visually impaired (8.9 per cent), and those with a speech disability at 0.5 per cent.

These population demographics and characteristics have important implications for the labour force; 31.3 per cent of the working age population (aged 15–64 years) was outside the labour force, and the labour participation rate was recorded at 68.7 per cent in 2019, compared with 68.3 per cent in 2018 and indicating a slower pace of increase of 0.4 per cent

(DOSM, 2020). Meanwhile, although Malaysian women have high levels of educational attainment, their labour market participation remained low (OECD, 2019).

The DOSM statistics highlight the following salient features of the labour force and employment situation (see *Figure 3*), which must be seen as the backdrop to the current and future higher education scenario in Malaysia. First, in July 2019 the labour force had increased by 2.0 per cent to 15.70 million persons compared with July 2018. Second, during the same period, the number of employed persons also increased by 2.0 per cent to 15.8 million persons, while the unemployment rate over the two survey periods remained at 3.3 per cent (DOSM, 2019). Third, in terms of skill positions, 62.3 per cent were semi-skilled, 24.4 per cent were in the skilled category, and 13.3 per cent were classified as low skilled (see *Figure 3*). Fourth, DOSM statistics noted that filled positions made up more than 97.0 per cent of the total positions, while the composition by skill category was similar. The DOSM also reported that 62.4 per cent of positions were in the semi-skilled category, followed by 24.4 per cent in the skilled category, and 13.2 per cent in the low-skilled category. The highest vacancies in Q2 of 2019 were recorded in the semi-skilled category (56.1 per cent), followed by the skilled category (25.2 per cent). Meanwhile, vacancies in the low-skilled category were recorded at 18.7 per cent. Fifth, the highest number of newly created jobs in Q2 2019 was in the semi-skilled category, with a share of 48.5 per cent. This was followed by the skilled category that recorded 44.7 per cent, and finally the low-skilled category (6.8 per cent).

Figure 3. Malaysia – employment by skills (percentage share)

Semi-skilled category comprised 62.3 per cent of positions	POSITIONS		FILLED POSITIONS		VACANCIES		JOBS CREATED	
	Q2 2019	Q1 2019	Q2 2019	Q1 2019	Q2 2019	Q1 2019	Q2 2019	Q1 2019
SKILLED	24.4%	24.3%	24.4%	24.4%	25.2%	23.3%	44.7%	44.9%
SEMI-SKILLED	62.3%	62.3%	62.4%	62.4%	56.1%	57.6%	48.5%	49.1%
LOW-SKILLED	13.3%	13.4%	13.2%	13.2%	18.7%	19.1%	6.8%	6.0%

Source: *Department of Statistics Malaysia (DOSM) (2019).*

The preceding sub-section has highlighted the salient features of changes in Malaysia's socio-economic fabric and the nation's broad population dynamics. The implications of these changes for the provision of higher education, particularly among equity groups in Malaysian society, were the focus of the research.

2.3.   Disadvantaged and marginalised groups

The period immediately after Malaya's independence in 1957, followed by the formation of Malaysia in 1963, was the foundation of the socio-economic fabric of the emerging Malaysian society. Subtle inter-ethnic issues emerging during the mid-1960s made the government realize that post-colonial policies immediately after independence needed to be re-examined. However, it was only after the 1969 ethnic riots that any serious redesign of policies was undertaken. Thus, in 1970 the Malaysian government formulated economic and social policies based on affirmative action and exceptional sensitivity to income distribution, since growth and development in a divided society were associated with improving equity and security (Zainal and Bhattasali, 2008). Post-1969, affirmative actions targeted marginalized and disadvantaged groups, encapsulated in the New Economic Policy (NEP) document launched in 1970.

In terms of operationalizing and implementing this NEP, an ethnic quota system was designed for student admissions to ensure that the composition of the student body in public HEIs reflected the ethnic distribution in the general population. In 1970, no less than 60.0 per cent of Malaysia's population was indigenous. The admission policy to public HEIs was aimed at promoting social mobility through higher education, especially for the indigenous population or the *Bumiputera* people, who were identified as the poorest, most disadvantaged, and most economically marginalized group. Since 1970 several other segments in Malaysian society have also been identified as disadvantaged and marginalized groups, either through specific government policy or by the groups' own self-declarations. Gradually, Malaysia's policies for disadvantaged and marginalized groups have moved beyond ethnicity, targeting instead very poor and low-income households including persons with disability, irrespective of their ethnicity.

While the early development of higher education policies was not gender specific, policies directed towards increasing access to higher education have benefited women's participation (Jamil *et al.*, 2019). It is argued that women in the expanded, marketized, and neo-liberalized higher education sector in Malaysia have been some of the main beneficiaries in terms of enrolment, but there has been no significant increase in the numbers of women in leadership roles in either the private or the public sector (Jamil *et al.*, 2019). Arguably, Malaysian women have experienced significant advances in obtaining access to higher education since the 1980s, but this equitable access to education, employment, and leadership varies among women who are members of disadvantaged or vulnerable groups, such as those with disabilities, housewives, single mothers, older women, and *Orang Asli* women in Malaysian society.

The *Orang Asli*, the minority indigenous people of Peninsular Malaysia, were unevenly distributed. They are comprised of 95 subgroups, each with their own distinct language and

culture based on geographical location (Masron, Masami, and Ismail, 2013). In the context of Malaysian society, the *Orang Asli* and the indigenous *Bumiputera* population of Sabah and Sarawak could be considered as marginalized both socio-economically and culturally (Masron, Masami, and Ismail, 2013; Nicholas, 2006). For a variety of reasons, the *Orang Asli* have become a subjected people, pushed to the furthest margins of society (Nicholas, 2006). Lack of interest in attending school, unconducive home environments, lack of parental support, and low awareness are reasons given for the high dropout rates and the low educational attainment among B40 households, particularly the *Orang Asli* in Peninsular Malaysia and the *Bumiputera* in Sabah and in Sarawak. The dropout rate at primary level among *Orang Asli* students was 12.8 per cent, the dropout rate during transition from primary to secondary was 25.2 per cent, and at the secondary level it was 49.2 per cent (Malaysia, 2015). Dropout rates among *Bumiputera* in Sabah and Sarawak were also significant in the transition from primary to secondary and from lower secondary to upper secondary (Malaysia, 2015). Although various programmes are available for the *Orang Asli* in Peninsular Malaysia and the indigenous population in Sabah and Sarawak, access to these programmes is highly constrained. In Sabah and Sarawak, geography is a major factor.

New policies targeting marginalized and the disadvantaged groups began to gather momentum through the establishment of relevant ministries with responsibilities to look into the well-being of these groups. The Persons with Disabilities Act (PWDs Act) 2008 was enforced on 7 July 2008. This was an act to provide for the registration, protection, rehabilitation, development, and well-being of PWDs. The National Council for PWDs was established, handling matters connected to PWDs. Section 29 of the Act stipulates that PWDs shall have access to employment on an equal basis with persons without disabilities. In the same vein, persons with disabilities must have the same opportunities to access education for the purpose of employment after completing their state education. With respect to this issue of access to employment, a set of Part Time Employment Regulations took effect on 1 October 2010. The objective of these regulations was to attract more participation from local workforces, especially from untapped workforce groups such as housewives, single mothers, students, persons with disabilities, and older persons.

Under the *Barisan Nasional* government (which was voted out in 2018), the concept of "1 Malaysia, People First, Performance Now" was introduced in April 2009, with the priority to raise the living standards of low-income households. Hence, under the Government Transformation Programme a number of initiatives were introduced, such as the National Key Results Area – Low Income Households (LIH NKRA) in July 2009. Specifically, based on the LIH NKRA, strategies were formulated to raise the living standards of low-income households in a sustainable manner, to ensure aid reaches the needy quickly and efficiently, and to create opportunities for low-income households to earn income independently. At the implementation level, periodic monitoring and evaluation of strategies have been reported.

2.4.   Emergence of a system

The situation as recorded in 1970 was a good indication of the context of the late 1960s. However, while the unemployment rate of 7.5 per cent at that time was generally high, the more critical issue was the correlation between unemployment, ethnicity, and geography (Mahani, 2002). Admittedly, a high rate of population growth in some less-developed regions of the federation had exacerbated the situation, with the agriculture-based economy of these regions unable to expand fast enough to absorb the new entrants into the labour market (Zainal and Bhattasali, 2008). Additionally, the new nation of Malaysia was separated by the South China Sea into two parts – Peninsular Malaysia, and Sabah and Sarawak. Geography was a major issue for national integration at that time. Understandably from a national integration stance, there was an urgent need to bring East Malaysia (the North Borneo states of Sabah and Sarawak), the east coast states, and the northern states of Peninsular Malaysia into mainstream economic development, particularly with respect to access to higher education.

It was reported in the IIEP's *International Survey* that Malaysia's higher education is a binary system. The development this system may be divided into three distinct phases of policy reform, based on several important events in the history of Malaysian higher education. The first policy-reform phase, between 1970 and 1990, was tied to issues pertaining to nation-building and national integration, aimed at addressing inter-ethnic inequality, income inequity between ethnic groups, and regional disparities. The second phase, between 1990 and 2000, related to the need to liberalize higher education provision in time of economic crisis and to increase the massification of higher education, while the third phase, post 2000, has presented Malaysia with opportunities for global competitiveness and reputation arising from the internationalization of higher education via the increasing mobility of students, researchers, academic programmes, and institutions. Higher education policy reforms in the mid-1990s were encapsulated in the National Higher Education Strategic Plan (NHESP) 2020, launched in 2007. In 2015 the Malaysia Education Blueprint (Higher Education) 2015–2025 (MEB(HE) superseded the NHESP, although it was still aligned to the National Education Blueprint 2013–2030. This forms the basis for the current development of education and higher education in Malaysia.

Of all Malaysia's national development plans since 1970, the Tenth Malaysia Plan (2011–2015) was notable in the sense that it was formulated based on the vision of achieving a prosperous and equitable society, regardless of gender, ethnic group, socio-economic status, abilities, and geography. The focus was to address poverty and socio-economic imbalances, especially for the bottom 40 per cent households (the B40 group). The categories B40, M40, and T20 represent percentages of the country's population – respectively the bottom 40 per cent, the middle 40 per cent, and the top 20 per cent. Based on DOSM (2017), the categorization of T20 was a median income of RM 13,148 in 2016, M40 was median income of RM 6,275, and B40 was a median income of RM 3,000, although

these median values may increase or decrease from year to year depending on the country's GDP. This explains the adoption of median household income as the determinant. Subsequently, the Eleventh Malaysia Plan 2016–2020 has emphasized charting Malaysia's development with the B40 in mind. This Plan's target was to increase the percentage of B40 households with tertiary educational attainment from 9 per cent in 2014 to 20 per cent by 2020.

2.5. Size of the higher education sector and types of HEIs

The demand for higher education in Malaysia has been increasing since the late 1980s. This was fuelled by the trend towards the massification of higher education, and in the 1990s, with the positive move towards the internationalization of higher education, the demand from international students has also increased markedly. In the late 1990s there was an almost even split between the enrolment of students in public and private higher education institutions. However, with the internationalization of higher education emphasizing the inflow of international students to Malaysia, the proportion of enrolled international students has shifted towards the private higher education sector. This is primarily because the private higher education sector uses the English language as a medium of instruction, and there is no admission quota for international students. The National Higher Education Strategic Plan 2020, launched in 2007, and Malaysia's Internationalization Policy 2011 provided the policy framework for Malaysian higher education institutions to drive the agenda to recruit more international students. This is also a main source for income for higher education institutions and the nation.

As of 2018, the Malaysian higher education system consisted of 20 public universities, 450 private higher education institutions, 36 polytechnics, and 94 community colleges (Siti Hamisah, 2019). There were 130,806 international students in the system, of whom 30 per cent were in public HEIs and 70 per cent in private HEIs. As a percentage of the total enrolled students in public universities and private higher education institutions, international students accounted for 7 per cent and 16 per cent respectively. From the perspective of FLPs and equity groups in the higher education system, of a total of 552,702 enrolled students in the public sector, only 10 per cent were non-traditional learners. Of these 55,140 non-traditional learners, 48 per cent were from the B40 household category, and the dropout rate was about 9 per cent. In the private sector, non-traditional learners represented about 14 per cent of the total number enrolled students, and dropout rates were almost three times those of the public sector (see *Table 1*).

Table 1. Malaysia's higher education system – components and enrolment, 2018

Public higher education sector	Private higher education sector
▪ 20 Universities ▪ 36 Polytechnics ▪ 94 Community colleges	▪ 53 Universities ▪ 10 International branch campuses ▪ 38 University colleges ▪ 349 Colleges (under Act 555)
▪ 675,141 enrolled students (2018) (82% or 552,702 in universities) ▪ 552,702 enrolled students in universities; 55,140 (10%) were non-traditional learners; of this number, 48% were from B40 households, with 5,100 dropouts.	▪ 576,982 enrolled students (2018); 83,054 (14%) were non-traditional learners; of this number there were 22,824 dropouts (no data about B40 households).
▪ 39,099 of 552,702 (7%) were international students	▪ 91,707 of 576,982 (16%) were international students

Sources: Siti Hamisah (2019); Ministry of Higher Education (MOHE), unpublished data (2019).

Of the 20 public universities, the latest categorization is as follows: five were listed in the research university category; five were categorized as focus universities for specific sectors in line with national priorities such as education, business, entrepreneurship, marine and coastal sciences, and the armed forces; three universities made up the comprehensive universities category; three identified as dedicated Islamic universities; and four were categorized as technical universities with a focus on engineering and technology (Siti Hamisah, 2019).

In the private higher education sector, it is important to highlight the existence of 13 foreign branch campuses, of which six are from the United Kingdom (UK), three from Australia, and one of each from the Netherlands, Singapore, China, and Egypt.

Based on strategic directions in the NHESP 2007 and the MEB(HE) 2015 - 2025, various components of the Malaysian higher education system were to implement FLPs based on the MQA's guidelines and codes of good practice for APEL, ODL, MOOCs, and micro-credentials.

2.6.   Governance of higher education and key steering instruments

Prior to the ethnic riots in May 1969, the sole public university, the University of Malaya, was established based on the British university model and enjoyed a high degree of institutional autonomy. The state-university relationship took a different and sudden turn after 1969. Higher education was seen by the state and society as an important vehicle to improve the socio-economic and political status of the indigenous population. Based on this view, public universities' missions and visions should be aligned with those of the

government. Thus, the University and University Colleges Act 1971 (Act 30) was enacted, which provided for the establishment, maintenance, and administration of public universities and university colleges thereafter. This is the Act that defined the limits of institutional autonomy for all public universities, and in very important ways it marked the beginning of strong state-centrism in the higher education system.

The cumulative effects of the economic predicament in the late 1980s and early 1990s have revealed serious capacity constraints in the Malaysian higher education system. There was greater demand than places available in HEIs. Once again, there was a dire need at that time to realign the universities' strategic direction with that of the government. The second phase of policy reform was initiated with the repeal of the Education Act 1961 and the enactment of the Education Act 1996, together with the Private Higher Education Institutions Act 1996 (Act 555). Because the reform was systemic, the University and University Colleges Act (Act 30) 1971 was amended as well. While there have been amendments to Act 30 since 1971, universities' activities continue to be monitored and supervised by the MOE or the MOHE. For academic staff, the extent of their academic freedom was defined by the Statutory Bodies (Discipline and Surcharge) Act 2000 (Act 695). This is the Act that provides for matters relating to the discipline of, and the imposition of surcharges on, the officers of statutory bodies incorporated by federal law, and for matters connected therewith.

The enactment of these various Acts was, in fact, part of the government's raft of measures to further monitor public universities and regulate private higher education institutions in Malaysia. With such a regulatory regime in place, the autonomy of public universities was clawed back, particularly with respect to budgetary and procurement matters. For private HEIs, the MOHE continues to regulate them for compliance with prescribed institutional governance arrangements and the provision of quality education. The parent companies of private HEIs were more concerned with the financial sustainability of the university operation. There was limited institutional autonomy for these private HEIs, since academic matters need to be aligned with the broader business goals of the parent companies.

These various legislations that were enacted between 1971 and 2007 governed the establishment and management of higher education institutions, the delivery of higher education, and the qualification requirements for local higher education institutions as well as foreign institutions' branch campuses in Malaysia. Transnational provision of higher education and the delivery of courses via non-traditional methods were in a nascent stage during the NHESP 2007–2020 period. The higher education sector experienced profound changes and transformation in terms of access, capacity, and the delivery of higher education between 2007 and 2013, based on the strategic priorities set in the National Higher Education Strategic Plan 2007–2020 and the National Higher Education Action Plan 2007–2010.

This third phase of policy reform was introduced with the global competitiveness of Malaysian higher education as a major strategic direction, and to leverage the internationalization of higher education. It is also of interest to note that there were emerging global development agenda in education proffered by major international organizations, such as the International Universities Association's (IAU) move towards 'Equitable Access, Success and Quality in Higher Education', the World Bank's emphasis on the 'Knowledge-based Economy', UNESCO's 'Education for All', the UN's Millennium Development Goals (MDGs), the World Economic Forum's 'Fourth Industrial Revolution', and now the UN's Sustainable Development Goals (SDGs). These agendas became priorities to be achieved by the Malaysian higher education sector, focusing on private investment initiatives and an equal commitment from a socially responsible government.

Since 2015, with an increasing tendency towards a neoliberal approach in the development and operation of public higher education institutions, new reform initiatives directed at public universities were introduced in the MEB(HE) 2015–2025. Primarily, the initiatives were intended to facilitate public universities' involvement with the market and to enable them to partake in opportunities provided by the market. This blueprint represents the desire to balance a humanistic and socially responsible stance among public universities with the need to be financially sustainable via market mechanisms.

From the IIEP's *International Survey*, in the case of Malaysia it was reported increasing or widening access to higher education and strengthening equity remained a major policy focus, facilitated through several Technical and Vocational Education and Training (TVET) programmes and the provision of alternative modes of entry to tertiary education based on APEL. While the policy emphasized supporting so-called groups from B40 households, the policy lacked orientation in terms of disadvantaged and equity groups. "In September 2015, Malaysia has expressed commitment along with 193 other countries to support and implement the 2030 Agenda and Sustainable Development Goals (SDGs) at the United Nations General Assembly in New York" (DOSM, 2018: 1). This commitment to Agenda 2030 for Sustainable Development is aligned with the strategies and initiatives of the Eleventh Malaysia Plan 2016–2020 (DOSM, 2018: 1). With this commitment and evidenced in periodic progress reports by the Department of Statistics Malaysia (DOSM) on SDG4 – Quality and Equitable Education, there has been some development with respect to FLPs for equity groups. Nevertheless, challenges remain with regard to data availability on the progress and outcomes of these policies.

From the angle of policy reform, as far as higher education is concerned and specifically in relation to alternative admission/learning pathways, initially there was NHESP 2007–2020. This plan outlined directions and strategies for the higher education system and institutions. A national policy for the internationalization of higher education was introduced in 2011 to realize the objective of transforming Malaysia into an international hub for education. In the

context of the FLPs, a major item in the NHESP 2007–2020 was a strategic intent to promote lifelong learning. To push this policy agenda forward, a Critical Agenda Project (CAP) group was established. CAP prepared a Blueprint for Lifelong Learning, and in 2013 the second phase of the NHESP introduced "Enculturation of Lifelong Learning" (strategic thrust 6) as one of its seven major strategic initiatives. In 2015 the MEB(HE) 2015–2025 was launched to strategize Malaysian higher education in the context of national and international changes in the higher education landscape, largely influenced by the internationalization of higher education, geopolitics, and advancements in technology. Once again, lifelong learning (shift 3 – Nation of Lifelong Learners) was one of the 10 shifts adopted as the major strategic intent of the MEB(HE) 2015 - 2025. This strategic intent stated:

> *…lifelong learning is envisioned as a way of life for all Malaysians… For this to be realised, there will be high quality formal, non-formal, and informal programmes in a wide range of disciplines and topics to support both professional and personal development… In terms of learning pathways, therefore, it is envisioned that Malaysians will have access to these opportunities, regardless of income level or socio-cultural background* (Malaysia, 2015: I–17).

Based on the above strategic intent, the MEB(HE) 2015–2025 has listed several key initiatives, but only one is directly relevant to the present study:

> *Creating a framework for recognising prior learning, including the establishment of clear pathways for re-entry into the education system, establishing a national credit system to enable accumulation of modular credits over time, and stipulating clear criteria for recognising prior experience* (Malaysia, 2015: I-17).

In early 2018 there was a change in the federal government after the 14th General Election, and because the new regime did not push for a rethinking of the overall higher education framework and agenda, existing plans and initiatives as outlined in the MEB(HE) 2015–2025 continued to be implemented. Notably, however, the new government occasionally made official press statements on the need to focus on education and higher education opportunities for the indigenous population, the disadvantaged, and low-income sections of the population. Taking a cue from the PWDs Act 2008, a ministerial pronouncement was made that all public higher education institutions must become completely inclusive or disability-friendly within the next decade (Rajaendram and Menon, 2019). In March 2020 Malaysia's federal government changed again, but to date there have been no policy changes in higher education because of the government's preoccupation with the COVID-19 crisis.

Higher education has been and continues to be regulated by central government through the MOE/MOHE. These regulatory regimes give the Minister of Education/Higher Education full powers to regulate private higher education institutions. However, for public universities

in addition to the MOE/MOHE, other central agencies such as the Public Service Department and the Treasury continue to limit institutional autonomy with respect to human resources matters, budgetary and financial procedures.

2.7.   Sources and allocation of funding

Education (including higher education) is a major beneficiary of the federal government resource allocation mechanism. For higher education, some universities continue to be heavily funded/subsidized by the Federal Government. Private higher education institutions do not receive funding from the Federal Government, but HEIs established by the state and other state-related agencies are usually funded by the state government, although their funding mechanisms vary. This sub-section will detail the funding sources and mechanisms for the education sector as a whole. Separate data for the higher education sector was not always available, especially during the period where there was only one education sector.

Figure 4. Government allocation for education, total (percentage of GDP), 1971–2017
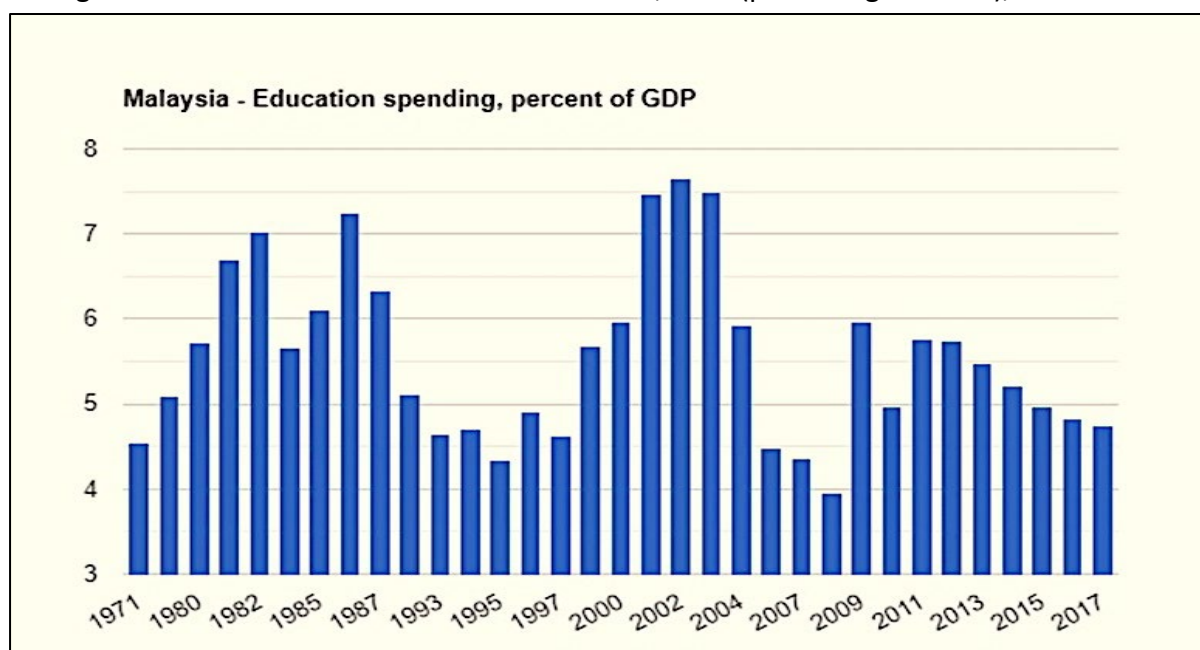
Source: TheGlobalEconomy.com (2020).

From *Figure 4*, between 1971 and 2017 the government expenditure on education has been between 3.9 per cent (the lowest) and 7.7 per cent of the GDP (TheGlobalEconomy.com, 2020). Notably, a declining trend may be observed between 2012 and 2017, indicative of Malaysia's economic austerity and overstretched public expenditure during that period. Nonetheless, the government is committed to make sizable allocations to the education sector, emphasizing efficiencies and continuous reviews of priorities within this sector. This is indicative of a situation whereby education is still seen as a public good, and the retreat of the state in this sector in terms of funding allocation is not politically acceptable.

Malaysian public universities are under the control and supervision of the MOHE, and thus they are funded by the federal government via a budget allocation approved by parliament. Typically, since 2015 the Ministry of Finance (MOF) has allocated public research universities between 85 to 90 per cent of their total operating budgets. Technical and comprehensive public universities were allocated around 85 per cent of their annual total operating budgets.

With respect to development funding, public universities have always been dependent on government funding. From the Fifth Malaysia Plan 1986–1990 to the Eighth Malaysia Plan 2001–2005, development expenditure for higher education has averaged at about 34 per cent of the total educational development expenditure, reaching an all-time high of 43.5 per cent in the Sixth Malaysia Plan 1991–1995, only to fall to 25 per cent in the Seventh Malaysia Plan 1996–2000. However, in the Eleventh Malaysia Plan 2016–2020 the emphasis was on reducing dependency on government funding, and the MOHE began to implement a strategy to compel public universities to be active in generating their own income through university enterprise to supplement a short fall in government funding.

When examining government allocation for higher education, it is important to note that a neoliberal approach, as suggested by the World Bank in their report on knowledge economy and the Malaysian higher education sector, was quickly adopted in 2007 in the NHESP 2020, and in the Tenth Malaysia Plan 2010–2015. The government's ever-increasing deficit budget has also, in part, prompted the government to adopt a different approach towards national economic development. Increasingly there are initiatives to leverage education not only as a means to increase economic productivity, but also emphasizing other key educational outcomes such as producing holistic graduates with a well-balanced mix of skills, competencies, and spirituality (Malaysia, 2015).

Through its Student Loan Fund Corporation (PTPTN) the government provides deserving students in both public and private higher education with low interest study loans, which are repayable after graduation. Eligibility criteria and loan repayment schedules have been amended several times since the scheme's inception to take into account borrowers' employment situations and salary levels. It was noted earlier that the government does not fund the private HEIs sector; the financial sustainability of private higher education institutions was, to a large extent, dependent on their business model, dynamism, entrepreneurship, good governance, innovativeness, and competitiveness. In this context, the government's financial aid as provided through the Student Loan Fund Corporation (PTPTN) was an important source of indirect funding to bolster the financial sustainability of private higher education, targeting specifically to achieve 100 per cent financing for B40 students. Arguably, PTPTN has increased access to higher education for B40 households, particularly in the public higher education sector. Notably, this student loan scheme has supported the government's lifelong learning objectives and FLPs.

2.8. Study pathways, admission to each level (ISCED 5–8), and degree structure

The Malaysian education system provides diverse pathways to both technical and vocational qualifications and higher education after 11 years of state education. *Figure 5* presents graphically the study pathways post-*Sijil Pendidikan Malaysia* (SPM, or Malaysian Certificate of Education) for Malaysians, depending on their performance in the SPM examination. Based on examination results, the choice is between pre-university studies or diploma programmes. Choosing a pre-university studies pathway would lead students to academic qualifications. While normally students following the diploma programmes pathway would graduate with professional qualifications, there are opportunities to transfer from diploma to degree programmes. Those completing SPM with insufficient credits for admission to the pre-university studies or diploma programmes may choose certificate-level courses. Certificate-level courses link students with opportunities to pursue diploma programmes. There are also other options outside the MOHE system for SPM school leavers who have not excelled academically, for instance skill-related programmes offered by the Ministry of Human Resources (MOHR) or degree programmes offered by the MOE. American degree or other transfer programmes involve specific academic arrangements between Malaysian private higher education institutions and partner universities abroad.

Figure 5. Study pathways after Sijil Pelajaran Malaysia (SPM)
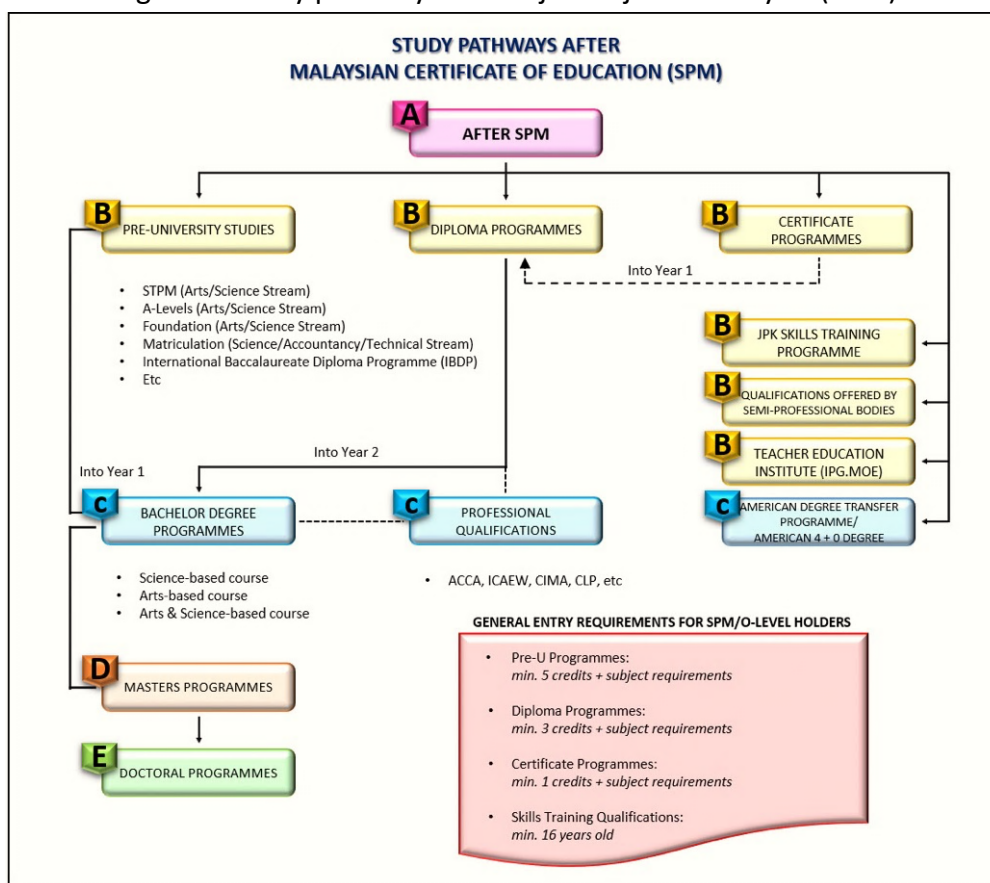
Source: StudyMalaysia.com (2020).

From the perspective of admission or entry to higher education, the general entry requirements for study at diploma, undergraduate, and postgraduate levels for higher (academic) education based on the traditional pathways can be grouped as follows: diploma (for students with secondary school qualifications such as SPM or the Malaysia Certificate of Education), Bachelor's degree level (for students with post-secondary or pre-university qualifications such as STPM or the Malaysia Higher School Certificate, General Certificate of Education, GCE A-levels, etc.), Master's degree (for students with a Bachelor's degree), and PhD (for students with a Master's degree). Based on these traditional pathways, HEIs award qualifications with reference to laws pertaining to Malaysian education, which are governed by the MQF and administered by the MQA. Each programme requires students to achieve minimum credits before an academic qualification can be awarded by the approving HEIs, e.g. diploma (90 credits), Bachelor's degree (120 credits), and taught Master's degree (40 credits). Master's and doctoral degrees obtained by research do not have credit values (See *Table 2*).

Table 2. Malaysian higher education qualification, education levels, and minimum credits

Education levels	Higher education Qualification	Minimum credit required for the award of qualification
8	Doctoral	No given credit value
7	Research Master's degree	No given credit value
	Fully or partly taught Master's degree	40
	Postgraduate diploma	30
	Postgraduate certificate	20
6	Bachelor's degree	120
	Graduate diploma	60
	Graduate certificate	30
5	Advanced diploma	40

Source: StudyMalaysia.com (2020).

With the implementation of the policy on Lifelong Learning, the Accreditation of Prior Experiential Learning (APEL) has been identified as a pathway to access various levels of qualifications set under the MQF. Data on the beneficiaries of APEL are collected at the institutional level, and a central repository for these data is in the planning stage. Consequently, currently the data on APEL beneficiaries nationally is incomplete.

Non-traditional or alternative admission pathways in the Malaysian higher education system are presented in *Figure 6*, supporting the national lifelong learning agenda. The MQA introduced the provision of APEL for the purpose of providing access to higher education programmes and academic recognition for individuals who have acquired non-formal and informal learning throughout their work and life experiences. Between 2007 and 2016, the quality provision in the MQF has been expanded in support of quality flexible lifelong learning. From *Figure 6*, it is clear that the MQA is expecting that APEL can form the basis for

entry at MQF Level 8, which is the PhD (Rozana, 2019). As of now, the MQA is still working on the details of the implementation of this system.

Malaysian universities have adopted the MQA's Guidelines on APEL as an alternative admission pathway to undergraduate programmes. In some public universities APEL (A) is only applicable for admission to its undergraduate distance education or Business Administration executive MA programmes. Generally, for admission to Science, Arts, and Social Science courses the applicant must have passed MQA APEL Level 6 (aptitude test and portfolio assessment). In addition, the applicant must be a Malaysian citizen who is over 21 years old on the date of application, with no less than 3 years' work experience in a related field. The university's senate is responsible for any minor changes to admission requirements based on the MQA's Guidelines on APEL. Even so, the spirit and purpose of the MQA's Guidelines pertaining to alternative admission pathways are being adhered to. In the case of APEL (C), the institutions administer applications internally. For instance, higher education providers that were approved to implement APEL (C) at their institutions must adhere to standards and rigours as set out by the MQA in its *Guidelines to Good Practices: Accreditation of Prior Learning for Credit Award.* The MQA will assess the implementation of APEL (A) and at the institutional level for courses to be accredited.

Figure 6. Current Malaysian Qualifications Framework (MQF) learning pathways

| MQF LEVEL | GRADUATING CREDIT | SECTOR | | Lifelong Learning |
		ACADEMIC	TVET *	
8	No credit rating	PhD by Research		
	80	Doctoral Degree by Mixed Mode & Coursework		
7	No credit rating	Master's by Research		
	40	Master's by Mixed Mode & Coursework		
	30	Postgraduate Diploma		
	20	Postgraduate Certificate		Accreditation of Prior Experiential Learning (APEL)
6	120	Bachelor's degree		
	66 **	Graduate Diploma		
	36 **	Graduate Certificate		
5	40	Advanced Diploma	Advanced Diploma	
4	90	Diploma	Diploma	
3	60	Certificate	Certificate	
2	30	Certificate	Certificate	
1	15	Certificate	Certificate	

* Technical and Vocational Education and Training   ** Inclusive of 6 credits for U1 courses from general studies

Source: MQA (2020).

Some Malaysian universities have implemented both APEL (A) and adopted the MQA's guidelines on access and credit transfer. However, credit transfer between HEIs is not automatic. For example, the Open University Malaysia (OUM), the Wawasan Open University (WOU), and the Asia E-university are the front-runners in opening access for non-traditional learners. These universities have opened applications in the context of APEL (A) to both citizens and non-citizens, and they actively promote online distance learning education (ODL). In 2001 the OUM admitted 753 students (Anuar, 2005) and 18 years later its total admission based on APEL (A) was a staggering 22,000 (OUM, 2020). This is no surprise as the OUM was established specifically to cater for non-traditional learners. Currently, the adoption of APEL (A) is slow because mapping of subjects between HEIs to facilitate credit transfer is time-consuming, with an 80 per cent match required. The MQA expects another initiative, micro-credentials, to be implemented based on its Guideline on Micro-credentials (MQA, 2019).

2.9. Modalities of education delivery

Based on the IIEP's *International Survey*, the delivery of programmes in Malaysian HEIs may involve several modalities, such as face-to-face full-time education, face-to-face part-time study (such as evening and weekend classes, extension programmes), and distance and online education. However, data on these modalities of delivery are collected at the institutional level, with a central database to capture all institutional data still in the planning stage. At the institutional level, delivery strategies and techniques may include face-to-face learning, e-learning, mobile learning, problem-based learning, research-based learning, analysis of media materials, microteaching, ICT-based interactive learning, enquiry-based learning, action learning, independent studies, and other approaches, strategies, and methods which may be applied by the creative, imaginative, and innovative scholar-teacher (MQA, 2011). Since COVID-19, universities have been requested to develop their e-learning systems as an important mode for education delivery.

2.10. Conclusion

Higher education in Malaysia has a very short history, characterized initially by nation-building based on nationalistic fervour. But after the ethnic riots in 1970, Malaysia's socio-economic and political characteristics began to have a strong influence on policies, particularly with respect to higher education. Disadvantaged and marginalized groups, and more recently persons with disabilities, were identified as primary target groups for socio-economic development. Policies were introduced to increase access to higher education and progression to the labour market. The Education Agenda 2030, the SDGs, and now Malaysia's Shared Prosperity Vision 2030 have provided vital strategic policy directions to

re-examine the situation of disadvantaged groups in terms of higher education admission and attainment. While lifelong learning agendas and instruments, such as Accreditation of Prior Experiential Learning (APEL), open and distance learning (ODL), massive open online courses (MOOCs), and now micro-credentials are targeted at non-traditional learners, relevant regulations to guarantee flexible admission and progression in the Malaysian higher education system for disadvantaged and equity groups continue to be further developed. The non-availability of relevant data has made it difficult to assess the outcome of these efforts. Even in the context of the adoption and implementation of SDG4, the lack of availability of data on non-formal education, and on people with disabilities in higher education institutions with a view towards making statements on inclusivity, remains a work in progress. Overall, however, the system is ready to incorporate flexible learning pathways in the future.

The government's mid-term review of the current Eleventh Malaysia Plan 2016–2020 is relevant in ascertaining the future context of the operation of the higher education system, vis-a-vis socio-economic and political dynamism. Six strategic thrusts or high-level initiatives arising from the strategic vision have been reviewed, and three are relevant for flexible learning pathways: thrust 1: Enhancing Inclusiveness towards an Equitable Society; thrust 2: Improving Wellbeing for All; and thrust 3: Accelerating Human Capital Development for an Advanced Nation. Based on the government's mid-term review, new priorities and emphases, known as pillars, were identified for the period 2018–2020. Of relevance here are pillar II: Enhancing Inclusive Development and Well-being, and pillar IV: Empowering Human Capital.

Based on current sentiments, the new priorities and emphases noted above will be implemented in the 12th Malaysia Plan 2021-2025. In the context of higher education, these new priorities and emphases need to consider the shifts identified in the MEB(HE) 2015 - 2025. The links between the overarching goal of lifelong learning, pillar II: Enhancing Inclusive Development and Well-being, and pillar IV: Empowering Human Capital are expected to have direct implications for flexible learning pathways among equity and disadvantaged groups.

CHAPTER 3: SYSTEM-LEVEL APPROACHES FOR SUPPORTING FLPS

3.1. Introduction

This chapter presents an analysis of the policies, instruments, and practices that are relevant to the system that supports Malaysia's approach to FLPs in higher education. This analysis was based on three main sources of information and data: desk research, IIEP's *International Survey on Policies, Instruments and Practices for Developing Flexible Learning Pathways into and throughout Higher Education – Malaysia*, and interviews with national stakeholders (quoted verbatim in some cases). The data and information collected were organized according to IIEP's outline on thematic subtopics for this study.

Following the report outline, this chapter will discuss the findings in seven main categories, which are: regulatory/policy frameworks, the actors involved, the key instruments and key practices supporting flexible learning in Malaysia, monitoring and evaluation of programmes and initiatives, constraining factors, and priorities for the future development of flexible planning pathways. It has to be noted at the outset that some policies supporting FLPs in Malaysia are well described by the respondents and have been systematically analysed in the literature, since these policies have been implemented since 2005. There are new policy initiatives which were mentioned in the MEB(HE) 2015–2025 but which are yet to be fully implemented. In the literature there were fewer discourses on these new policy initiatives in Malaysian higher education. In addition, interviewees could only postulate about their potential impacts on flexible learning pathways (FLPs), as there has been no substantial evaluation of these new policy initiatives. Thus, the discussion on these new policy initiatives in this chapter will be necessarily brief and lacking in critical analysis compared to the strategies implemented prior to 2015.

3.2. Interviews conducted at the national level

Eight respondents were selected at the national level, and all were interviewed. The respondents were mainly selected using the criteria/categories of the positions at the national level listed in the research guidelines for this study. Invitation letters for the interviews were sent to the respondents with a list of relevant research questions, including a brief research proposal for the study. The respondents selected were all key people and top management at the national level. They were responsible for higher education policy decision-making, specifically in areas such as the finalisation of policy intent, the design of policy regimes, the generation of relevant strategic initiatives, and the implementation of initiatives and programmes. Four of the top key respondents were from the Ministry of

Higher Education (MOHE), two from the Malaysian Qualifications Agency (MQA), one from the Malaysian Employers' Federations (MEF), and one from the Ministry of Human Resources (MOHR). The respondent from the MOHR was interviewed, although he was directly involved in the planning and implementation of FLPs at the technical and vocational education and training (TVET) rather than at the university level. However, as a member of the top management in the MOHR, he had information relating to FLP at the university level from his subordinates on the working committee level chaired by the MOHE. For this reason, his responses, where relevant, were considered as additional information at the data collection stage. The final seven respondents at the national level are listed in *Table 3*.

Table 3. The stakeholders/respondents interviewed at national level

Body / Organization	Date	No	Role of the interviewee	Type of interview
Ministry of Higher Education Malaysia (MOHE)	9 July 2019	1	Deputy Secretary of Coordination Division (Data Management)	In-person Interview
	17 July 2019	1	Deputy Undersecretary of Policy, Planning and Coordination Division, Higher Education Sector	In-person Interview
	25 July 2019	1	Director General, Department of Polytechnic and Community Colleges	In-person Interview
	26 July 2019	1	Director General of Higher Education	In-person Interview
Ministry of Human Resource (MOHR)	17 July 2019	1	Deputy Director, National Occupational Skills Standard (NOSS), Skills Development Department	In-person Interview
Malaysian Qualifications Agency (MQA)	8 July 2019	1	Chief Executive Officer (CEO)	In-person Interview
	8 July 2019	1	Head, Quality Assurance & Accreditation	In-person Interview
Malaysian Employers' Federation (MEF)	24 July 2019	1	Chief Executive Officer (CEO)	In-person Interview

Before the interviews, the researcher briefed the respondents about the study and the duration of each session. Then the researcher sought the respondents' permission to audiotape the session, and they were informed that the recording would be safely secured, and the identities of the respondents would remain confidential in the reporting stage. Respondents were also informed that in the process of the interview they were allowed to pause the interview and the audiotaping, if they felt that they were raising highly sensitive policy and operational matters. They were also reminded to refrain from mentioning or naming specific persons during the interviews. If any names were mentioned, the researchers would delete them from the quotes to be used in the report. This explanatory

session prior to the interview was unproblematic, as many of the respondents were already familiar with research protocols.

After the respondents had fully understood the process and their permissions were obtained, the interview sessions began. Each interview session had different levels of engagement and intensity; some sessions took about 30 minutes, but several others took one to one and a half hours to complete. On many occasions these were followed by an off-the record session, for better understanding of the issues raised but not to be used in the report. The interviews were conducted mostly at interviewees' offices except for one respondent from the MOHE, where arrangements for the interview session had to be made at a hotel. All interviews were conducted by the lead researcher and assisted by one research officer. Questions were based on the study's main themes.

3.3. Regulatory and policy frameworks supporting FLPs in higher education

Based on Malaysia's response to the IIEP's *International Survey*, there was no specific regulatory or legislative framework pertaining to flexible learning pathways. Arguably, there is one overarching (national) policy on lifelong learning supporting flexible learning pathways and the expected outcomes, which have evolved over time, are as follows:

a) Widened participation in higher education
b) Better responsiveness to diverse student needs
c) Reduced dropout rates/increased completion of studies
d) Strengthened equity in progression of studies
e) Facilitated labour market (re-)entry and career progression
f) Improved general education level of education/qualification in Malaysian society

This national policy to support flexible learning pathways covers both public and private sector, at the ISCED level 5 and ISCED level 6. To operationalize this national policy, the Ministry of Higher Education introduced the Open Entry Policy in 2005. This was the beginning of a flexible entry/learning system in Malaysia. In 2007, several supporting policies for FLPs were introduced to support flexible learning pathways in the Malaysian higher education system. Section 35 of the Malaysian Qualifications Agency Act 2007, which established the Malaysian Qualifications Agency (MQA) in 2007, stipulated, among other things, the establishment of the Malaysian Qualifications Framework (MQF), and support for flexible education by providing a choice of educational pathways and recognizing prior learning (RPL). Based on the IIEP's *International Survey*, and a review of official documents, since 2011 the MOHE and the MQA have fully implemented supportive administrative policies and instruments for the promotion of FLPs as follows:

- Validation/recognition of prior learning (based on work experience, non-formal learning, and/or informal learning) – APEL (A);
- Credit accumulation and transfer system (CATS);
- Establishment of APEL centres for information and guidance to prospective and current students in the higher education system.

Based on an analysis of the most recent document, the MEB(HE) 2015–2025, the overall objectives of FLPs in the context of the higher education sector were reiterated as significant by respondents among the top management at the MOHE, the Department of Higher Education, the Department of Polytechnic and Community College Education, and the MQA. Stakeholders representing the government sector are unanimous that the MEB(HE) 2015–2025 focused on lifelong learning was aimed at enabling Malaysians to meet the changing skill needs of a high-income economy, and maximizing the potential of individuals who are currently outside the workforce through reskilling and up-skilling opportunities. These focuses relate to Malaysia's strategic intent expressed as the Enculturation of Lifelong Learning and the creation of a Nation of Lifelong Learners. The stakeholders were of the view that these strategic intents were important in moving the nation towards an inclusive and vibrant society, in which opportunities are open for all to gain knowledge, competencies, and skills.

Based on the stakeholders' responses, there was general agreement that this policy on lifelong learning facilitated re-entry to higher education after individuals had dropped out of the system for personal or other reasons. Equally, this policy intent was viewed as appropriate in the context of increasing access to higher education for equity groups, such as the B40, disadvantaged groups, and persons with disabilities. No less important to respondents from the MOHE and MQA was the emphasis on a learning environment/system appropriate to the needs of equity groups, as this forms a major support system.

3.3.1. Policy on lifelong learning

At the outset, it is important to differentiate national policies arising from strategic intent based on the five-year national development plans from policies that were internal to the ministries, which are generally referred to as operational policies.

Regulatory and policy frameworks supporting FLPs in higher education are based on the national policy on lifelong learning. In the Malaysian context, the national policy on lifelong learning was first introduced in 2006, based on strategic intent as expressed in the Eighth Malaysia Plan 2001–2005. The objective then was to "support the development of a knowledge-based economy and enhance productivity and competitiveness" (Malaysia, 2001: 15). Lifelong learning is a national policy that has been adopted by several ministries and then followed through based on appropriate strategies, programmes, and initiatives.

Flexible admission pathways and learning in higher education were introduced during the Ninth Malaysian Plan 2006–2010. This introduction began with the MOHE introducing a policy on Open Entry System and Open and Distance Learning (ODL) in Malaysia's higher education, in line with the national strategic intent to encourage lifelong learning for human resource development and competitiveness. This was the precursor to FLPs in the Malaysian higher education system.

3.3.2. Policy on open entry system and open distance learning

Ghosh *et al*. (2016) described open distance learning (ODL) as follows: it provided flexible educational opportunities in terms of access and multiple modes of knowledge acquisition; flexibility was reflected in the availability of choices for educational endeavours anywhere, anytime, and anyhow; access was about opportunities made available to all, freeing learners from constraints of time and place; and with the facilitation of advanced ICT and other digital technology, multiple modes have enabled the use of various education delivery systems and learning resources.

The Open University Malaysia (OUM), the Wawasan Open University (WOU), and the Asia E-University (AeU) were private universities that were established and adopted the open entry policy in 2006. These universities then proceeded to offer higher education based on both open entry and ODL. However, prior to the open entry policy and ODL, other universities had already offered open and distance education (ODE). This was a dual mode adopted by both public and private universities: Universiti Sains Malaysia (USM); Universiti Teknologi Mara (UiTM); Universiti Kebangsaan Malaysia (UKM); Universiti Malaya (UM); Universiti Putra Malaysia (UPM); Universiti Utara Malaysia (UUM); Universiti Multimedia (MMU); Universiti Tun Abdul Razak (UNITAR); and Universiti Islam Antarabangsa (UIAM).

As far as ODL was concerned, interviews with top management of the MOHE and the MQA provide some background to this policy. The regulatory framework and policy on ODL, which supported FLPs, were developed based on the practices of several Malaysian higher education institutions, such as Universiti Sains Malaysia (USM), Universiti Teknologi Malaysia (UTM), and Universiti Teknologi MARA (UiTM), in terms of the entry requirements to their distance education programmes. For example, USM's Distance Education Programme (*Rancangan Pendidikan Jarak Jauh* or RPJJ), which started in 1971, has offered courses equivalent to those pursued by full-time students in the campus/university. The period of study under USM's programme was extended from a minimum of five years to a maximum of 12 years. The policy on entry requirements was more relaxed than full-time study, and work experience was taken into consideration.

Arguably, these were the precursors to the current policy on the Recognition and Accreditation of Prior Experiential Learning (APEL) being adopted in the higher education

system. These practices were very well received by non-traditional learners re-entering higher education, since they formed an alternative entry route for non-traditional learners, who were normally adult students, less qualified academically but possessing relevant work experience to enrol in a programme of study (MQA, 2012).

3.3.3. National qualification framework

At the initial stage of formulating the policy framework, the private and public higher education sectors were regulated under a different set of policies. The legislative/regulatory base for tertiary education (higher education, TVET, and the skills sectors) in relation to FLPs comprised the following:

- The Private Higher Educational Institutions Act 1996 (PHEI Act 1996)
- National Skills Development Act 2006 (NASDA Act 2006)
- Malaysian Qualifications Agency Act 2007

Within the public higher education sector, there were different arrangements for policy implementation. The technical and vocational education and training (TVET) institutions were in essence government departments with no autonomy, which had to comply with the requirements of both the National Skills Development Act 2006 (NASDA Act 2006) and the Malaysian Qualifications Agency Act 2007. Public universities, which were established as public statutory bodies, had some autonomy in academic matters at the initial stage of the implementation of the MQA Act. However, according to the two respondents from the MQA, "public universities have to follow the MQA's rules and regulations if they wanted their programmes and qualifications to be accredited and listed in the MQA's Malaysia Qualification Register" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). Section 81 of the Malaysian Qualifications Agency Act 2007 (Act 679) provides that the Agency shall establish and maintain a national register known as the Malaysian Qualifications Register (MQR), which is a reference point containing programmes, qualifications, and higher education providers accredited under the Act (MQA, 2009). These programmes or qualifications (i.e. certificate, diploma, advanced diploma, or degree) must conform to the Malaysian Qualifications Framework (MQF). Despite this regulatory requirement, the respondent from MQA questioned why "public universities continue to question the MQA's role in academic matters in HEIs" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). Underlying this contestation between the MQA and public universities is the issue of the erosion of public universities' autonomy on academic matters.

Effectively, as of 2007 onwards, all national policies with respect to the National Qualifications Framework (NQF), the validation/recognition of prior learning (based on work experience, non-formal learning, and/or informal learning), the credit accumulation and transfer system (CATS), and information and guidance to prospective and current students

in the higher education sector were framed in the context of the policy-making environment and governance arrangements between the MOHE/MQA and higher education institutions. Interviewees at the MOHE and MQA highlighted the fact that the regulatory regime and policy framework supporting FLPs must be cognizant of the Malaysian Qualifications Framework (MQF), which was first established in 2007. It is the sole responsibility of the MQA to continuously update this document and align it with evolving policies at the MOHE level. Indeed, qualifications frameworks are not static statements existing in perpetuity; they are dynamic, and require periodic revisions to serve their purpose in higher education which itself is constantly changing (MQA, 2017:i).

3.3.4. Policy on accreditation of prior experiential learning

The policy that allowed for the Accreditation of Prior Experiential Learning (APEL) was implemented in 2011. This policy has been identified as a pathway to access the various levels of qualifications set under the MQF. For now, APEL for Access (A) is about charting access into the certificate, diploma, Bachelor's, and Master's degree programmes of study. The APEL for Credit Award (C) is the award of credits for prior experiential learning towards a course in an accredited programme of a higher education provider (HEP).

Policy on articulation

The articulation programme was another policy initiative under the MEB(HE) 2015–2025 that supports the national policy on credit accumulation and transfer systems (CATS). The policy on articulation rolled out in 2018 and is now being implemented, providing more flexibility for students in certain categories of HEIs. Arguably, this is one of the outcomes of inter-ministry collaboration that achieves national policy objectives on human resource development. Previously, there were no clear career pathways for the graduates from TVET institutions to further their studies, therefore the articulation programme allows students to pursue a Bachelor's degree and beyond at public universities by matching the courses, requirements and coursework at vocational colleges with that at higher education institutions. For example, the MOHE with the Malaysian Technical University Network (MTUN) comprising four universities — Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Teknikal Malaysia Melaka (UTeM) , Universiti Malaysia Pahang (UMP) and Universiti Malaysia Perlis (UniMAP) — and the professional body for technologists and technicians, the Malaysia Board of Technologists (MBOT), have collaborated in establishing newly developed Bachelor of Technology Degree (BTech) programmes in specific technology fields (NST, 2019).

> We also work with other ministries, such as the Ministry of Human Resources. Their TVETs are assessed in their own right, not as an affiliation. Students from TVET, from other ministries such as the MOHR, can get access to higher education at our public universities. For example, students who graduated from institutions from the

Department of Skills Development can proceed to study in our public universities. This has been articulated starting from last year or early this year. The policy was implemented starting from last year (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Arguably, a holistic approach to FLPs should include pathways for getting into the HE system, going through the system, and getting out of the system after studies are complete; this is the focus of this study. However, in Malaysia the focus of FLPs is primarily on gaining entry into education institutions. Once admitted, students are expected to survive in the mainstream or conventional learning environment, and MQA guidelines do not focus on the outcome of FLPs in terms of the absorption of graduates into the labour market. An assessment by a respondent from the MQA highlighted the existing gap between access and success in the higher education system: "while alternative admission pathways were already in place, the learning environment has not been very flexible for these non-traditional learners" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). This is despite the fact that the MEB(HE) 2015–2025 encouraged flexibility via digital and online technology in teaching and learning activities. This encouragement was premised on the idea that innovative teaching and learning would increase the success rate for non-traditional learners.

3.3.5. Policy on massive open online courses and e-learning

In this context of an environment with advanced communication and information technology, such as digitization, a policy initiative to establish Malaysian massive open online courses (MOOCs) and e-learning was pursued under the MEB(HE) 2015–2025. This policy provided Malaysians with an open online learning experience which was not previously widely available because of connectivity issues. A policy initiative on micro-credentials is the latest in the context of the development of lifelong learning in Malaysia. Presently, micro-credentials are not linked to academic programmes; rather, this is a free-standing policy geared towards continuous professional development programmes. Based on interviews with the MQA, the guideline that links micro-credentials to qualifications in the Malaysian higher education system is still being designed.

3.3.6. Equity in mind

In the context of people with disabilities in higher education, the Persons with Disabilities (PWD) Act, gazetted in 2008, complemented earlier lifelong learning and RPL policies with the specific needs of this group in mind, particularly in terms of learning environments. Arguably, PWD have missed opportunities to access higher education simply because universities were not equipped to cater for their learning needs. The MOHE's Blueprint on People with Disabilities in Universities is a testament to the intention to serve PWD better when they are in higher education institutions.

The Eleventh Malaysia Plan 2016–2020 underscored equally novel intentions for B40 households (B40). Students from B40 households were identified as "qualified to access higher education via the alternative admission pathway, which was an admission over and above the agreed number of enrolled students via the conventional admission system in public universities" (MOHE, top management, MY/Nat/DG/ID01, in-person interview). The MOHE targeted at least 20 per cent admission to HEIs from disadvantaged groups (MOHE, top management MY/Nat/DG/ID01, in-person interview).

To sum up, policies at the national level for the promotion of lifelong learning were adopted at the MOHE level. A regulatory regime was formulated with specific policies, taking into account the governance arrangements between the MOHE and higher education institutions during the early phase of implementation. Subsequently, policies were introduced covering both the public and private higher education sectors for the design of a common enabling mechanism within the MQA's learning pathways, primarily to facilitate alternative admissions and articulation, flexible learning environments for diverse groups of non-traditional learners, and the identification of qualification nomenclatures or titles, such as Bachelor's, Master's, or PhD.

3.4.   Actors in the policy development and implementation of FLPs

Public policy making and implementation in the national context necessarily involve several actors at the inter- and intra-ministry levels (Morshidi and Norzaini, 2014). A major success factor in policy formulation, subsequent implementation, and evaluation in such an organisational structure is the quality of leadership in the leading ministry.

Based on the responses of stakeholders from the MOHE, MQA, and the MEF, in fact the MOHE was the leading ministry for the lifelong learning agenda in the higher education sector, with a Policy Division overseeing policy co-ordination, both inter- and intra-ministry. Typically, within the context of the MOHE policy-making environment/structure, interviewees emphasized the "MOHE's role in providing the strategic direction' (MOHE, top management, MY/Nat/DG/ID01, in-person interview), drawing up policy frameworks in consultation with the Attorney General Chambers (AGC), and assessing the 'appropriate policy framework for FLPs to be designed by the MQA" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). These instruments are then reported on in policy co-ordination meetings between the MQA and the Department of Higher Education, MOHE.

Within the MOHE, the Department of Higher Education and the Department for Polytechnic and Community College Education were the main players in translating national and ministry agendas into appropriate strategies for implementation. Currently, the MEB(HE) 2015–2025, outlines the strategies, plans, key performance indicators, responsible

departments, institutions, and agencies within a number of strong enabling legal frameworks (MQA, 2017: 1).

3.4.1. Malaysian Qualifications Agency

The Malaysian Qualifications Agency (MQA) was established on 1st November 2007 with the enactment of the MQA Act 2007. The Agency is an independent self-governing body that derives its mandate from the MQA Act, and which functions under the purview of the Minister at the Ministry of Education. It receives "60 to 70 per cent of funding from the government and operates independently with accreditation and policy decisions finalised within the Agency" (MQA, top management, MY/Nat/CQA/ID02, in-person interview).

The MQA is the main player in quality assurance and accreditation in the Malaysian higher education system. According to the MQA's top management, Section 6 of the MQA Act 2007 (Act 679) outlines the functions of the MQA, which include:
   a) Implement and update the Framework;
   b) Accredit programmes, qualifications, and higher education providers;
   c) Conduct institutional audit and review of programmes, qualifications, and higher education providers;
   d) Establish and maintain a register to register programmes, qualifications, and higher education providers;
   e) Conduct courses, training programmes, and provide consultancy and advisory services relating to quality assurance;
   f) Establish and maintain liaison and cooperation with quality assurance and accreditation bodies in higher education within and outside Malaysia;
   g) Act as a qualifications reference centre on accredited programmes, qualifications, and higher education providers;
   h) Advise the Minister on any matter relating to quality assurance in higher education;
   i) Do all things reasonably necessary for the performance of its functions under this Act.

MQA assures quality in higher education through programme and institutional accreditation as well as qualification recognition. The Agency establishes policies, practices, and systems pertaining to the qualifications framework, standards setting, and quality assurance that are nationally appropriate and internationally benchmarked.

Arguably, public universities as public statutory bodies have experienced mixed fortunes with respect to their institutional autonomy. According to the MOHE's interpretation, even though public universities in theory can decide what aspects of the approaches and programmes interest them, in practice the MOHE has the means to incentivize public universities to come on board by allocating financial resources for the promotion of

programmes listed in the ministry's key performance indicators (KPI), such as the MOOCs. As the caretaker/guardian and implementer of the MQF, the MQA is responsible for creating mechanisms and instruments that support the implementation of the Malaysian agenda on lifelong learning. However, because of contestation with regard to who has the upper hand in academic decision-making, "public higher education institutions often overlooked the supporting role provided by the MQA. They tended to view the MQA as intruding in the authority of the university Senate in academic matters" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). For private higher education institutions, compliance with MQA regulations is a matter of institutional survival. This idea of working together for Malaysian higher education in general and FLPs in particular was expressed as follows:

> *Under the MQF, together we can build the framework for flexi education, together with the ministry, to identify the kinds of flexi education that the university wishes to lead. Normally, they will ask whether university X will lead this area, and university Y will lead another area. But the framework is that the MQA will be developing it* (MQA, top management, MY/Nat/CQA/ID02, in-person interview).

From the above, the MQA would have to navigate emerging challenges relating to the accreditation of higher education institutions and programmes in an ever-changing international and national higher education landscape. In the context of its legal framework, it has to re-examine its position vis-a-vis the MOHE to give real meaning to its independent status. Not doing so would mean that the MQA is merely implementing MOHE's policy without any independent assessment of the development of the higher education system and HEIs. This has evidently caused stress within the Malaysian Qualifications Agency (MQA) itself (Hazman, 2016).

3.4.2. Different levels of committees and administrations

On the surface, the influence of politics in the policy formulation and decision-making process in the Malaysian system appears to be entrenched, primarily because of the structure of government, which appears to prioritize the Minister's decisions and input (Morshidi and Norzaini, 2014). While the civil service controls the procedural steps involved in making policy, in most instances decisions require some form of ministerial endorsement. However, in practice policies are systematically determined by the inputs and output of government bureaucracy (Fazni and Noraini, 2018). In the past, inputs from community leaders were incorporated at the foundation of these structures or hierarchies of policy formulation processes. Now, the usual practice is to organize a town hall session to discuss issues and policy direction. This attempt at engaging the public or different stakeholders in the process of policymaking shows a national inclination to venture into other innovative ways of policy processing (Fazni and Noraini, 2018).

According to Morshidi and Norzaini (2014), public policymaking and implementation in Malaysia were the responsibility of several joint committees. Major national policy directions are set by the Cabinet of Ministers, but programmes and initiatives such as those pertaining to FLPs are framed, detailed, implemented, and co-ordinated at two levels of joint committees, namely the Intra-Ministry Committee and the Inter-Ministerial Committee. Feedback on national policies is generally reported back to the Cabinet by the minister responsible for the relevant national policy proposals. After the Cabinet meeting there would be a post-cabinet meeting at the ministry.

3.4.3. Intra-ministry committees

Various types of committees were set up to assemble the actors and key players involved in the development and implementation of FLPs. For example, intra-ministry technical committees used a bottom-up approach in their decision-making process, involving external bodies or entities. In the case of FLPs, this constituted a joint technical committee involving the MQA and the Higher Education Department of the MOHE. Policy agendas would normally be discussed at the joint technical committee between the MQA and the Department of Higher Education (JPT). Then the matter would be brought up at the section heads meeting. However, "if there were any changes in the plan during the process, the matter would then be brought up with the Minister" (MQA, top management, MY/Nat/CQA/ID02, in-person interview).

3.4.4. Inter-ministerial committees

Other committees are the inter-ministerial committees formed among members of the relevant ministries – for example, the inter-ministerial committee for TVET chaired by the Minister of Education (MOE). This committee is responsible for pushing the TVET programme agenda. The committee members consist of the Secretary Generals of the relevant ministries, including the Secretary General of the Ministry of Human Resources (MY/Nat/DG/ID01).

Other stakeholders outside the ministries are also involved in policy deliberations under this inter-ministerial joint-committee set-up. Various stakeholders are usually invited to provide their inputs and feedbacks on the development of policies and the implementation of FLPs. For example, on many occasions the Malaysian Employers' Federation (MEF) was invited to sit on the joint technical committee. They have provided input that could determine access to higher education from the demand side (non-traditional learners, such as part-time students). They were also relevant in ensuring progression to the labour markets. Interestingly, while these committees were usually chaired by ministry senior management personnel, there were specific instances where stakeholders such as the Malaysian

Employers' Federation were given a major role in the joint technical committees, such as to act as co-chair.

> *Basically, we are very much involved in discussions with the Ministry of Education regarding TVET education. One of our members is the co-chairperson for the TVET education development programme. Also, we are very much part of this council for technical learning within the Ministry of Human Resources. We are involved in the National (Technical) Skills Development Council – MPKK [Majlis Pembangunan (Teknikal) Kemahiran Kebangsaan]* (MEF, top management, MY/Nat/DEF/ID03, in-person interview).

In the Malaysian policy-making environment, many decisions are made at the inter-ministry or intra-ministry level, and such a set-up demand consensus-building. Sometimes intuitions play an important part in decision-making, as empirical data may not be available (Morshidi and Norzaini, 2014). Inter-ministry rivalries are common, and such was the case with lifelong learning, where many ministries were involved in its implementation. Notably, resources were allocated based on programmes and initiatives, and the ministries involved wanted resources to push their own agendas and programmes. At the intra-ministry level, policy formulation, co-ordination, and resources allocation are the responsibilities of the Secretary General. Depending on the personality of the Secretary General, the Ministry's role may at times overlap with the role of the Director General of Higher Education, creating tension in the process. The roles and responsibilities of the Director General of Higher Education are stipulated in the Universities and University Colleges Act 1971 and subsequent amendments, with a focus on operational matters.

The political arrangement, power structure, and multi-ethnic characteristics of Malaysia have made it necessary for consultations to be very selective and strategically managed. Even though some transparency has been injected into the system, bureaucrats still have a strong hold on the policy-making process. Technical committees were made up mostly of bureaucrats. Occasionally, academics as key experts were brought in to provide highly technical input, and they would stay to follow through implementation at the institutional level. However, bureaucrats moved between ministries, and there was no guarantee that replacement personnel would have the same positive inclinations towards FLPs. In this situation, the MQA's role would be critical in sustaining policy and implementing FLPs.

3.5. Key instruments supporting FLPs

The national qualifications framework, quality assurance mechanisms, credit accumulation and transfer systems (CATS), and academic and career advice and guidance on testing under APEL are important key instruments in supporting FLPs. These instruments support assessment and testing towards the recognition of prior learning and experiences, thus

creating value for non-formal and informal learning. In addition, these instruments facilitate entry and progression, mobility, and transfer of learning in different settings for students in higher education. Information on the key instruments supporting FLPs is provided in some detail in the MQA's guidelines on open and distance learning (ODL), Accreditation of Prior Experiential Learning (A) (providing access to academic programmes), Accreditation of Prior Experiential Learning (C) (course credit transfers), massive open online courses (MOOCs), and micro-credentials.

3.5.1. Open and distance learning

In the case of open and distance learning (ODL), which has been implemented since 2006, it is now gone beyond mere guidelines; it is at the stage of implementing a code of good practice for programme accreditation (MQA, 2019b). Briefly, in terms of the criteria and standards for ODL programme accreditation, the guideline outlines practices that are in line with internationally recognised good practice. These are meant to assist HEIs in achieving the standards in each of the seven areas of evaluation and stimulate HEIs to continually improve the quality of their ODL programmes, which will contribute to widening access to higher education (MQA, 2019b). The seven areas that comprise good practice in the offering of ODL in Malaysia, which will be assessed for the purpose of programme accreditation, are: programme development and delivery/curriculum design and delivery; assessment of student learning; student selection and support services; academic staff; educational resources; programme management; and programme monitoring, review, and continual quality improvement.

3.5.2. Accreditation of experiential prior learning

For the Accreditation of Prior Experiential Learning (APEL (A)), giving access to academic programmes in higher education, guidelines for good practice in its implementation were produced, first to create awareness and encourage more higher education institutions to offer flexible admission and learning through this mechanism, and second to ensure consistency in approaches to accrediting prior learning. The MQA published the Guideline for Code of Practice on Accreditation of Prior Experiential Learning in 2013 to guide HEIs in implementing APEL (A) at their respective institutions. Briefly, all APEL (A) provisions should be underpinned by the following core principles:
- Prior experiential learning should be recognized regardless of how and where it was acquired, provided that the learning is relevant to the learning or competency outcomes;
- Assessment should be evidence based, equitable, unbiased, fair, flexible, valid, and reliable;
- Assessment should be undertaken by experts/practitioners in the subject content or skills area, policies, and procedures;

- Assessment methods should accommodate the literacy levels and experiences of students, hence providing ways for students to demonstrate the required outcomes;
- Decisions should be accountable, transparent, and subject to appeal and review;
- Information and support services should be actively promoted, easy to understand, and recognize the diversity of learners;
- Quality assurance mechanisms should be clear and transparent to ensure confidence in decisions (MQA, 2013, p.6).

Accreditation of Prior Experiential Learning (course credit transfers) is a learning evaluation process (informal and non-formal) of an individual based on cumulative experiences (knowledge and skills), to obtain credit transfer for course(s) in the programme enrolled. In practice, it should reduce redundant learning for students. Other objectives are to encourage the admission of adult learners to higher education programmes, and to reduce the costs and time required to complete studies (MQA, 2020). Briefly, HEIs interested in conducting APEL (C) must comply with the following APEL (C) policies:

i. The provision is applicable to learners registered at any HEI, regardless of the mode of entry, whether through the conventional or APEL (A) route;

ii. It should encompass the assessment of prior experiential learning for the purpose of credit awards. Learning acquired through MOOCs or any other methods of self-learning should also be considered under this provision.

iii. All HEIs can implement APEL (C) at their respective institutions ONLY after obtaining the MQA's approval. Higher education providers which intend to implement APEL (C) must comply with the prescribed APEL (C) policy;

iv. APEL (C) will be implemented for all areas and at all levels of qualification in the MQF. For the postgraduate level of study, the credit award is limited only to courses in programmes conducted via coursework and mixed modes;

v. APEL (C) is confined to courses in programmes that have obtained at least provisional accreditation from MQA;

vi. Courses that form part of the programme structure under professional bodies may be considered for APEL (C), subject to acceptance by relevant professional bodies. HEIs shall be responsible for securing such approval. Generally, credit award policies through APEL (C) allow a maximum credit transfer of 30 per cent of the total graduating credits of a programme. This percentage is additional to the provision allowed by existing credit transfer policies (MQA, 2020).

3.5.3. Massive open online courses

According to the MQA's Guiding Principles of Credit Transfer for MOOC (CTM), the award of credits through this process is given on the basis of recognizing the learning acquired and not for the experience gained from the MOOC itself (MQA, 2016). The principle establishes that the learning acquired by the individual through MOOCs and the credits awarded must

be equivalent to the corresponding learning and credit value of the course applied for credit transfer (MQA, 2016). To ensure the integrity and credibility of the assessment system in granting the relevant credits for MOOC, the MQA has set the following criteria that must be adhered to when awarding credit for MOOCs taken by individuals, whether during the course of their formal studies or for personal enrichment prior to their enrolment in a HEI (MQA, 2016). These criteria are authenticity, coverage/sufficiency/adequacy, relevancy, currency, and fairness and equity (MQA, 2016: 4–6). The criterion on fairness and equity is of prime importance, since it will ensure that the entire process does not advantage or disadvantage applicants in terms of their gender, age, or cultural differences. This provides equal opportunities to all applicants without imposing unnecessary demands that may prevent them from demonstrating their competency/knowledge/skills.

3.5.4. Articulation programme

There is also an MQA guideline on articulation programmes involving Technical Education and Vocational Training (TVET) programmes. Notably, the TVET pathway is one existing route that allows Malaysians to enter or re-enter higher education based on prior learning and experience, knowledge, and skills. Through this articulation framework, after completing community college programmes or certificates from other skills institutes, students may be admitted into polytechnics based on a SPM qualification that was the minimum academic qualification required. From polytechnics they can then move on to public universities under the Malaysian Technical Universities Network. In the Malaysian context, TVET is defined as an education and training process that has occupational direction, with a major emphasis on industry practices.

3.5.5. Micro-credentials

Micro-credentials are the latest addition to the list of instruments for achieving FLP objectives. It is a term that encompasses various forms of certification, focusing on much smaller modules of learning than those covered in conventional academic awards. As such, it allows learners to complete the required work over a shorter period (Milligan and Kennedy, 2017). Micro-credentials are 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, 2017). Micro-credentials are new in the Malaysian higher education environment, and they appear to be very complex. While the MQA's guideline on micro-credentials is available to encourage, support, and guide all types of micro-credentials (MQA, 2019a), HEIs are still waiting for a code of practice for micro-credentials beyond their current adoption for continuous professional development programmes.

Based on literature and document reviews, it can be summarized that the introduction and implementation of ODL, APEL, MOOCs, micro-credentials and articulation frameworks in Malaysian higher education are highly organized and systematic, with the MQA providing guidelines on key and best practices. However, guidelines are at various stages of development, particularly with respect to MOOCs and micro-credentials. The adoption of these instruments is voluntary for most universities, except for universities that were established fit-for-purpose such as OUM, WOU, AeU, and UNIRAZAK. Universities that have been implementing ODL via part-time or online modes were more aware of the benefits of APEL, and were receptive to the potential of MOOCs and micro-credentials in their institutions. Understandably, these private universities are very receptive to new developments that might lead to their improved sustainability.

3.6.   Key practices supporting FLPs

Instruments that were designed at the national level, in line with the MQA's Qualifications Framework (MQF), quality assurance (QA) process, and programme standard settings, were already implemented at the institutional level in some HEIs. Six private and public higher education institutions spearheaded the re-entry of non-traditional learners and learners from disadvantaged and equity groups into higher education based on open entry and APEL programmes. OUM, WOU, UiTM, INTI, AeU, and UNIRAZAK were chosen because of their history and focus on non-conventional admission to higher education, and their experience with flexible learning environments. These institutions could then choose to lead certain aspects of the ODL and APEL programmes, as explained by a respondent from the MOHE who was familiar with the establishment of higher education institutions in Malaysia:

> *To a certain extent, some of the public and private universities have been established to cater for these students. For example, Wawasan Open University is a part-time learning university. The AeU is a university for online learning. The Open University Malaysia is for distance learning. The government is deemed to have done the right thing by making a strong decision on this. Distance learning in USM started in the 1990s* (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

3.6.1. Open and distance learning

The MQA (2019) operationalizes ODL as the provision of flexible educational opportunities in terms of access and multiple modes of knowledge acquisition. In this respect, flexible refers to "the availability of choices for educational endeavours anywhere, anytime and anyhow. Access is about the opportunity made available to all, these two freeing learners from constraints of time and place". For this to be possible, there must be multiple modes of delivery and learning resources.

The MQA code of practice for ODL has served many parties, namely dedicated ODL HEIs such as the Open University Malaysia (OUM) and Asia E-University (AeU), dual mode HEIs offering both distance learning and conventional programmes (such as Wawasan Open University), and conventional HEIs offering individual distance learning programmes (e.g. Universiti Sains Malaysia, Universiti Teknologi Malaysia, Universiti Putra Malaysia, and Universiti Teknologi MARA).

Based on the interviews with national stakeholders and a review of the MQA guidelines, it can be briefly summarized that "a programme of study is deemed an ODL programme if more than 60 per cent of the courses offered in the programme are conducted via open and distance learning" (MQA, 2019: 2). In addition to this requirement, "for a course to be considered an ODL course, at least 80 per cent of the student learning time (SLT) must be delivered via open and distance modes" (MQA, 2019:2).

3.6.2. Accreditation of prior experiential learning

The policy initiative on APEL for Access (A) was introduced in 2010 under the PSPTN's strategic intention to promote lifelong learning. Following APEL (A), the Malaysian Education Blueprint 2015–2025 introduced policy initiatives on improving the credit accumulation and transfer systems (CATS), also known as APEL (C). *Table 4* serves to illustrate the main characteristics of APEL (A) and APEL (C). These two instruments serve different purposes. APEL (A) is aimed at widening access to programmes offered by HEIs, and is applicable only to Malaysians with lower academic qualifications but having the required working experience which can be systematically assessed. As the number of Malaysians that are expected to benefit from APEL (A) is large, this facility is therefore open to citizens only. Any HEIs can offer APEL (A) to qualified students. APEL (C) is for course credit awards in an academic programme, and is open to all applicants who have passed the required assessment. All HEIs can implement APEL (C) at their respective institutions, but only after obtaining the MQA's approval (MQA, 2016).

Table 4. Comparison of APEL (A) and APEL (C)

ITEM	APEL (A)	APEL (C)
Purpose	Recognize the learning regardless of how and where it was acquired for the PURPOSE OF ACCESS TO A PROGRAMME	Recognize the learning regardless of how and where it was acquired for the PURPOSE OF COURSE CREDIT AWARD in an academic programme pursued.
Appointment of Higher Education Provider/Higher Education Institution	HIGHER EDUCATION PROVIDERS ARE NOT REQUIRED TO APPLY FOR MQA APPROVAL to accept APEL (A) students.	HIGHER EDUCATION PROVIDERS ARE REQUIRED TO APPLY FOR MQA APPROVAL to conduct APEL (C). PILOT HIGHER EDUCATION PROVIDERS: OUM, WOU, UiTM, and INTI International University.
Application for APEL Assessment	Candidates are required to SUBMIT the application for APEL (A) certification to the MQA or an APEL Centre.	Students are required to SUBMIT the application for assessment to THE HIGHER EDUCATION PROVIDERS.
Assessment Instrument	ASSESSMENT INSTRUMENT OF APEL (A) is standardized and administered nationwide.	ASSESSMENT INSTRUMENTS OF THE HIGHER EDUCATION PROVIDERS ARE VARIED depending on the nature of the course and students'/HEIs' preference.
Period of Appointment/ Approval	OPEN-ENDED	5 years
Basic Requirements	1. ONLY APPLICABLE TO MALAYSIANS 2. Pass the Aptitude Test and Portfolio 3. MINIMUM AGE REQUIREMENTS: • Certificate – 19 years of age • Diploma – 20 years of age • Bachelor's Degree – 21 years of age • Master's Degree – 30 years of age • Doctoral Degree – 35 years of age	1) OPEN TO ALL 2) Pass assessment 3) NO MINIMUM AGE REQUIREMENTS
References	1. Guidelines to Good Practices: Accreditation of Prior Experiential Learning 2. APEL Handbook for Learners	Guidelines to Good Practices: APEL for Credit Award.
Administrator of Assessment	Coordination & Quality Assurance Reference Division, MQA	Standards Division, MQA

Source: MQA (2020).

The MQA developed a guideline for APEL (A) implementation in 2013. APEL (A) enables students to enter/re-enter higher education based on their prior experience, knowledge, and skills, even if they do not meet the conventional academic requirements to enter higher education. In fact, based on APEL (A) students can proceed from one level to the next by fulfilling the set of criteria and requirements.

> *Currently, we have the APEL (A) for level 3 up to level 7. APEL is used to assess how the programme fits into the flexible alternative admission pathways. We have criteria that certain individuals must fulfil. We assess their readiness in terms of their competency. We allow them access to a certain level of education. However, it is only the access that enables them to pursue the degree of their dreams. The individuals will have to go through the system to complete the programme to get a degree. We only enable individuals, who need not go through the conventional requirements to provide them leverage based on their experiential learning as the ticket to enter a programme of study* (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

Subsequently, appropriate guidelines for implementation were prepared to support students to transfer within and between institutions. The MQA released the guidelines in 2016, setting the criteria and procedures as follows:

> *Accreditation of experiential learning is a system of awarding of credits. Under this system, we give recognition to individuals who have experiential learning related to the specifics of a particular degree course. Individuals who can demonstrate that they have met the requirements of the course will be assessed and they will be awarded certain credits. This facilitates those adult learners who have relevant experience. It means that they do not need to start their study right from the beginning. Their knowledge they learned from their work life is given recognition. Nevertheless, their experiences have to be assessed* (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

Based on our interviews, MQA respondents were of the opinion that although APEL (C) allows for the transfer of credits between higher education institutions, there were very few applicants in view of the difficult and time-consuming task of mapping courses between faculties within the same institution and from one institution to another (see *Figure 7*). However, there were more applicants within the same institution, for instance at the OUM which has a tradition of offering alternative pathways to higher education. The OUM regards APEL (C) as a mechanism to shorten a student's period of study. For this, at OUM APEL (C) has been implemented systematically. Typically, however, in a traditional comprehensive university (such as UNIX in *Figure 7*), credit awards based on APEL (C) are not widely adopted. Many faculties want to retain students for the prescribed duration of study, and this has resulted in many unsuccessful applications.

Arguably, in most instances, if students are successful in their applications to transfer between institutions, they end up repeating courses at the receiving institutions. Furthermore, the MQA has set the maximum allowable credit transfer of 30 units, and as a consequence many learners were unable to shorten their period of study.

Figure 7. Credit transfer status
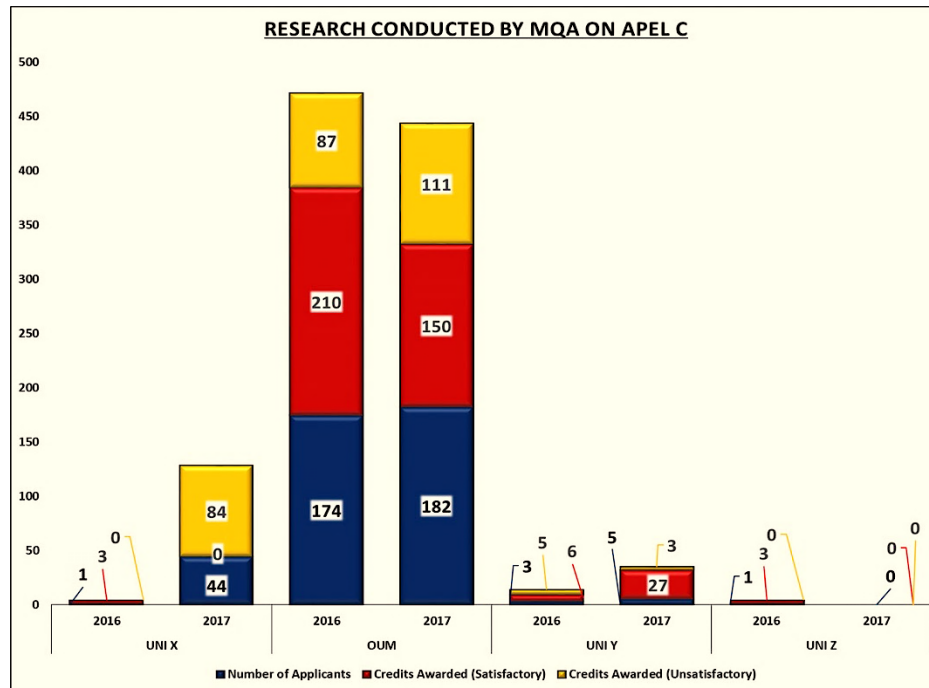
Source: Mohamad Afzhan et al. (2019).

In addition, MQA has also released a guideline for credit transfer for MOOCs (CTM) to support the Globalized Online Learning (GOL) initiative, highlighted in Shift 9 of the MEB(HE) 2015–2025. This guideline recognizes MOOCs as an avenue for the acquisition of learning, providing recognition via the award of credits and reducing the duplication of learning (MQA, 2016a: i). Based on the MQA's guideline, the award of credits through the CTM process is on the basis of recognizing the learning acquired, and not for the experience gained from the MOOC itself (MQA, 2016a; 3). Furthermore, the learning acquired by the individual through a MOOC and the credits awarded must be equivalent to the corresponding learning and credit value of the course applied for credit transfer (MQA, 2016a:3).

3.6.3. Articulation programme

Articulation programmes in the higher education sector are offered by the Malaysian Technical Universities Network (MTUN), which is a network of universities focusing on science and technology. The programme was implemented in September 2019. A new Bachelor of Technology Degree (BTech) in specific technology fields was initiated to create

more career pathways and opportunities for Technical Education and Vocational Training (TVET) students through collaborations between the MOHE and the Malaysian Technical University Network (MTUN) comprising four universities – Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Teknikal Malaysia Melaka (UTeM), Universiti Malaysia Pahang (UMP), and Universiti Malaysia Perlis (UniMAP) – and the professional body for technologists and technicians, the Malaysia Board of Technologists (MBOT). Through the Technicians Act 2015 (Act 768) MBOT established the Technology and Technical Accreditation Council (TTAC), which is a Joint Technical Committee with the Malaysian Qualifications Agency (MQA) that performs accreditation on professional technology and technical programmes (NST, 2020). However, these programmes adhere to a very strict disciplinary and work experience requirement for admission; for instance, applicants "should have at least two years of working experience" (MOHE, top management, MY/Nat/DDPPC/ID01, in-person interview).

> *Under the new articulation for TVET, for a Bachelor's degree in engineering you can enter from a diploma in engineering, but some courses need to have a bridging course. However, from engineering to engineering, no bridging is required, just as from technology to technology, no bridging is required. That is how we accommodate people who have gained extra qualifications beyond the SPM, even though their SPM does not qualify them to enter a degree course. This is the new wisdom. The three years they spent in their studies, plus their work experience, is enough to offset their deficiency of having a SPM-level qualification only. This is the new thinking. Formerly, a person without enough credits at the SPM would not be allowed to enter MTUN. However, by this September 2019 they will be allowed to do so, if they have a diploma certificate, or the necessary work experience to enter the Bachelor's in Technology program* (MOHE, top management, MY/Nat/DDPPC/ID01, in-person interview).

The Ministry of Higher Education (MOHE) through the Malaysian Qualifications Agency (MQA), in collaboration with the Department of Skills Development (JPK) and the Ministry of Human Resources, continue to work together to produce quality TVET graduates, and eventually to mainstream TVET pathways comparable to the existing academic pathways in Malaysian higher education.

3.6.4. Massive open online courses

The MOHE launched the first four Malaysian MOOCs, consisting of first-year undergraduate common compulsory courses offered by Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM), Universiti Teknologi MARA (UiTM), and Universiti Malaysia Sarawak (UNIMAS). These MOOCs offered over 439 courses to 381,785 students (Open Learning Global Pty Ltd., 2020). However, the adoption and implementation of MOOCs in Malaysian higher education institutions was slow, which could be explained with reference to the

findings of a study by Atiaja and Proenza (2016). According to these authors, as an alternative education system, MOOCs should be considered from pedagogical, technological, and organizational viewpoints. They argued that the digital literacy of tutors and students was key for participation in MOOCs, with the aim that participants would acquire digital, social, and organizational competence (Atiaja and Proenza, 2016). Recognizing these issues, the MOHE through the MQA has provided enhanced guidelines explaining the benefits of and the principles of credit transfer for MOOCs, but it has not shown how to solve the technological issues.

Arguably, MOOCs are central in many programmes. As stipulated in the MQA's guideline and the MQF, MOOC credit transfer for APEL (C) shall not exceed 30 per cent of the total graduating credits of a specific programme of study and the maximum limit for credit transfer for MOOC based on various MQF levels.

The requirements for credit transfer and the conditions for credit transfer eligibility were set out. The problem with MOOCs "revolves around the process of mapping course content, which is time consuming, while a 30 per cent maximum limit for credit transfers is another item that has slowed down the adoption of MOOCs" (MOHE, top management, MY/Nat/DG/ID01, in-person interview). Other elements of MOOCs that may have a bearing on outcomes in the marketplace are the "criteria of awarding credit transfer, ways of authenticating MOOCs credentials, and verification of learning attainment/outcomes" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). Based on interviews with respondents from the MQA, in view of several teething issues, currently the guidelines only cover MOOCs for continuous professional development courses. The MQA is still preparing MOOCs guidelines for academic programmes. Based on information provided on the Malaysia MOOCs, the 20 public HEIs in Malaysia are at various stages of establishing and implementing MOOCs in their respective institutions (Open Learning Global, 2020).

3.7.   Monitoring the implementation of FLPs, including for equity groups

Post-2015, national lifelong learning policy and its objectives should not be viewed purely from a human resource and competitiveness perspective. Education Agenda 2030 and the SDGs will play an important role in determining the implementation and evaluation of lifelong learning and FLPs in Malaysia.

3.7.1. Sustainable Development Goals

The Sustainable Development Goals (SDGs) that were incorporated in the Eleventh Malaysia Plan 2016–2020, and earlier policies on lifelong learning, were re-emphasised in Malaysia's current Shared Prosperity Vision 2030 (SPV 2030).

From the responses of MQA's top management, it was possible to fully implement the national policy on lifelong learning and policies that support FLPs if HEIs included these agendas in their missions and visions. The interviewees at the MOHE were of the opinion that future policy reporting on lifelong learning and flexible learning pathways in Malaysia "needs to be aligned with the SDGs" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). Respondents from the MOHE responsible for policy co-ordination between the MOHE and other central agencies underscored "how pertinent and relevant Malaysia's emphasis on lifelong learning way back in the mid-2000s" was in the current context of the SDGs (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). Indeed, to them this was forward thinking on the part of the national policy-makers at that time.

However, linking lifelong learning with SDGs with a view to achieving the objectives of FLPs in Malaysia may take time. The Department of Statistics Malaysia (DOSM), as the focal point in the coordination of the development of SDG indicators, has published an assessment report on SDG indicators since 2016. In the context of higher education and this research on FLPs in Malaysia, the relevant SDG is SDG4, but other SDGs such as SDGs 5 and 10 are also relevant, particularly with respect to outcomes for equity and disadvantaged/marginalized groups.

With respect to FLPs and in relation to non-traditional learners and equity groups, the reporting has highlighted serious gaps in terms of data. A MOHE respondent reiterated these "gaps in data at the national and ministry levels" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). Factually, all these data on SDG indicators are important for policy evaluation, and need to be analysed in relation to data collected at the ministry and institutional level. Presently, as reported by one MOHE respondent, this has not been done, and the ministry is "still working on a central database" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). Naturally, in keeping with current technology and knowledge, the MOHE is exploring the potential of data analytics for this purpose.

From the assessment report by DOSM, data on SDG 4 related to Indicator 4.3.1, detailing the participation rate of youth and adults in formal and non-formal education and training in the previous 12 months arranged by sex, are only partially available despite annual data collection. Notably, data is only available for formal education and training at HEIs, and in fact this data is based on conventional admission and learning pathways. Similarly, data for Indicator 4.5.1, related to parity indices for all education indicators that can be disaggregated, are also only partially available. The data for Indicator 4.3.1 are collected from the MOE and MOHR, and the data for Indicator 4.5.1 are from the various ministries.

On SDG 5 with Indicator 5.1.1, on whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination based on sex, the data are available and are collected annually at the national level by the Ministry of Women, Family, and Community Development (MWFCD), Malaysia. The SDG 5 indicator, getting out from HEIs and into labour markets, is relevant to this study on flexible learning pathways, but the data were not disaggregated based on equity groups or on non-traditional learning pathways and non-traditional learners.

The data related to SDG Indicator 10.1.1, on the growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population, are available at the national, state, and strata levels. The DOSM undertakes household income surveys twice in five years. Notably, data for SDG Indicator 10.2.1, on the proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities, are only partially available despite data collection by the DOSM through household income survey and household expenditure surveys twice in five years. It seems that for planning, monitoring, and evaluation purposes, Malaysia is still grappling with data-related issues.

3.7.2. National level monitoring

An efficient monitoring process provides the information needed to ensure the effectiveness of programmes and the changes that need to be introduced to realize expected impacts.

At the national level, in September 2009 the Malaysian government set up Malaysia's Performance Management and Delivery Unit (PEMANDU) to lead change in the country and to ensure that its national transformation programmes were successfully delivered (World Bank, 2017: 17). PEMANDU has focused on the key areas where public services and the economy were most in need of reform. Education was considered a focus area for PEMANDU, and an Education Performance and Delivery Unit (PADU) was established and attached to the MOHE to monitor policy and programme implementation.

Before the PADU was established the MOHE had its own Projects Management Office (PMO) and all public universities established their own Project Management Offices (IPMO) to co-ordinate local policy implementation with the MOHE. These agencies have since been disbanded, and the main responsibility to monitor the implementation of government policy and programmes now lies with the Implementation Coordination Unit (ICU) under the Prime Minister's Department. At the MOE there is the Education Planning and Research Division (EPRD), and at the MOHE the responsibility lies with the Policy and Planning Division.

Arguably, after seven years of handholding by PEMANDU the respective divisions in the ministry should have been able to take ownership of their policy monitoring. However, the experience of all these agencies dealing with monitoring and evaluation was succinctly described as "[d]elivering on policy promises … often derailed by implementation challenges" (World Bank, 2017:17).

For higher education, monitoring the implementation of FLPs was the responsibility of the MOHE. At this level of monitoring, more needs to be done to address limitations and challenges related to the workings of inter-ministry technical committees, such as the need for continuous communication and engagement with relevant agencies and HEIs as good practice to discuss issues related to the allocation of resources, and the availability and quality of data related to higher education. In the past, data were not always available to the public. Now that some data are publicly available, the main limitation is the frequent changes in the definitions and coverage of the data. Data are not always presented in a format that is most useful for monitoring the implementation of FLPs. A holistic approach to data collection is necessary in dealing with these constraints. There has been a recognizable move towards the adoption of data analytics within the ministry, with the above-mentioned constraints and challenges appearing as a common outstanding item among respondents from the MOHE and MQA.

Meetings with stakeholders for feedback and inputs
For the MOHE, continuous engagement with the relevant stakeholders was viewed as an important part of the monitoring process since these were important sources of innovative ideas in the decision-making process to further improve the implementation of FLPs. Notably, there was a need to combine top-down control with bottom-up voices (World Bank, 2017). For instance, the MQA Council has representatives from the HEIs, who are responsible for providing relevant input and feedback:

> *This is why we are having a lot of cooperation with the universities, because they are giving feedback on the curriculum attributes and competencies required. At our level, we basically try to find out how many jobs are available, so that we can do the planning. Our tasks are at a different level. For example, once a year we have a meeting and presentation by TalentCorp, by Jobstreet, by Ilmiah, and other professional bodies to discuss the number of jobs available in a few years' time. The information they provide allows us to make our projection about the future job market* (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

The MOHE has made it compulsory for public universities to set up University Industry Advisory Groups to advise and undertake evaluations of the curriculum being offered. Their feedback and recommendations are channelled to the university's Board of Directors for further deliberations at the MOHE. The setting of yearly University Key Performance Indicators (KPIs) and half-year reviews by the MOHE form an important platform for

continuous monitoring with implications for funding. Indeed, performance incentives through the monitoring and reporting of KPIs are very important for MOHE and other agencies, even today.

Level of awareness

One of the challenges for implementing FLPs has been the low level of awareness among academics at the universities. As a result, the implementation of programmes moved very slowly. Indeed, this has been a major psychological constraint to cascading and scaling up the implementation of FLPs and other related initiatives in HEIs. This low level of awareness, according to top management within the MOHE, is widespread in both public and private universities, and for both new and existing initiatives by the MOHE:

> *There are still spots where lecturers are not aware that we are moving towards this flexible learning. For example, Curtin University in Sarawak, Miri. They have a global classroom, where the students from Curtin University in Australia and in Malaysia sit and listen to the same lectures together. They do their assignments together, even though physically they have never met. The lecturers will assess them, and this is also flexible learning. Our challenge is to be cascading it down and scaling it up. For example, 2U2I [two years in university and two years in industry] is one of our programmes that we want the universities to take up. It carries more involvement from industry. Get more people from industry to come in and teach, and get the students to spend time in industry. Give them credits for spending time in industry* (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

The 2U2I Programme initiative (where students learn for two years at a university and work for two years to gain experience in industry) of 2016 was one way to meet the challenges and critical needs of future industry (NST, 2017). 2U2I is a way to support flexible education and, importantly, Shift 1 of the Malaysia Education Blueprint 2015–2025 (Higher Education) on Holistic, Entrepreneurial and Balanced Graduates. The 2U2I academic programme is a learning concept that combines on- and off-campus learning throughout the study period (MOHE, 2019).

Data sharing

A monitoring process would be more efficient if it was data or empirically driven. Without systematic data collection procedures, the monitoring and evaluation of the implementation of FLP programmes cannot be undertaken. For this purpose, the MOHE collected data and kept it in a database, the MyMohes. As custodian of the raw data, the ministry could share it with users who wished to study specific areas of interest related to higher education. In addition, the "MOHE collected data related to FLPs, such as on the number of students enrolled under the APEL programme, gender, field of studies, and those who have graduated from the courses" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview), but these data were not disaggregated according to other equity groups.

For the private sector, data provided to the MOHE were "not very comprehensive in coverage as these institutions insisted on a high level of data confidentiality" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). The MOHE could insist that the Polytechnics and Community Colleges provided data since, as government departments, they are part of MOHE. However, the MOHE had a more difficult relationship with public universities that are public statutory bodies with respect to data sharing. Even then, in general the quality of the data collected was sometimes suspect because of the discrepancies in data reporting between different HEIs. Data collection procedures and data sources for the MOHE are very diverse and complicated:

> *Our role at the management level normally involves data collection from the IPTAs [public HEIs]. We collect our data from IPTAs under our system of MyMohes. IPTAs consist of public universities, polytechnics and community colleges, but we also coordinate data collection by the JPT [Higher Education Department] under the Data and Standards Section (Bahagian Data dan Piawaian) for data from IPTS. And then we also collect data from the Malaysia education section. They collect data for overseas students manually. We get it from them, and we compile and publish a report under the Statistics for Higher Education. We are also coordinating tracer studies. We trace graduates' employability every year. We also compile data on higher education for UNESCO, and we submit them to the EPRD [Education Planning and Research Division]. The EPRD will then compile the data and send it to UNESCO* (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview).

The data collected are compiled with little analysis from the division within the MOHE that manages and organizes this. In other words, data are collected to populate the database, and may be provided in raw form to other divisions for policy planning purposes. It is up to each department to analyse the data supplied as per their requirements.

> *Basically, we collect raw data. Everything we collect, and keep them in our database. We will provide the data depending on the purpose and the division asking for the data. We are doing more like a reporting job. And, we collect the data as they are. … For example, how many entered through the APEL system, just as they are. We just report the numbers as they are. We are concerned with only the administration. Whatever the top management wants to do with the data, whether they want to increase the number or reduce it, it is their prerogative. For example, in terms of gender equality, they may want to balance of the number of females to male students. We will collect the data and present it them to them as they are. The same is the case for lifelong learning, APEL (A), and all others* (MOHE, Top management, MY/Nat/DSCD/ID01, in-person interview).

While the MOHE monitored the implementation of FLPs in terms of resource utilization at the ministry level, any monitoring of the effects of this implementation on equity groups has not been evident. This is because there were no relevant data generated for these groups,

and for many HEIs this is a recent government agenda (for instance, targeting the B40 in the Eleventh Malaysian Plan 2016–2020), and the process of collecting data has only just been initiated.

3.8. Evaluation of effectiveness, enablers and factors lacking in implementation of FLPs

At the ministry level, the programme evaluation process would normally have gone through four phases, namely planning, implementation, completion, and dissemination and reporting. The data collected would reflect the effectiveness at each of these phases. However, these phases may not necessarily proceed in that sequence, since the reporting and dissemination stage may not be carried out. In other words, projects were seen as completed even without a proper evaluation. In the case of the implementation of programmes and initiatives pertaining to FLPs, there were issues relating to jurisdiction, responsibility, and procedures. Presently "there is no law that requires private HEIs to report to the MOHE annually on their activities and performance, except for enrolment" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). In addition, for private HEIs, reporting in most instances is voluntary. Public HEIs report to the MOHE on the basis of what they deem relevant for the MOHE to collate. Thus, "this important stage in the programme planning and delivery process was highly dependent on the availability of quality data and information" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview).

While the ministry collected data for reporting at the ministerial level or even at the inter-ministerial level, "the rigour of data collection methods and procedures varied unless these were undertaken by the Department of Statistics, Malaysia" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). Therefore, better and more systematic information on the effectiveness of programmes implemented could improve policies and regulatory frameworks, instruments, and practices pertaining to FLPs, particularly for equity groups. Data on disadvantaged and marginalized groups is often collected at the institutional level on a "need to do so basis" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). This point will become more apparent when examining the cases of the two selected HEIs in this study. In the past, because of the sensitivity of inter-ethnic issues, HEIs did not attempt to collect data such as income, which later could be linked to ethnicity. Data would normally be aggregated. It is only recently that government agencies have begun to collect and generate data on marginalized and disadvantaged groups as national policy has moved beyond ethnicity.

At this stage of policy implementation, participation was voluntary, and as such some public universities have not adopted FLPs. They were passive in the implementation of FLPs

because they were preoccupied with traditional, face-to-face, full-time students. A respondent from the MOHE noted that "the non-implementation of FLPs, despite a policy on lifelong learning and RPL in the NHESP 2007–2020 and the MEB(HE) 2015–2025, is primarily because of the need to have the right facilities and technology for e-learning and MOOCs" (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

3.8.1. Effectiveness

The study focused on two aspects of effectiveness: (1) how effectively the objectives and targets set at the national level related to FLPs have been achieved; and (2) how effective, as evidenced by the national data, has been the provision of students' access to higher education, students' transfer within and across institutions for the same or different programmes, and completion and transition into the labour market, especially for equity groups. The approach here is qualitative analysis, based on stakeholders' perceptions and literature reviews. Raw data collected by MOHE was not available for analysis because this data has not been cleaned and verified.

Best practices from some universities in Malaysia
In terms of the effectiveness of flexible learning practices at institutional level, it was only very recently the MOHE conducted some form of evaluation by organizing workshops involving universities and stakeholders to specifically deliberate on best practices for implementing FLPs. The OUM and the "private universities associations would normally provide inputs at these workshops" (MOHE, top management, MY/Nat/DG/ID01, in-person interview). These workshops, referred to as 'labs' and based on Malaysia's Performance Management and Delivery Unit (PEMANDU), involved extensive stakeholder engagement workshops lasting six to nine weeks and organized around a policy priority area (World Bank, 2017). Typically, these workshops would cover items such as programme/activity impact analysis and scenario-building exercises. PEMANDU's 'labs' were a consultative process in which people worked together iteratively to design solutions to identified policy challenges within a strict timespan (World Bank, 2017). The findings were reported and deliberated at the MOHE steering committee meetings for follow-up action. Often the findings would revolve around items such as the utilization of resources in terms of efficiency and effectiveness, and recommendations for "doing more with less" with effectiveness as the primary consideration. Specific follow up actions with respect to FLPs would normally be directed to the Higher Education Department and the MQA to follow through. These would then be discussed at the "joint Higher Education Department-MQA policy committee meeting" (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Several HEIs have been accredited by the MQA as national guidance and counselling centres, and as testing centres for APEL. APEL Centres were established at Wawasan Open

University (WOU), UiTM (University Teknologi MARA (UiTM), and at the Open University Malaysia (OUM). The strategic mission of all APEL Centres is to widen access to higher education by granting recognition to individuals with prior experiential learning for the purpose of admission and the award of credits. The APEL Centres' specific roles are prescribed by the MQA (see *Figure 8*).

Figure 8. APEL Centres' Terms of Reference (TOR)
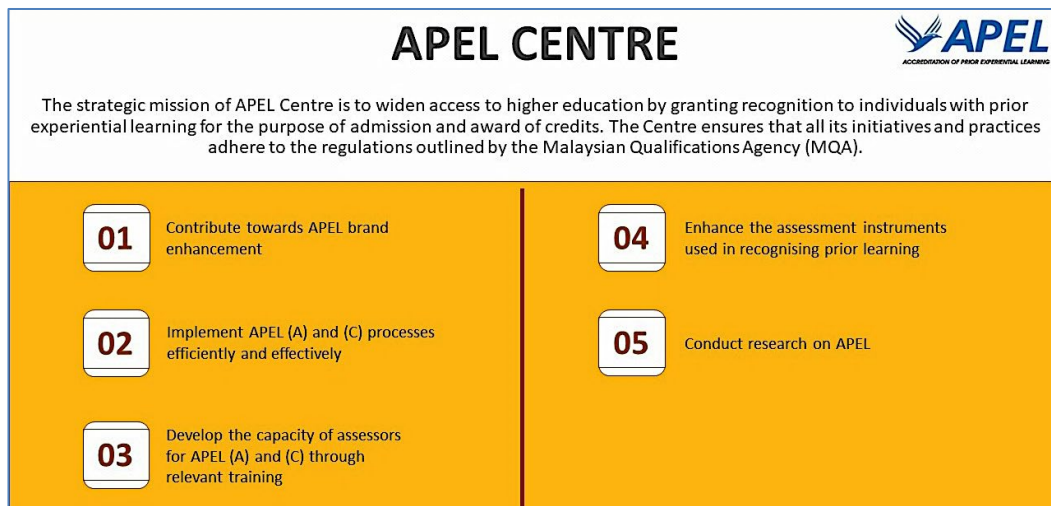
Source: Mohamad Afzhan et al. (2019).

The APEL Centre at Open University Malaysia (OUM) has created important best practice in providing guidance, counselling, and testing. More importantly, this centre tracks the users of the system, and it also undertakes research on awareness and evaluates the outcomes of APEL initiatives (Mohamad Afzan Khan, 2018). The OUM APEL Centre has promoted and played an important role in contributing towards APEL brand enhancement since its inception in 2016, which resulted in a significant increase in APEL acceptance within OUM (see *Figure 9*).

Figure 9. OUM – APEL Acceptance, 2016–2018
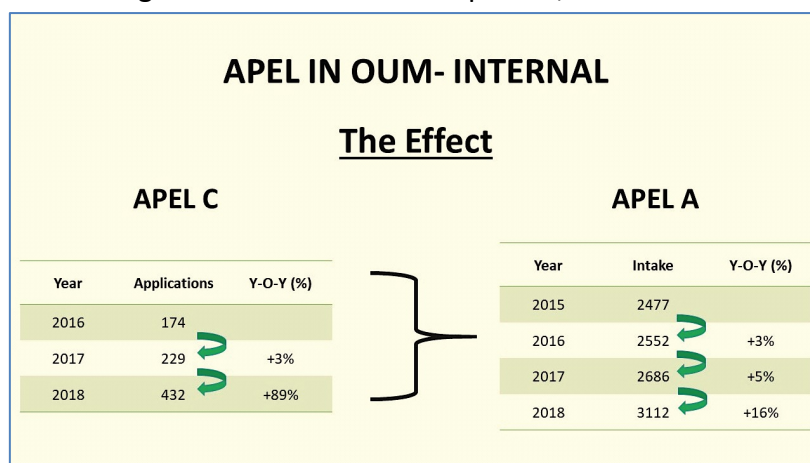
Source: Mohamad Afzhan et al. (2019).

OUM's APEL Centre has also developed best practices for maintaining a good relationship with the admission and record section through a clear standard operation procedure (See *Figure 10).*

Figure 10. OUM's APEL Centre standard operating procedure
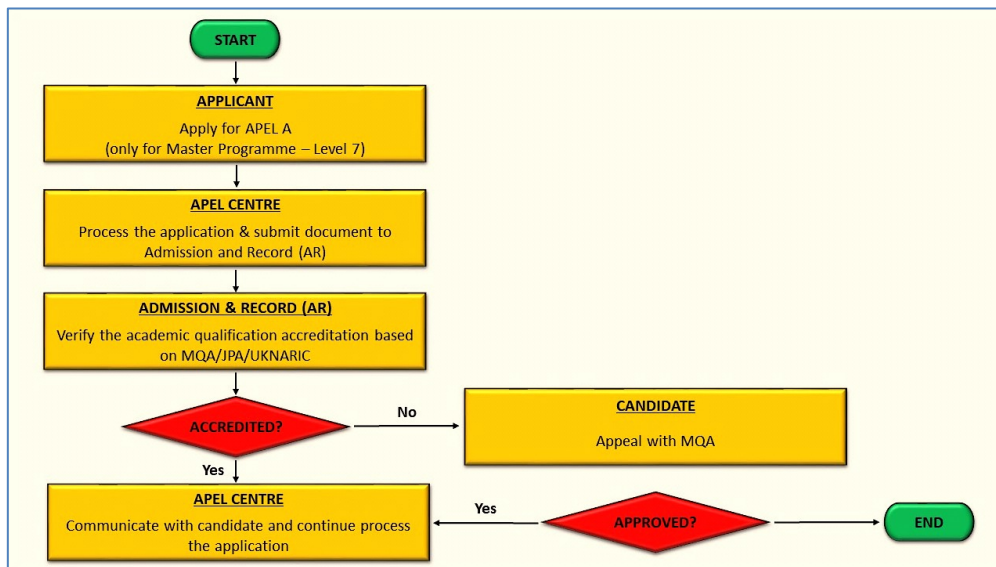
Source: Mohamad Afzhan et al. (2019).

Malaysian universities that have implemented FLPs, particularly the offering of ODL and the application of APEL for admission, have many standard operating procedures and best practices that could be emulated in the whole system. These best practices would normally attract the attention of the MOHE and MQA through 'labs' and workshops. Unfortunately, however, more often these best practices remain as business secrets within the HEIs, and the Malaysian higher education system is missing the opportunity to publicize these as its strength.

3.8.2. Enablers

Based on the literature survey, two groups of enablers were considered as critical success factors in the implementation of FLPs in Malaysia. One of the enablers could be grouped as appropriate instruments and guidelines from the MQA on APEL, and an updating of MQF itself (Noraini and Wahid, 2015; Mohamad, 2018).

Another enabler is promoting FLPs in higher education through an awareness campaign to all (Widad *et al*., 2018), this must be accompanied by very clear targets. Based on the MOHE's responses to the IIEP's *International Survey*, clear targets was rated highly as an enabler. The top-down approached by MOHE and other ministries has resulted with a clear strategic direction and appropriate strategic policies to realize the national objectives and for the implementation of FLPs at HEIs in Malaysia, especially for non-traditional learners. But awareness campaigns have been based on a scenario where there would be voluntary participation among institutions in FLP implementation.

The MQA is the agency that is responsible for implementing the MQF, and this function was stipulated in Act 679. The MQA operates in the wider context of the role and function of the MOHE with respect to lifelong learning. It operates through top-down policy direction from the MOHE, and reports its policy implementation through a bottom-up mechanism within the MOHE structure. Such top-down and bottom-up approaches in policymaking and evaluation guarantee the MQA 60–70 per cent of its yearly operating budget from the MOHE for performing its role and responsibilities.

> What enables an agency like us to move forward? First, it is a very clear mandate from the ministry on what we are allowed to do. The mandate will enable us to get things done rather smoothly, because our roles and responsibilities are mentioned very clearly. So, as an enabler, we need to be given the mandate. Having that as the main support, financial allocations and directions from the ministry are also very important for us to move forward with all these initiatives (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

Rationale for the adoption of flexible learning pathways

Private higher education institutions are more likely to accept new initiatives that include promising business propositions (in terms of students' enrolment and thus income). This is the case particularly with FLPs. Many public HEIs have been slow to roll out initiatives relating to alternative admission pathways, partly because they have no issue with their yearly student enrolment under the conventional admission system, which is based on a credit point system and relevant subject grading (see *Chapter 2*). However, several public HEIs that have been implementing the ODL were highly receptive of FLPs with equity groups and non-traditional learners as their primary targets. The focus on FLPs by private and public HEIs in terms of admission, learning environments, and progression to the labour market has been influenced by their perception of the current market value of such initiatives, and the links with industry. "Both sectors are increasingly focusing on the employability of their graduates" (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

To be profitable and sustainable financially, private higher education sector institutions must be progressive and receptive to new ideas and innovations after due consideration of the risks involved (IPPTN, 2019). For the private higher education sector, they followed the MQA's guidelines seriously as "non-compliance may result in non-accreditation status" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). However, in the public higher education sector, "protracted deliberations on academic quality issues in the university senates" (MOHE, top management, MY/Nat/DG/ID01, in-person interview) have slowed down implementation, especially when professional courses were involved.

For private higher education institutions, FLPs are a welcome opportunity with potential in several aspects apart from increasing student enrolment:

This is because their overhead would be minimal, I think, if the students are placed in industry. At the same time, those people in industry are interested in the talents because at the end of the day, these students are the talents that they will receive. This may be one of the reasons they are moving faster compared to others. Cascading down, scaling up, sometimes many of them are not sure of how flexibility can be implemented, instead of finding out what we can do. We have given them a lot of flexibility. Unless mentioned specifically in the MQA document, universities are at liberty to explore different ways of conducting flexible learning (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Based on either real or perceived benefits, private higher HEIs are very receptive of FLPs, and it is important that the policy, mechanisms, and instruments are appropriate for the private sector to take up this challenge. More importantly, there should be flexibility in the implementation of FLPs for them to be innovative and creative.

The private sectors are more accepting and more innovative than the public sector in terms of jumping on the bandwagon. This could probably be because at private institutions, every student is seen as an income to the institution. Furthermore, they are more sensitive to new products. Every time we introduce a new product, we find that the private institutions are very eager to take it up. In addition, they are also trying to come out with very innovative ways of doing things. Maybe it is because the red tape or their administrative bureaucracy is less than that in the public institutions (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

Public and private HEIs have different perceptions of the benefits of implementing FLPs in their own institutions. With capacity and technology limitations, admitting students based on FLPs would result in traditional and non-traditional students progressing along the same learning paths, as flexibility could not be extended to the latter.

3.8.3. Factors lacking

From the interviews, several factors have negated the effectiveness of policies, instruments, and practices to implement FLPs: an apparent lack of awareness and understanding among the implementers, a lack of awareness among target groups of the opportunities made available to them, the unpreparedness of universities, a lack of knowledge and expertise for APEL assessment, a lack of monitoring of programme implementation, non-standardized data on disadvantaged groups, and insufficient support on the part of employers.

Lack of awareness and understanding of policy intent – mid-level implementers
A major factor that is lacking in the implementation of FLPs is related to the lack of awareness and the low level of understanding of policy intent among the implementers of the policy. Mid-level administrators in the MOHE who were tasked with the operational aspects of implementing FLPs did not have exposure to and understanding of lifelong

learning policy and RPL. Notably, "relevant and updated information provided by the Ministry or the MQA's guidelines were not disseminated widely to facilitate better understanding and implementation of programmes and initiatives" (MQA, top management, MY/Nat/CQA/ID02, in-person interview). Arguably, in this situation, somewhere along the line the leader should be the sharing point of information.

Lack of awareness among target groups

Relevant information on the implementation of FLPs may not be readily accessible to the target groups concerned, especially among equity groups, resulting in low awareness of the available opportunities to enter or re-enter higher education through non-conventional admission pathways. This is especially true in the case of equity groups in rural areas. More outreach is needed to reach these groups and provide them with all the information and opportunities available to them. In this context, the APEL Centres have been identified as playing an important role to provide counselling and guidance, including the subsequent testing of applicants.

> *Even at the entry level, those people who are discussing this issue may be fully aware of it, but the people who are the target group, their awareness is very low. When we talk about education, they are thinking about the normal education pathway, rather than through this flexible pathway. Maybe those people in the city and town areas have the information on this; for those in rural villages, where accessibility to information is a challenge, the situation would be very difficult. To me, we should facilitate them, rather than trying to burden them with hindrances to them getting to access to certification* (MEF, top management, MY/Nat/DEF/ID03, in-person interview).

The level of unpreparedness in universities

Private and public higher education institutions that were previously focused on ODL were more open about FLPs. Evidence shows that these institutions were ready to adopt creative and innovative approaches to attract students to study at their institutions. Nonetheless, many public HEIs, although they subscribe to the national strategic intent in relation to FLPs, may not have rolled out related programmes in a big way because they are fully occupied with students who were enrolled based on conventional admissions pathways. Some are very cautious and prefer the traditional system of learning for traditional students, as there is no compelling evidence regarding the effectiveness of FLPs and other emerging initiatives.

> *Some institutions are very cautious about certain things that are new. Everybody will be waiting for someone else to get thing started. At other times there are also people who simply jump onto the bandwagon. For example, like micro-credentialing, which is now getting popular. Everybody is jumping onto it. Like the MOOCs – when we started it, everybody wanted to do a MOOC, but when we look at the outcomes of it, we can ask: How effective is it? That part of the information is still lacking. Although we are trying to ensure quality is in place by checking all items, still, at the end of the*

day, everything depends on the institutions that are going to use these products (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

The strategic intentions of flexible learning at the national level were very promising, but in practice many challenges faced by the implementers. In addition, the level of preparedness and awareness needs to be tackled at the institutional level. In particular, not all higher education institutions have demonstrated a reasonable level of preparedness to implement the transfer of credits between and within institutions.

> *Next is the issue of no transfer of students between universities. First, we do not have students who transfer between institutions. We did not disagree. We have no record to show student transfer. Normally, our students do not transfer university. For example, a student from say, USM; it does not suddenly happen that the student transfers to the UM, or suddenly transfers to a private university. It is not the norm … and they do not recognize it. The students say that when we transfer from university to university, they do not recognize our credit transfer. However, this is possible between polytechnics, because polytechnics are under the same system. However, this does not happen in student transfer between universities. Also, we have the same problem of transfer from private to polytechnics* (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview).

Supposedly universities and colleges have the autonomy to decide on whether or not to roll out their initiatives in relation to FLPs. Some may need more time to put non-conventional admission and learning systems in place, as these require a number of consultations at every level of the institution. More importantly, they have to align such initiatives with their institutions' visions and mission. Other stakeholders think that the implementation of initiatives was slow and it was more of a formality, toeing the party line of policy intent, rather than stemming from a real interest in adopting flexible learning pathways (MY/Nat/DEF/ID03). It is also possible that:

> *Perhaps the university is talking about protecting their self-interests. That should not be happening. The Ministry of Education is talking a lot about transfer of credits. But to me, this is not really happening, in fact, you do not see it happening at all. For example, with due respect to MQA, if you want to actually review your curriculum; I was told that you need not less than five years to do that. You must have meetings with all the so-called stakeholders. As far as my involvement with the system, to be frank, when the universities have meetings with stakeholders, the university is calling the meeting for the sake of calling the meeting, because the university has already cast the die. Whatever you say, and whatever your comments are, they would say that "this one is more like going on already, and we need to put this to the senate." We cannot redo anything. So, what is the point of you calling us for the meeting? Things are left just as they are* (MEF, top management, MY/Nat/DEF/ID03, in-person interview).

Lack of knowledge and expertise

Lukewarm interest in FLPs could also be due to a lack of local expertise for developing relevant initiatives and instruments. "Although, the awareness and acceptance of these alternative admission pathways is growing … [o]ne of the challenges we are facing is to find the local expertise to develop the instrument" (MQA, top management, MY/Nat/HQAA/ID02, in-person interview). Indeed, capacity-building is one of the biggest challenges for the MQA. There is a need to introduce new products. There are also other challenges, for example "the MOOCS credit transfer; it is a challenging task to get a group of experts to come out with an agreed instrument that must get buy-in from the institutions. I think this a challenging issue that we are facing" (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

Issues regarding monitoring of implementation

The planning stage of rolling out programmes from the ministry is a challenging phase, resulting in enthusiasm among agencies, especially stakeholders. While new entities were created to implement these programmes, the implementation of programmes is often not monitored.

> *During the previous government, the Minister of Education or Minister of Higher Education talked about this 2U2I [two years in university and two years in industry], which was a fantastic idea. However, you do not hear about it now. What has happened to the 2U2I? Again, I think, it is not the question of which party gets control of Putrajaya. It is a question of policy. Policy should not be based on political parties. It must be implemented for the sake of the country and for the sake of the citizens* (MEF, top management, MY/Nat/DEF/ID03, in-person interview).

Non-standardized data on disadvantage groups

The lack of standardized data on disadvantaged groups has also made the monitoring and evaluation of policy at the national level a challenge. Information on disadvantaged groups, such as persons with disabilities and the bottom 40 per cent of households (B40), are not well defined and standardized. Currently there is no agreed definition or terminology used at the policy level and between ministries on marginalized and disadvantaged groups. A common terminology only relates to persons with disabilities because of the Persons with Disabilities Act 2008. Therefore, "varied interpretations and definitions have caused difficulty when trying to determine the effectiveness of programmes and policies" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). The legal definition of persons with disabilities is based on the Persons with Disabilities Act, 2008, but "[f]or B40 households, at the moment the working definition is based on household income, which is RM4,000 or RM3,900 and below" (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview). However, the cut-off points that define B40 households have been changing.

According to the UNDP's (2016) study on poverty reduction in Malaysia, the B40 were defined as households that earn a household income of RM3,855 and below in 2014. The

same UNDP study highlighted another pertinent point when formulating a definition of the B40 group; this is not only a low-income group, but also a disadvantaged group based on gender. In 2014 B40 households can be further disaggregated into 80.7 per cent male-headed households and 19.3 per cent female-headed households. There is a tendency for female-headed households to experience relative income deprivation more acutely (UNDP, 2016).

Employers' support

The respondent from the employers (MEF, top management, MY/Nat/DEF/ID03, in-person interview) provided his views on FLPs, particularly "on the support of employees to re-enter higher education, which understandably varied among the types of employers. Some employers were not very supportive of their employees advancing and upgrading their careers through further studies on the company's time". Based on the views of this respondent, and in summary, there was a perception that if employees decided to re-enter higher education, they must find their own time and financial support to pursue their studies. For this reason, in order to take advantage of FLPs, employees would have to enrol in night classes or weekend classes.

However, some employers support employees by providing funding or loans for specific terms, such as bonded time to remain in post with their employers upon successful completion of their studies. Some employers would convert study loans into scholarships, based on their employees' academic performance. Some of the more enlightened employers would chart better pathways for promotion soon after the employees completed their studies. However, the percentage of employers who were supportive of their employees re-entering higher education based on FLPs was small, since no less than 98 per cent of Malaysian-owned firms are considered small or micro enterprises with financial and human resource limitations. "To be frank, employers are quite mean. They want to make sure that they are making the necessary profit. Employers are not simply giving time-off just like that" (MEF, top management, MY/Nat/DEF/ID03, in-person interview).

The lack of systematic evaluation of the effectiveness of the implementation of FLPs in Malaysian higher education may be traced to the nature of the policy itself, the mechanisms in place to implement FLPs, and the implementers. The experience so far could be summarized as follows: good FLPs policies were necessary for achieving the desired outcomes, but these were not sufficient because good policies also need to be effectively implemented.

3.9. Priorities for the future

In terms of the future of FLPs, priorities in terms of admission, learning environment, and progression to the labour market have been highlighted. In addition, our interviewees noted that there should be a sustained policy focus with prioritized strategic initiatives, appropriate instruments, codes of best practice, and broad-based engagement.

3.9.1. Policy on data collection, management and integration

Future policies and subsequent evaluation of the outcomes or impacts of policies are contingent upon the ministry's capacity to collect, manage, and integrate data from within the ministry, from all its agencies, and from stakeholders. Based on the MOHE's response to the IIEP's *International Survey*, no data have been collected to monitor policy implementation on a regular basis. Realizing the importance of quality data for evidence-based policymaking, the ministry had plans to introduce a centralized data platform that would have various data analytic capabilities. Such a centralized data platform would aim to facilitate the implementation of programme monitoring and evaluation. A platform with standardized definitions and measurement parameters for policy initiatives within and across ministries would contribute significantly to good policymaking and practices.

> *Currently we are planning on developing a centralized database, between us and the basic education institutions, the IPTS [private HEIs], and the IPTA [public HEIs]. We are developing a data warehouse, a repository. All the basic data and the crucial data that we need for doing analysis will be kept under this depository. However, the challenge is not among the higher education institutions or in the higher education sector, but also with institutions in basic education. Later, we can merge our data. For our own definitions, we must look back at the data and then we create one definition. The data for the model suits both sectors* (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview).

Equally importantly, a centralized data system would facilitate the tracking of students' progression from entry or re-entry into higher education, their learning outcomes from the flexible learning environment, and finally their integration in the labour market based on industry and employers' feedback.

> *Currently, we are integrating our data and mapping our data with other agencies. For example, we map our data with e-Kasih [government data base for poor households], but the problem is that not everybody is in the e-Kasih system. We also have that from UPU under basic education, SP. We can compare our data with their data and then compare them with other agencies. Basically, we have another two data sets that we can use to compare with. If the data is consistent between the data from basic education and those from UPU [Central Admission Unit for HEIs] and higher education, then the reliability of the data will be higher. Basically, we are*

trying to triangulate all the data sources. The concept we want to have is the trend from the primary data, and then we can track them down, not only to the students, but to their families, too. This is where the big data will come in. The analysis will come in, and then we also integrate our data with those of other agencies, including those for MOHE and the Employees' Provident Fund. This becomes more challenging now (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview).

For the present and future focus on B40 households and other disadvantaged groups, the system should provide better access and ensure the success of these groups to enter higher education with flexible admission systems, learning environments, and arrangements for financial support. However, data should also be available for planning purposes.

My personal response is that the situation of the B40 must be data driven. So, the authenticity of the data is very important. That is the main challenge. It is in one of the many manifestos. The B40 group should be given free higher education. The JPT [Department of Higher Education] is planning to conduct a study to see to what extent the B40 group deserves the amount of help and assistance. We also want to know what the financial implications to the government are if we fully subsidize and give free education to all. This is another challenge. In addition, people would tend to compare, if public institutions are providing free education, what will happen to higher education in the private sector. They would want to have their students to get some assistance as free education type incentives. Some of those in the B40 group are also in private universities, and so forth (MOHE, top management, MY/Nat/DSCD/ID01, in-person interview).

Another aspect of concern revolves around gender issues in higher education. While more females are enrolled in higher education institutions, their access to better-paid jobs with safe working environments requires more policy initiatives. Having more women in universities does not translate into more and better employment prospects for them (UNDP, 2019). Therefore, the current Shared Prosperity Vision 2020 (SPV 2030) needs to be evaluated in terms of specific outcomes for disadvantaged and marginalized groups, as they may be lumped into the bigger B40 household group. The predicament of marginalized/disadvantaged groups is not only about income; access to higher education is also an outstanding issue for the indigenous *Orang Asli*.

The [lifelong learning and APEL] policy of the Ministry is that if they meet the requirements, we will have to take them in. For example, the case of Orang Asli. For equity, we must look at the policies in other countries. We want to solve gender issues; we want to make sure that girls are not left behind, but in Malaysia we have to start looking at our affirmative action because recently we were told that more than 65 per cent of the students in the universities are females. Nevertheless, when it comes to employment, more male graduates are entering the job markets (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

The data were collected based on the template by the Department of Statistics, Malaysia (DOSM), but detailed primary data on higher education in relation to disadvantaged and marginalized groups need to be collected and managed at the ministry and institutional levels, which will be critical for planning and implementation purposes.

3.9.2. Relevant instruments

The effectiveness of the currently implemented instruments needs to be assessed if they are to achieve the policy direction and strategic intent of FLPs vis-a-vis lifelong learning. If the results of the appropriate assessments show that new objectives need to be developed, stakeholders should be engaged in a systematic manner. It is the sole responsibility of the MQA, based on the MQA Act, to lead the development of these instruments with reference to the policy framework at ministry level. A respondent from the MQA raised relevant questions in this context as follows:

> The question is, how many people are going to benefit from the instrument? How many have gained access to this admission system? I think the other thing is that the instrument that we develop has to be relevant, and actually acceptable to the people. We need to get buy-in from the public as well as from the stakeholders on the instruments that we produce (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

It is primarily because of these doubts and the need to be relevant that the MOHE and the MQA organizes workshops with other stakeholders and clients periodically, based on the PEMANDU and PADU 'labs' style.

Expanding FLPs

While flexible entry or re-entry to higher education is being implemented, there was already an emerging need to expand the reach of FLPs further by looking at flexibility during study programmes, through the accumulation of subjects taken by students based on their study interests. More importantly, the needs of persons with disabilities should be considered, and technology should be utilized to make learning more flexible for this group. Some innovative ideas have been successfully implemented in public universities, as follows:

> To me, the meaning of flexible learning is very broad, and we have not looked at the system in depth yet. This includes the transit preliminary programme. When you talk about flexibility in terms of delivery, content, the lecturers, time and place, these terms must be defined. It is very broad. For example, UKM [Universiti Kebangsaan Malaysia] started with Citra [image] – a first-year programme for all students, regardless of their background and major. They can take any courses they want. Then they go to their specific majors. This flexibility concerns the choosing of courses. In UTM [Universiti Teknologi Malaysia] there is a programme where you come in with a programme in Bachelor of Arts or Science, but when you come in you may not

know the programme that you wish to pursue. So, you start by looking at the courses and start picking and choosing the courses you wish. However, before you graduate, then you will need to identify how many per cent of these courses that you have taken. Therefore, based on the record you will have a degree. This flexible system was created because sometimes students do not know what they want. They take music, physics, and then in the process of collecting the units they have collected in the programme then they will decide to have a BA in such and such a degree. We are moving towards that kind of flexibility (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Expanding and upgrading the APEL programme

APEL adoption in the Malaysian higher education system is evolving. The MOHE and MQA have been exploring future directions and priorities for APEL in the higher education system in terms of revised admission requirements, qualified target groups, and more alternative pathways in the articulation framework.

We are thinking of improving our APEL standard to remove the experience of academic requirements totally. As long as they can read and write, they can write their own portfolio; they can have them assessed, and then we take them in. This will actually help to open up the space for adult learners who are challenged by poverty, family dysfunctionality, and not able to go for higher education (MQA, Top management, MY/Nat/CQA/ID02, in-person interview).

At the moment, APEL (A) is applicable for admission from levels 3 to 7 (Master's degree). After getting their diploma, graduates may want to upgrade themselves to obtain their first degree under the Malaysian Technical Universities Network (MTUN) based on the current articulation framework. An interesting development in the context of APEL is APEL Q. According to a respondent from MQA, Malaysians with a Bachelor's degree and at least five years of work experience will soon be able to go straight for "PhD studies through the APEL T-8 assessment. APEL T-8 (or Level 8) is being studied by the MQA, and it expects to be completed by 2020. At this stage of the design of APEL Q, it is envisaged that potential candidates for APEL T-8 must be Malaysian citizens, at least 35 years old and must pass the APEL T-8 assessment, among another requirements" (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

Improving credit transfer

Credit transfer would be one of the priorities for the future under FLPs. At the moment, credit transfer opportunities have not been widely explored and adopted. MOOCs and micro-credentialing should be fully explored to provide a more diverse and meaningful provision of flexible learning and certification in the future. While such policies have been endorsed by the MOHE, their implementation needs further refinement for wider acceptance among employers.

Normally, about 67 per cent of the students wish to pursue a degree from the diploma level. This is the issue that the minister asked us to review. He found that credit transfers among our students are low. So, we are reviewing it now. Indeed, I spoke to the MQA's CEO that we want to review this issue because currently it is 33 per cent or even lower. In the case of students from diploma programmes, if they sit for three years, they only get exemption for the first year. This is equivalent to going to a matriculation course, which should not be the case, right? A discount of only 30 per cent. We used to give them 67 per cent. This is the part that we are looking at now, the transition from a diploma to a degree, that is a programme at the university level (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Micro-credentials – potential and current status

Arguably, micro-credentialing is the way to the future and will be one of the main areas with the most potential for flexible learning, especially now with the release of the MQA's (2019) guideline in this area. The future of FLPs is slowly shifting to focusing on students' strengths rather than programmes/qualifications.

The future of flexi education may not be in the degree programme, it may be in the form of flexi credentials; the degree may be offered by USM, but the certificate for certain areas is conferred by the university based on the academic prominence of the professor. What do we mean by "flexi" for working adults? It means that they can do their education online. The traditional mechanism now is MOOC, which is a form of credit transfer. The thing that we think should be a mover is micro-credentialing, which is like magic. They can come in and take short courses, which are part of a big course that can be given credits. I see "flexi" as a new dimension; under this micro-credentialing, students can choose the best professors from whom they can learn, rather than we ask them to enrol in one set of courses. You may enrol in an MBA at university X. Then, you are stuck with the faculty, but if you create a flexi-environment where a consortium of universities works together to end up with a testation of a degree, the students can choose the professors from whom they want to learn (MQA, top management, MY/Nat/CQA/ID02, in-person interview).

Such statements from the MQA were indeed very promising, and the spirit and purpose of micro-credentials are fully documented in the guideline. As this is a new initiative on the part of the MOHE and MQA, the document was crafted based on research and practices in other higher education systems. Similarly, a respondent from MOHE has expressed with optimism that by focusing on student's different abilities the Malaysian higher education system would be able to realise the national agenda on FLP.

Now, I think the definition of flexible learning has moved into quite different areas, like you said. One of them is the MOOCs, whereby they learn online. You also have the micro-credentials, where students spend time in industry, and what they have learned in industry can be transformed into credits. Now we are going into 2U2I, meaning that the deliveries are in different forms. Instead of traditionally, we have

focused on cognitive learning, now it is more on learning skills, meaning that we are looking at students' strengths, rather than the programme's strength. Currently, we say okay, this is the programme and this is the degree in certain fields, this is the way we deliver and this is the content. Maybe this is good for certain students with excellent grades, but for students with different abilities, it could be done in a form based on skills. It is very diverse, and we can say there is one way or two ways of doing it (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Such high hopes for online learning, MOOCs and micro-credentials in the higher education system reflect the MOHE's aspiration for a new higher education landscape, whereby technology would be adopted to improve the delivery and content of courses at HEIs.

Engaging more with industries and professional bodies
Frequent engagement with industry for feedback and support/collaboration in study programmes such as TVET, and 2U2I (two years in university and two years in industry) is the way forward, outlined in the Malaysia Education Blueprint (Higher Education), 2015–2025. The MOHE, advised by Industry-Academic Advisory Panels in universities, would find innovative ways to accommodate the issues raised and solutions recommended.

When we ask industry, what they care about is whether the students can fit into their industry. What we used to give them is like one-size-fit-all type of students. They are the same in breadth and depth. Now, there is a need to customize our programme according to industry needs. Some industries are very advanced. So, we need to see them to know what they want and how many they want us to produce for them according to their projections of years to come. For some other companies, although they are from the same field, their requirements are different, because they are at different stages of their development (MOHE, top management, MY/Nat/DDPPC/ID01, in-person interview).

Engagement with the industry was also conducted at ministry level, since some of the recommendations require inter-ministry intervention, particularly in the case of the TVET programmes and programmes offered by universities in the Malaysian Technical Universities Network (MTUN). A respondent from the MOHE highlighted the importance of this buy-in from the industry as follows:

We are actively seeking inputs from the industry in terms of collaboration. The ministry also has various platforms. In terms of effort to get buy-in, we even have platforms chaired by the highest level, for us to get buy-in. If I may add, in our previous experience we have collaborated with industry, we have our members in the technical working group for skills and talent development. We are working closely with other ministries. Ministries are giving us the resources. The MOE are in the joint chairmanship for the technical working group for skills and talent development for all industries. This is part and parcel of future efforts to improve our talent, because we

Many professional bodies are now working with the MOHE to explore the potential for the recognition of qualifications based on FLPs in their professions. One such professional board is the Malaysian Board of Technologists (MBOT), a professional body that gives professional recognition to technologists and technicians in related technology and technical fields. Based on Act 768 (2019), MBOT looks at technology-based professions that cut across disciplines, based on conceptual designs to realized technology and covering Technicians (at SKM/Diploma Level) up to Technologists (Bachelor's degree level and above). Based on the responses of the interviewee from the MOHE, MBOT was receptive of qualifications based on FLPs.

> *As an example, some professional bodies such as engineering have their requirements of additional mathematics, physics and the like, that cannot be compromised. These are knowledge based, which shows how well one knows the subject. On the other hand, MBOT is skill based. The flexibility that we are talking about is skill based, such as STEM [Science, Technology, Engineering, and Mathematics] and TVET. MBOT was set up to facilitate skills-based education. The TVET base makes it easier for them to facilitate. That is why most attention is given to MBOT* (MOHE, top management, MY/Nat/DG/ID01, in-person interview).

Even though the future potential of FLPs has been demonstrated, many professional bodies are not yet ready to accept graduates from flexible learning pathways. Many professional courses are accredited and recognized by international bodies. For example, the Washington Accord, established in 1989, was responsible for the accreditation or recognition of tertiary-level engineering qualifications, and unless or until there are positive changes in the recognition of FLP-based engineering education, it will not be possible for the local Board of Engineers Malaysia to accept such qualifications as fulfilling the requirements to be registered as professional engineers.

3.10. Conclusion

Malaysia's policy on lifelong learning embodies two important organizing principles in higher education, which are flexibility and continuity of learning (see Longworth and Davies, 1996; Usher and Edwards, 2007). Equally important, the policy focuses on the harmonization of all forms of learning, timing, and space to conduct learning, which reflect flexibility in admission, learning environment, and mode of delivery. However, an important element missing from this policy is the absorption of graduates with qualifications based on FLPs in the workplace. This is because the MOHE has only begun to engage industry and

employers since 2015, based on the strategic intent outlined in the Malaysia Education Blueprint (Higher Education) 2015–2025. A national policy on the recognition of prior learning, a process of recording the achievements of individuals that result from any kind of learning in any environment, is the basis for flexible learning pathways in the Malaysian higher education system. This national policy is translated as the accreditation and recognition of prior experiential learning (APEL), with important implications for the promotion of lifelong learning in Malaysia, not only in higher education but in other sectors too.

However, based on desk research and interviews with stakeholders, it appears that there are certain areas in policy-making and the implementation of the policy that need re-examination with a view to better awareness and more widespread adoption and acceptance among Malaysian HEIs and employers. To these ends, the MQA has formalized the guidelines and appropriate instruments have been established, but these need to be reviewed periodically in line with changes in national and international higher education. For APEL to be highly subscribed, the national policy on counselling and guidance has created APEL Centres, and in the case of OUM, its centre has played an important role in increasing the level of awareness and participation in FLPs.

CHAPTER 4: IN-DEPTH STUDY OF UNIVERSITI TEKNOLOGI MARA AND WAWASAN OPEN UNIVERSITY

4.1.   Introduction

This chapter presents an in-depth study of the implementation of the national policy on lifelong learning at two selected Malaysian universities, namely University Teknology MARA (UiTM) and Wawasan Open University (WOU). These two universities, one public and one private, have been offering ODL since their establishment based on various modalities of education delivery, such as face-to-face, part-time, weekend and evening classes, and online. Both are also implementing the national policy on recognition of prior learning (RPL) based on the MQA's guidelines for the Accreditation of Prior Experiential Learning for Access – APEL (A), and Accreditation of Prior Experiential Learning for Credit Transfers – APEL (C). However, because these institutions were established based on different legal frameworks – the UiTM Act in the case of UiTM and the Private Higher Educational Institution Act in the case of WOU – some differences in response to how national policies on flexible learning pathways were implemented at the institutional level are to be expected.

At the inception stage of this study massive open online courses (MOOCs) were identified as one of the focus areas, as this initiative was outlined in the Malaysian Education Blueprint (Higher Education) 2015–2025 in Shift 9: Globalised Online Learning (GOL). GOL is aimed at enhancing the quality and lowering the cost of delivery, as well as fostering life-long learning among Malaysians. With the launch in 2017 of the APEL for Credits guideline, and the recognition of MOOCs for credit transfer and micro-credentials, these policies were also identified as a focus area in this research. Micro-credentials may be considered part of the credits contributing to an academic degree qualification.

The offering of courses via MOOCs was initiated in 2017 but was slow to take off, except for the much-hyped Malaysia MOOCs platform. In March 2020, in the context of the coronavirus (COVID-19) pandemic, MOOCs and other online or e-learning platforms came to be regarded as the new normal for education delivery in the future. However, micro-credentials were still slow to attract the attention of universities. Also, the situation with MOOCs reported in this chapter was analysed prior to the COVID-19 pandemic. For these reasons, the discussion on MOOCs and micro-credentials in this chapter will not be very detailed compared with the analysis of ODL and APEL, as these were already implemented at the two selected universities. Articulation frameworks are also not considered in the specific cases of UiTM and WOU, since they are not technical universities. Articulation

frameworks only involve students from Technical Education and Vocational Training (TVET) programmes and universities in the Malaysian Technical Universities Network (MTUN).

In terms of research methodology, similar data collection procedures and methods of data analysis to the national stakeholders were adopted in the UiTM and WOU case study. However, due to differences in the governance arrangements and administrative systems of these institutions, there were some differences in the administration of the interviews, particularly in terms of the focus group discussions (FGD) with the alumni and currently enrolled FLP students. This chapter was written based on: (a) data from interviews with top management, academics, students and alumni at the two universities; (b) analysis of institutional documents (primarily from websites); and (c) a review of the literature on UiTM and WOU related to the areas of focus identified above. Based on the IIEP's research proposal on FLPs, this chapter will focus on the following themes:

- Policies and practices of FLPs;
- The role of national policies and instruments in supporting FLPs;
- Monitoring the implementation of FLPs in general and for equity groups in particular;
- Qualitative evaluation of effectiveness, enablers, and factors lacking in the implementation of FLPs;
- Priorities for the future.

4.2.   In-depth study of University Technology MARA

4.2.1. Interviews and focus group discussions

The in-depth institutional study was conducted using desk research, interviews with university top management, deans, and focus group discussions (FGDs) involving students and alumni. The purpose was to explore how national policy on FLPs was implemented at the institutional level. The intention was to undertake a qualitative analysis of policy relevance and outcomes in the specific context of equity groups, such as PWD, the B40, and other disadvantaged groups.

Stakeholder interviews
The data for the University Technology MARA (UiTM) case study were collected through a series of interviews with top management (see *Table 5*) and FGDs at the university. This case study was conducted at the UiTM's main campus in Shah Alam, where the top management of the UiTM university system with major policy decision-making functions are located.

Table 5. Stakeholders/respondents interviewed at UiTM

University	Date	No	Role of the interviewee	Type of interview
University Technology MARA	25 July 2019	1	Head of Academic Affairs Division	In-person interview
	25 July 2019	1	Director of Institute of NEO Education (iNED)	In-person interview
	25 July 2019	1	Dean of Humanities/Social Sciences	In-person interview
	25 July 2019	1	Head of Data Management Centre	In-person interview
	31 July 2019	1	Deputy Vice- Chancellor (Academic and International)	In-person interview
	31 July 2019	1	Dean of Applied Sciences	In-person interview
	31 July 2019	1	Assistant of Deputy VC of Quality Assurance Unit	In-person interview
	31 July 2019	1	Dean of Professional Programmes (Accountancy)	In-person interview
	26 August 2019	1	Head of Academic and Career Advice and Guidance	In-person interview
	26 August 2019	1	Head of Student Association	In-person interview
	26 August 2019	1	Exco of Student Association	In-person interview
	5 October 2019	4	Current APEL students: Business, Policy Administration, Hotel Management (1 female, 3 males)	Focus group discussion
	17 – 18 November 2019	3	Alumni Distance Learning: Education, Public Administration (3 females)	Telephone interview

Interview procedures

Initial contact was established with the Office of the Deputy Vice-Chancellor for Academic and Internationalization. The DVC then appointed key personnel to identify potential interviewees who fit the study's requirements. A formal letter with all the relevant research materials was emailed to potential interviewees to ensure that they were indeed appropriate persons to take part in the case study. More importantly, the letters asked the potential interviewees to confirm that they were willing to be interviewed.

All interviews were conducted at the Chancellery Building (Academic Division), led by the lead researcher assisted by one research officer, and on two occasions other researchers participated in the interview sessions. Interview questions were based on the study's main themes. Before the interviews the respondents were briefed about the study and the time needed for the session. Permission was sought from the respondents to audiotape the session. The participants were also informed that recordings from the sessions would be kept safe and the identities of the respondents would remain confidential. They were also given the freedom to pause the audiotaping for whatever reason while the session was in

progress. The respondents were also reminded to refrain from mentioning or naming specific persons in the course of the interviews. If names were mentioned, they would be deleted from the quotes to be used in the report. This explanatory session prior to the interview was conducted easily, as many of the respondents were already very familiar with research protocols. The interview session commenced after the respondents confirmed that they had fully understood the process and permission to proceed was granted. Each interview session had different levels of engagement and intensity; some sessions took about 30 minutes, but several others took one to one and half hours to complete. On many occasions these interviews were followed by an off-the record debrief session.

The audiotaped interviews were transcribed verbatim for analysis. The transcribed texts from the recordings were checked and rechecked, and the research officer's short notes from the interviews were frequently referred to in order to clarify ambiguous words, terminologies, and acronyms. These texts were then uploaded to the ATLAS.ti, software to manage and process the qualitative data for systematic analysis. The output from ATLAS.ti was coded accordingly, organized into themes, and then verified by the research team members.

Focus group discussions with current students
Ideally, the research should have included six current students who gained admission via APEL and six alumni who followed APEL and who have graduated. It was decided that these FGDs need not necessarily have equal representation from the three faculties – Humanities/Social Sciences, Natural Sciences, and Professional programmes – as the structure of faculties at UiTM is somewhat different from the study's guidelines for FGDs at the institutional level. Therefore, the research had to settle for four participants, three males and a female, who agreed to be part of the FGDs. The participants were from the Faculty of Business Management, the Faculty of Policy and Administration, and the Faculty of Hotel and Tourism Management.

Telephone interviews with alumni
For the alumni groups, the research took a different strategy to secure participation; telephone interviews were conducted. This was because it was difficult to gather participants from the alumni groups in one place at a predetermined time. The person in charge of students and alumni affairs at UiTM provided a list of names and contact details of potential alumni to be interviewed. Invitation letters to take part in the study were then sent directly to the alumni from the list. Three alumni, all females, agreed to participate, and they were interviewed separately via telephone.

Interview via telephone procedures
The research protocol was explained to the interviewees prior to the interview. The interview started once they had agreed to allow the researcher to audiotape the interview

session. The session began with the alumni introducing themselves, talking about their backgrounds, and then moving on to their experiences with FLPs, and their outcomes in terms of entering or re-entering higher education based on this pathway. Summary notes of the conversation were prepared. The notes were then combined with other sources of data and information on FLPs to prepare an in-depth narrative of the UiTM case study.

4.2.2. Description of the Universiti Teknologi MARA

UiTM is a public higher education institution that has evolved from the former Institut Teknologi MARA (ITM) that was established in the 1950s specifically to improve access to higher education among the indigenous groups in post-independent Malaya. The Universiti Teknologi MARA Act 1976 provided for the establishment, maintenance, and administration of Universiti Teknologi MARA (UiTM). Since 1976, UiTM's strategic plan has re-emphasized its mission and vision to provide access to higher education to the indigenous groups in Peninsular Malaysia, Sabah and Sarawak, reflecting its important role in the higher education system. It is primarily for this reason that alternative admission pathways and issues relating to access and equity involving marginalized, disadvantaged, and indigenous groups are always synonymous with UiTM more than with any other public university in Malaysia. As far as the B40 is concerned, access to UiTM statistics on this was not granted, but according to the Deputy Vice-Chancellor (Academic and International), as of December 2020, no less than 60 per cent of the UiTM student population was composed of individuals from the B40.

In 2013, a federal policy pronouncement led to a sudden and steep increase in UiTM student intake. UiTM was already a public higher education institution with a large student population of 78,331 in 2012. Such a large existing student population, with intake increasing yearly, has led to a marked increase in total enrolment at UiTM's 35 branch campuses throughout Malaysia. As of December 2019, UiTM has a total undergraduate population of 180,538 students enrolled in 526 academic programmes at 35 branch campuses in the UiTM University System (UiTM, 2019). Of this total number of undergraduate students, 8.0 per cent are part-time students (Mohd Azraai, 2020).

By law, UiTM is not allowed to enrol international students at the undergraduate level. As of the end of 2019, there were 7,829 local and 276 international postgraduate students (Mohd Azraai, 2020), representing 1.7 per cent of the total student population. In the context of non-traditional learners, UiTM provides courses for adult learners across diverse fields of interest, especially for working adults to pursue and obtain qualifications. UiTM has experienced and continues to experience a steady upward trend of female graduates in the STEM fields (see *Figure 11*). The trend for male students in STEM fields has been shown to be lower (see *Figure 12*). From 2009 to 2019 UiTM produced a grand total of 840,267 graduates, with more females than males (UiTM, 2019).

Figure 11. Graduates of UiTM by fields of study (females)

Number of graduates from your HEI, by field of study (females)
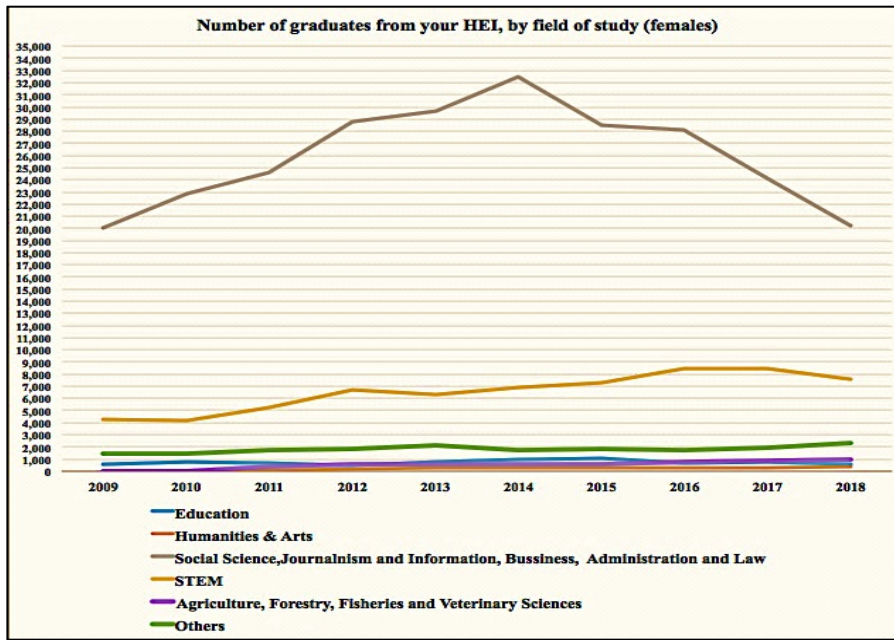
Figure 12. Graduates of UiTM by fields of study (males)

Graduates of UiTM by Field of Study (Males)
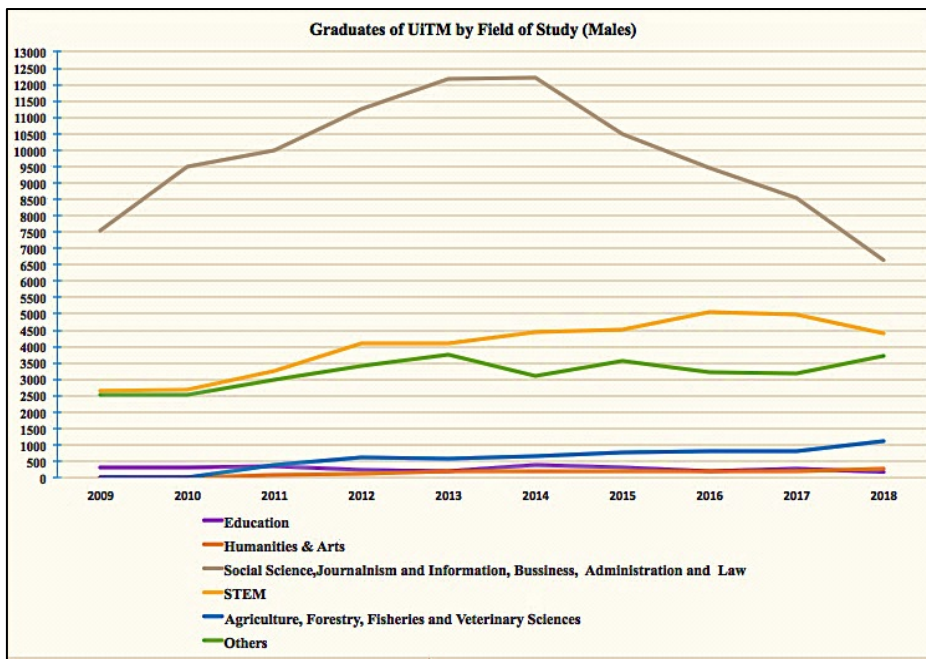
In 2019 UiTM employed 8,721 non-academic/support staff and 8,625 academic staff (Mohd. Azraai, 2020), in a ratio of 1:0.99 of non-academic to academic staff. Traditionally, UiTM's faculties and academics are categorized into three main clusters, namely business and management, social sciences and humanities, and science and technology. Branch campuses are normally dedicated to specific clusters, and these cater primarily for diploma, degree, and to a limited extent postgraduate training.

The UiTM Campus in Shah Alam, Selangor is the main campus with major policy decision-making functions for the whole university. Top and senior university management for the university operate from this campus, which has 12,000 enrolled students.

From the beginning of 2015 onwards, with the sustained increase in yearly student intake, like all other public universities UiTM began implementing measures to overcome serious resource constraints. Much earlier, in 1998, in the context of the downturn in the Malaysian economy the government began to corporatize public universities, which allowed them to establish a private arm to engage in income-generating business activities. Since 2015 the MOHE has insisted that public universities must be financially sustainable; these institutions had to focus on income-generating activities to overcome the shortfalls in government allocation. Linking university activities with opportunities in the market, particularly with industry, were not unusual activities for UiTM as it had previously been collaborating with industry. However, the quantity of income to be generated in remotely located campuses became a cause for concern for the university. This concern for income generation could have led to the side-lining of UiTM's mission to provide access to higher education for disadvantaged groups. Moreover, in the context of regional campuses surrounded by rural communities containing predominantly B40 households, side-lining its focus in favour of income generating activities would be detrimental to its mission.

4.2.3. *Policies and practices of FLPs in UiTM*

To date, UiTM offers alternative admission pathways via the ODL and the MQA's APEL (A), to diploma, degree, and Master's level. However, researchers did not have access to statistics on the actual breakdown of student enrolment by various modalities of education delivery. With 35 branch campuses in its system, the university authorities felt that there were technical issues in disaggregating the composite data.

The answers of respondents to the questions on the policies and practices related to FLPs in UiTM could be categorized into six themes: flexible entry points, flexible support system, affordable tuition fees, flexible modes of teaching and learning, flexible academic structure, and the stance of professional bodies on FLPs.

Moving on to discuss the implementation of ODL, APEL (A), MOOCs and micro-credentials, UiTM was guided by the MQA's guidelines on all these instruments. The overviews of these guidelines, which have enabled flexible entry points or flexible admission to UiTM programmes, were presented in *Chapter 3*. These programmes were tailored to the contexts and circumstances of applicants from non-traditional learner groups, such as working adults.
Open distance learning
ODL at UiTM has a long history. In fact, Nor Aziah and Haziah (2004) noted that UiTM, like other universities offering ODL in early 2000, were not only offering online distance learning

programmes to thousands of learners; they were already comfortable enough to develop their own learning management systems. The MQA 2019 *Guideline on Code of Practice for Programme Accreditation: Open and Distance Learning* has provided UiTM with a fresh approach to implementing a code of good practice for ODL.

APEL (A) and APEL (C)
For APEL (A), according to one UiTM respondent, in some faculties the entry requirements were very loose but in the spirit and purpose of APEL.

> *For example, in the Business Schools they are based on experience. If you enter their programme with no experience, you need five credits to get a diploma. If they have working experience, a certain number of years of experience, entry requirement is three credits. Even if you have 10 years of working experience, the entry requirement is three credits. So, there is some flexibility when we allow the adult learners to join us* (UiTM, Director, MY/Inst/DINE/ID01, in-person interview).

Another UiTM respondent re-emphasized the importance of this flexible admission system as a way to nurture highly talented people who otherwise would not have a chance to achieve academic qualifications.

> *In 2018, one candidate enrolled in Akademi Pengajian Bahasa's [Academy for Language Studies] Bachelor of Applied Language Studies (English for Professional Communication) academic programme. He was a mature student and had relevant working experience. He enquired about whether he could be given exemptions for several courses. The Head of the programme interviewed him and found that he had this wealth of knowledge and experience in creative writing and other skills. He was a good candidate for promotion to a Master's degree. He was then advised to talk to officers at MQA. He later registered to sit for the APEL (A) test and passed. He was given approval to go straight to Master's level. Recently, he has been accepted into the Master's in Professional Communication academic programme* (UiTM, Dean, MY/Inst/DHSS/ID01, in-person interview).

Based on the MQA's guideline on APEL, applicants can leverage their prior learning experience to gain admission into the university, specifically via the APEL (A) route, and use their experience to earn credits in order to shorten their study duration. Based on the interviews with stakeholders at UiTM, adult learners gain admission to UiTM via APEL (A). In addition, "qualified elite athletes with lesser academic qualifications and disadvantaged groups have the privilege of getting admission to UiTM via this special pathway, and then register as full-time students" (UiTM, Head of Division, MY/Inst/HAAD/ID01, in-person interview). Students do not have to follow the normal study plan, but "they could learn through self-study in the university" (UiTM, Head of Division, MY/Inst/HAAD/ID01, in-person interview). Based on the MQA's guideline, APEL (A) provides for the transfer of credits up to a maximum of 30 credits, and this may shorten the period of study at UiTM. From the

interviews, however, it could be deduced that this pathway, namely "transfer within programmes at UiTM, was not commonly pursued" (UiTM, top management, MY/Inst/DVC/ID01, in-person interview) since mapping courses was regarded as time consuming.

> *Regarding transfer arrangements within the faculty, applicants need to apply for credit transfer, and they need to bring all the documents. Under the conventional programme they need to bring the syllabus also. However, they need to bring during the interview, whatever the documents from their employers, their scope of their job and so on, to be endorsed* (UiTM, Dean, MY/Inst/DPP/ID01, in-person interview).

Bridging programmes and peer mentoring

On the second theme, FLP support systems, the discussion was in the context of UiTM's bridging programmes for those who did not manage to achieve good results in their pre-tertiary education, including pre-diploma and diploma programmes. Anecdotally most of the beneficiaries of these programmes are from the B40 group, but there are no official statistics to corroborate this. However, our respondent was very confident about the admission of students from B40 households to UiTM, as follows:

> *We receive many B40 students in the university. To be exact, 63 per cent of our [enrolled] students are from B40. We see most of them going into the diploma programme, and from there they proceed on to degree programmes. We are not going to touch on the fees structure, because they cannot afford it anyway. Our real thinking on the B40 is to provide access* (UiTM, top management, MY/Inst/DVC/ID01, in-person interview).

In addition, peer group mentoring, which is widely practised, has facilitated the learning process for disadvantaged groups. This was seen as important, considering the low academic performance and struggling family backgrounds of this disadvantaged group.

> *…so, we have the flexible approach plus peer mentoring. Basically, peer mentoring helps a lot the disadvantaged students, in the hope that they can get to the level that they require by doing patching up, especially to go for degree programmes* (UiTM, top management, MY/Inst/DVC/ID01, in-person interview).

Financial support

The third theme, affordable tuition fees or exemption from tuition fees, reflects UiTM's focus on providing access to ensure students' success in higher education for the B40 and other disadvantaged groups. The provision of financial packages by universities and other agencies is a common practice in public universities such as UiTM, and this information is usually available on the universities' websites.

> *Yes, when we have adult learners and underprivileged students, we will assist them by managing everything they need. Meanwhile, priority will be given to the B40 students, especially those who need some major financial assistance, such as an*

exemption of tuition fees (UiTM, Head of Division, MY/Inst/HACAG/ID0, in-person interview).

Flexible learning modalities

Having established alternative admission pathways to UiTM, this institution intends to increase access for equity groups to ensure their learning outcomes gained through flexible learning and teaching environments. Based on UiTM's history, these steps were viewed as appropriate to the needs of non-traditional learners, especially working adults. The fourth theme identified in the UiTM case study, flexible learning environment, could be interpreted in terms of the location of learning activities, delivery mode, and teaching and learning time. It is not necessary for students to be in the classroom all the time, as various modes of delivery are being explored by the institution, such as online and blended learning. As of December 2019, there were 14,267 part-time learners in the UiTM university system (Mohd Azraai, 2019). However, from this figure, as indicated earlier, it was not possible to determine the proportion of B40 and other equity groups. Nevertheless, FGDs with alumni and currently enrolled students confirmed the modality of education delivery, as also noted by one of the deans.

> *For flexible deliveries, we have what we call delivery without walls. This means for a week the students do not have to study in class. The lecturers must design learning in industry or in the community, online, or just project-based with peers. We have formalized that* (UiTM, Dean, MY/Inst/HAAD/ID01, in-person interview).

The alumni interviewed via telephone were working adults and part-time students during their time at UiTM. For them, besides online and blended learning, it was important also to have flexibility with the timing of lectures and other academic activities. For these alumni, UiTM provided this flexibility, and in fact the respondent from top management also noted that.

> *The third thing is the issue of time flexibility. The online learning allows the students to consult the lecturers at any time outside the office hours. There will be flexibility on delivery mode, location, and time. We run our programme within these three flexibility frameworks* (UiTM, top management, MY/Inst/DVC/ID01, in-person interview).

MOOCs as an alternative delivery modality

Since 2015, MOHE has made MOOCs their priority. UiTM has participated in Malaysia MOOCs, a partnership between Malaysian public universities and OpenLearning, an Australian education technology company. Before MOOCs were widely used, some higher education institutions were already designing and offering online courses, but there were issues with assessment and recognition. In the past UiTM has adopted online learning as one of its modalities for the delivery of education. According to a respondent, "even before the term MOOCs came up, there was already an online interaction between the lecturers

and students" (UiTM, top management, MY/Inst/DVC/ID01, in-person interview). Of course, most of this was based on individual lecturers' preferences for delivering lectures. Eventually, however, this was formalized within a framework that is being practised now. In fact, "UiTM has adopted MOOCs and blended learning" (UiTM, top management, MY/Inst/DVC/ID01, in-person interview).

However, one of the respondents stated that there is still "resistance at the faculty level to the implementation of MOOCs, even if the UiTM as a whole has adopted the national policy and MQA's guideline on it" (UiTM, Head of Centre, MY/Inst/HACAG/IDOI, in-person interview).

Flexible academic structure

The fifth theme that emerged pertaining to policies and practices for FLPs was flexible academic structure. To cater for students with different academic needs, UiTM allows its students to reduce the number of courses they wish to take in each semester. "This approach was adopted to avoid students from getting too ambitious, and consequently fail in their exams" (UiTM, Director, MY/Inst/DINE/ID01, in-person interview). Working adults and other non-traditional learners found that this flexible academic structure suits their flexible learning mode, since they often need to take a much longer time to complete their course of study. Furthermore, UiTM is also flexible in its assessment approach:

> *In terms of assessment, we give some leeway to athletes in term of delivery. For example, the mainstream students may have to sit for two tests. The athletes can have six shorter quizzes. The same outcome in terms of cognitive results, we get the same outcome* (UiTM, Head of Division, MY/Inst/HAAD/ID01, in-person interview).

Based on the interviews, FLP acceptance among non-professional courses, especially in the social sciences, business and administration, was not too difficult, but trying to convince them to actually implement FLPs was another matter. Convincing the various professional boards to accept FLP qualifications when these were implemented at UiTM was far more difficult again.

> *While UiTM is very innovative in trying to cater for the learning needs of disadvantaged groups, convincing professional boards about flexible learning pathways and progression to professional fields is still a challenge. Courses in engineering and medicine offered in Malaysian universities, for instance, need to be accredited and recognized by international accreditation bodies before local professional bodies can accept registration of graduates to practice their profession. Faculty boards are also influenced by the requirements of the professional bodies. In the case of nursing, some of the entry requirements fall back to their SPM, even though they have their diploma and have good grades. When they want to do their degree, they fall back to their diploma, they must make sure they have credits in their*

physics and biology. To me, that means their SPM result gives a higher qualification than their diploma (UiTM, Director, MY/Inst/DINE/ID01, in-person interview).

As expected, FLPs were more difficult to implement in the field of engineering than in nursing. According to one respondent, "in the field of engineering, the Malaysian Board of Engineers insisted on high academic achievements for entry into higher education. The MQA, which was supposed to be responsible for programme standard setting and promoting APEL, has to give way to the professional bodies to finally decide on this matter" (UiTM, Director, MY/Inst/DINE/ID01, in-person interview). UiTM realized that non-compliance with the standards set by the engineering profession and the Washington Accord could result in non-accreditation and non-recognition of their engineering degree. However, "[t]he Malaysian Nursing Board allowed part-time study with certain conditions that were easily fulfilled by UiTM and the faculty board of studies" (UiTM, top management, MY/Inst/DVC/ID01, in-person interview).

4.2.4. *Role of national policies and instruments in supporting FLPs*

Two major themes emerged from the responses to queries related to the roles of national policies and instruments that support FLPs in UiTM. These are support through consultations, and guidelines on the implementations of FLPs. These responses need to be understood and interpreted in the context of MOHE's policy statements and MQA's guidelines for implementing instruments such as ODL, APEL (A), MOOCs, and micro-credentials.

<u>*Support through consultations*</u>
The first theme was support for the implementation of FLPs at the institutional level. The translation of policy statements to appropriate instruments and then guidelines for operationalizing these instruments usually involves a series of engagements with stakeholders, in particular the universities. UiTM is one of the most important consultation partners, which has been admitting non-traditional learners in line with its strategic mission to provide access to equity groups. UiTM admitted candidates without a Bachelor's degree to pursue Master's degree programmes via the APEL facility. However, not all faculties are implementing FLPs with equal enthusiasm; the take-up is much lower in faculties that offer professional programmes, as indicated earlier. While inter-faculty and inter-division consultations within UiTM are important, consultation with external agencies, such as the MQA for feedback on a case-by-case basis, is also crucial.

> *A staff member from SIRIM has her SPM result, but she has no degree, and she wanted to pursue her Master's degree. I experienced that during my time as the Deputy Dean of Academic Affairs. We interviewed her; to my surprise, she knows every single principle in her field; she has experience of handling all the high-end equipment that we have in our faculty. Nevertheless, on our part, her case was clear;*

she must go to MQA for APEL (A) admission, and only then can she come back. Then I did not hear anything from her (UiTM, Dean, MY/Inst/DAS/ID01, in-person interview).

Guidelines on the implementations of FLPs

Another theme that emerged from the responses related to the guidelines on the implementation of FLPs. As a public university, UiTM regards it as very important to be in full compliance with the MQA guidelines, programme standards, and the MQF. However, from the other side, interviewees were taken aback when the guidelines, which were supposed to be dynamic and accommodating to institutional circumstances, became a major constraint to creativity and innovation. Even though the MQA introduced the mechanism to operationalize the process, academic staff were not prepared to undertake any other initiative beyond APEL (A). "The low level of awareness and preparedness to implement, coupled with constraints on creativity and innovativeness beyond the MQA guidelines, are a pushback factor for FLPs at UiTM" (UiTM, Director, MY/Inst/DINE/ID01, in-person interview).

For another respondent, the MQA's guideline on three subject credits for entry to UiTM was sufficient, considering the academic background of students applying to UiTM. He noted: "I could not comprehend the justification from some faculties to increase the subject credit requirement from three to five, just to be 'innovative' and to demonstrate quality and standards" (UiTM, Head of Division, MY/Inst/HACAG/ID01, in-person interview). There appears to be a tension even at the faculty level on the implementation of APEL, with some wanting to raise the standard for admission, which was clearly contrary to the national policy on lifelong learning and RPL. More importantly, such a move would undermine UiTM's effort to increase access to higher education among disadvantaged and marginalized groups. Nevertheless, it may be understandable in some faculties in international and regional universities, since rating and ranking organisations are starting to look at the minimum criteria for university admission in their scoring matrices or templates.

As a public university dedicated to increasing accessibility to higher education among equity groups, UiTM has seen fit to implement national policies based on the FLP instrument. With annual increases in student intake, it makes sense for UiTM to explore various modalities of education delivery, adopting technology to make these possible. However, UiTM's keen interest in being listed in global university ranking tables may distract it from its important mission to increase access for equity groups.

4.2.5. Monitoring the implementation of FLPs, including for equity groups

Based on the analysis of the transcribed data, and notes on FGD and interviews, the themes that emerged in this section are the management of flexible learning pathways (FLPs), efficiency in the implementation of FLPs, and monitoring of FLP students.

Management of FLPs

The first theme identified was the management of FLPs, particularly in the case of applications. Several deans highlighted the role and functions of the UiTM's Institute for Continuing Education and Professional Studies that screens all applications. "If applicants were assessed as suitable, they were then referred to the faculties. At the faculty level, applicants' portfolios were evaluated; the faculty would then decide on the application, not the Institute for Continuing Education and Professional Studies" (UiTM, Dean, MY/Inst/DPP/ID01, in-person-interview). Notably, the Institute for Continuing Education and Professional Studies only runs and manages programmes "without any decision-making role in the case of APEL" (UiTM, Dean, MY/Inst/DPP/ID01, in-person-interview). It was reported that ICEPS wanted to implement APEL based on the national policy on lifelong learning and RPL, to earn credit exemptions "so as to speed up students' graduation, but if the faculties decided to change the minimum academic requirement for admission, there was nothing the Institute for Continuing Education and Professional Studies could do" (UiTM, Dean, MY/Inst/DPP/ID01, in-person-interview). Subsequently, all decisions regarding RPL candidates were the responsibility of the faculties where they were registered. The Institute for Continuing Education and Professional Studies' "responsibility was to coordinate and monitor students' progress, and even this was not directed to specific groups, such as the disadvantaged and the marginalized" (UiTM, Dean, MY/Inst/DPP/ID01, in-person-interview). Any evidence pointing to the fact that disadvantaged groups were being monitored was primarily "because of the director's personal commitment to the disadvantaged group" (UiTM, Director, MY/Inst/DINE/ID01, in-person interview).

> *What we have in the UiTM is a centre called the Institute for Continuing Education and Professional Studies. For students, normally the Institute for Continuing Education and Professional Studies would screen their portfolio in the first instance. Some applicants do not have the right competency to pursue a Bachelor's degree or diploma certificate at the faculty, but they have other merits, obviously not academic* (UiTM, Dean, MY/Inst/DPP/ID01, in-person interview).

Efficiency in the implementation of FLPs

The second theme that emerged was efficiency in the implementation of FLPs. "Each department in the university is monitored; and improvements to processes and procedures are to be undertaken periodically" (UiTM, Head of Unit, MY/Inst/ADVCQAU/ID01, in-person interview), which is standard practice in Malaysian public universities with a clients' charter and standard operating procedure (SOP). This monitoring would normally cover the SOP for the offering of FLPs such as ODL and APEL, in line with the MQA's periodic auditing of institutions for the purpose of programme accreditation.

Monitoring of FLP students

The last theme identified is the monitoring of students admitted via FLPs, from admission to progression in their studies, and to some extent their success in the labour market. This task

is undertaken via a tracking system known as the electronic portfolio or E-portfolio. Briefly, the E-portfolio is a monitoring system to track the progress of students, and simultaneously prepare them for the job market after they graduate. Students can create their own E-portfolio as soon as they enrol in Year 1 of their course of study at UiTM. The E-portfolio has a flexible personal learning environment where the students can freely share their achievements and development, but at the same time they are in control of the shared space.

The E-portfolio is accessible by other parties too, including the administrators and educators of UiTM, in order to keep track of students' progress, and also students' sponsors and potential employers. In the context of post-study at the HEI and the job market, the E-portfolio mentally prepares students for industry, whereby they can gather feedback about what is needed in the job market and at the same time compare what is available (for example, by accessing existing head-hunting portals). The industry-driven E-portfolio has the potential to guide the students and also HEIs on links between study programmes (theoretical aspects) and the demands of industry (the practical side of the study).

Before the E-portfolio, it was the "responsibility of the faculties to monitor students' learning progress, students' learning experience, satisfaction, and more importantly absorption into the labour market" (UiTM, Head of Centre, MY/Inst/Pub/HDM/ID01, in-person interview). Currently, "students' feedback is captured via Student Online Feedback" (UiTM, top management, MY/Inst/DVC/ID01, in-person interview). Based on FGD with currently enrolled students and alumni, they have utilized this online platform to comment and give feedback on teaching and learning issues, as well as mentoring problems. According to one respondent, the chief assistant registrar or academic staff member was "obliged to respond to issues and questions raised online" (UiTM, Head of Division, MY/Inst/HACAG/ID01, in-person interview).

Also based on FGD with currently enrolled FLPs students, the following is a summary of their evaluation of FLPs at UiTM. Their assessment was rather mixed, but overall the general feeling was that as working adults, time was their main constraint. Therefore, flexibility in the learning environment was much needed. Generally, FLPs were seen as giving working people a second chance at higher education and academic qualifications. Unfortunately, the FGD participants reported that while they were able to gain access to higher education via APEL (A), the university did not differentiate them from traditional students in the teaching and learning environment. In fact, non-traditional and traditional learners sat the same examinations. This approach put greater pressure on non-traditional students, who are mostly working adults. It was reported that APEL or non-traditional students have limited time to study and their classes were conducted over weekends, on a fortnightly basis. According to the FGD participants, faced with all their constraints and limitations combined

with pressure from the institution, there was a tendency for non-traditional students to drop out of the system.

Based on an FGD with alumni on the FLPs being implemented at UiTM, the following is a summary of their evaluation of processes and procedures, and some reflections on the impacts. Despite the constraints and pressures of being a non-traditional learner, the FLPs at UiTM are recommended for those who are willing to work hard and persevere. The alumni were of the opinion that a second chance at getting an academic qualification would open up opportunities for promotion, either at their current workplace or elsewhere. The flexible learning arrangements at UiTM were favourably rated, as many of the participants had been working adults while studying at UiTM. Generally, not differentiating between traditional and non-traditional learners may have its disadvantages, but it also gave non-traditional learners the confidence to compete with traditional learners based on their working experience. The alumni interviewed were very appreciative of the fact that some lecturers were very sympathetic to their needs. More importantly, the participants reported that favourable considerations, such as time off work accorded by their employers, helped immensely with balancing work, study, and family life.

From the telephone interviews with alumni, it may be deduced that they were enormously grateful to UiTM for giving them the opportunity to improve their academic qualifications based on FLPs. In fact, some responded that because of this opportunity, and after successfully completing their course of study on a part-time basis, they were promoted in their jobs. Comments on UiTM's FLPs from alumni and currently enrolled students in terms of the impact and outcomes are pertinent for future improvement, but their comments on system-wide process and procedures also reflect the fact that they were not familiar with or knowledgeable about national policies and implementation at the institutional level.

In the case of UiTM, it appears that monitoring students' progress, learning outcomes, and success in the labour market was undertaken by several entities within the university. Regretfully, however, the monitoring of disadvantaged and marginalized groups was left to the faculties. In the context of faculty concerns about academic excellence, and with a majority student body made up of traditional learners, the needs of non-traditional learners and disadvantaged and marginalized groups may have been overlooked. Entities within UiTM, concerned about academic progress and other non-academic matters pertaining to these groups, were not empowered or motivated to monitor their progress.

4.2.6. Evaluation of effectiveness, enablers and factors lacking in the implementation of FLPs

Based on an analysis of the texts of the interviews and the FGD notes, three themes related to the credit exemptions for students, quality assurance matters, and review of

documentation have been identified. These were issues relating to credit exemptions for students, quality assurance matters, and the timely and speedy review of documents submitted to the MQA and MOHE. These issues were cited or raised many times by respondents.

Credit exemptions for students

Exemptions were considered as a practical option for students since opportunities for credit transfer were not applicable to all the subjects offered. Exemptions were only open to students if credit transfer helped them to excel academically. But then, according to one dean, "exemptions may not reflect the actual competencies and knowledge of the students concerned. Inaccurate subject mapping, for instance, Calculus mapped with Mathematics, may be a disservice to the students" (UiTM, Dean, MY/Inst/DAS/ID01, in-person interview). From the FGDs and interviews with alumni, students were aware of the pitfalls of such inaccurate mapping of subjects.

Quality assurance matters

From the perspective of students' performance, quality was determined from their Grade Point Average (GPA), but a detailed evaluation of students' overall performance as non-traditional learners may not have been undertaken. This would raise "the issue of connecting the quality of UiTM with outcomes in the labour market, and knowledge when they returned to their place of employment" (UiTM, Head of unit, MY/Inst/ADVCQAU/ID01, in-person interview). As such, employers should be encouraged to provide feedback on the performance of mature students, particularly before and after studying at UiTM on a part-time basis. Indeed, according to students and respondents, among the faculties that have undertaken evaluation, this was one quality measurement of the FLPs at UiTM.

> *We have not done this analysis. If they have graduated, in terms of outcome, is there any difference between those coming in with FE and FL, what are their performances like? Are there any differences or not? We do not have that evaluation yet. We have not done any analysis on that. However, we have done analysis, like what I have mentioned just now, what have been the overall achievements, immediate outcome, and the GPAs. Yes, we have performed that simple evaluation* (UiTM, Head of Unit, MY/Inst/ADVCQAU/ID01, in-person interview).

Review of documentation

Respondents tasked with process improvement and quality assurance were concerned with the "slowness of the review process once relevant documentations were submitted to the MQA and MOHE" (UiTM, Head of Unit, MY/Inst/ADVCQAU/ID01, in-person interview). In fact, however, this slow process could be due to miscommunication and incomplete understanding of the review process itself. In fact, "the MQA had its own client charter and standard operating procedure for accreditation" (MQA, top management, MY/Nat/HQAA/ID02, in-person interview).

UiTM was viewed by students and alumni favourably for its implementation of FLPs. Based on the interviews and the FGDs, currently enrolled students and alumni saw this institution as a saviour for giving them a second chance at higher education and the pursuit of qualifications. More importantly, the alumni and currently enrolled students also understood that UiTM accepted them as students based on non-academic criteria, and they had to make good any shortcomings. However, UiTM was also having internal issues with FLPs; while academic staff were familiar with ODL, they not comfortable with MOOCs and micro-credentials.

4.2.7. Priorities for the future

From the responses of UiTM respondents, for the future, four themes have been identified: implementation of FLPs, UiTM's facilities for flexible learning environments, micro-credentials, counselling and guidance to better support equity groups.

Implementation of FLPs
UiTM as a university that is already implementing FLPs was familiar and comfortable with ODL and APEL (A), but not much has been mentioned on other pathways. The interviewees noted that a successful implementation of FLPs requires the cooperation of various stakeholders and players within the UiTM system, from the main campus to the various regional campuses. Notably, this will have important implications for future priorities. In this respect, based on the interviews with top management and academics, FGD with students, and telephone interviews with alumni, the following statement from one respondent appropriately summarized their concerns and hopes: "Arguably, the frustration within UiTM was not about national policies and the idea of RPL, but more on issues or shortcomings of the enablers for the efficient and effective implementation of FLPs"(UiTM, Head of Unit, MY/Inst/ADVCQAU/ID01, in-person interview).

In a nutshell, UiTM was more concerned about compliance with MOHE rules and regulations and the MQA's guidelines and standards for programmes, and the deans often lamented, "while there were other enablers for implementation of FLPs such as people and technology, the lack of flexibility of university administrators was their major concern, as the administrators must change the way they work, academics can do whatever they are doing now" (UiTM, Head of Unit, MY/Inst/ADVCQAU/ID01, in-person-interview).

UiTM's facilities for FLPs
For the future, in the context of the PWD Act and the MOHE blueprint on persons with disabilities in Malaysian HEIs, UiTM facilities have to keep abreast with the needs of this category of non-traditional learners. As one interviewee noted, "while smart classrooms would greatly facilitate flexible learning environments for traditional and non-traditional learners, it is a highly desirable facility for persons with disabilities" (UiTM, Dean,

MY/Inst/DAS/ID01, in-person interview). Academics must be properly trained to understand and design such flexible learning environments to ensure smooth progressions from work to university and back to work, particularly for working adults. UiTM has a high proportion of working adults among its student population, and this proportion will increase in the future.

Micro-credentials

Micro-credentials, being something new with no clear guidelines for academics, were not something that UiTM's academics wanted to explore at the moment. However, as a university, based on the MQA's 2019 guidelines, the top management and deans saw the potential of micro-credentials in the future.

In 2019 the MQA released a guideline on micro-credentialing, which is an emerging component of FLPs in the Malaysian higher education system since introducing MOOCs. The MQA's guidelines have addressed issues of assuring the quality and recognition of micro-credentials. The same respondent's comment on micro-credentials reflects a general feeling among top management and academics on this new instrument, which is highly dependent on digitization. To this respondent, much still needs to be done with respect to a full-scale implementation of micro-credentialing at UiTM.

Counselling and guidance to better support equity groups

However, UiTM has already made its mark in the Malaysian higher education system in terms of the implementation of APEL. UiTM's focus on increasing access to higher education for the indigenous population, especially those with lower academic qualifications, those from B40 households, and working adults were well recognized in the higher education system. However, its responsibility towards increasing access to higher education for persons with disabilities via FLPs is only now gaining traction. For all these reasons, the MQA has appointed UiTM, through its APEL Centre, to provide counselling, guidance, and testing for prior experiential learning. In the context of FLPs and disadvantaged/indigenous groups, this APEL mechanism should create possibilities for them to change pathways, for example coming to UiTM with a background in social sciences and the humanities and then continuing to pursue studies in the STEM field.

> *There is another one that is our plan right now, a mechanism for converting students from an arts background into the sciences. We are constructing a programme, what we call pre-higher education; we want to capture students who graduated with SPM [Malaysia Certificate of Education] from the arts stream and who want to do sciences through a conversion programme. We are starting to do it now. We do not know whether it will be successful or not* (UiTM, top management, MY/Inst/DVC/ID01, in-person interview).

This conversion mechanism from the arts to STEM fields is one innovative idea that UiTM is working on. Even though this is an internal mechanism, its implementation requires approval from MOHE and the MQA.

4.2.8. Conclusion

As a long-established public HEI, and among the early few that started to offer ODL, UiTM has the potential to further enhance access to higher education, and in the process improve qualification opportunities for marginalized and disadvantaged groups and persons with disabilities. National policies on lifelong learning and RPL, supported by instruments such as APEL, MOOCs, and micro-credentials, if implemented among disadvantaged/marginalized groups and persons with disabilities, could enhance UiTM's reputation even further in this area. Furthermore, the UiTM university system is a nationwide system with campuses located in lagging and underdeveloped areas, which also opens up opportunities for UiTM to reach out to marginalized communities and improve their access to higher education.

Apart from technology, three other factors will determine UiTM's ability to fulfil national policy objectives on lifelong learning and RPL. The first of these is the quality and commitment of its staff. While the MQA's guidelines are already available and there are national centres to provide guidance, counselling, and testing for a systematic and effective implementation of FLPs, much still needs to be done to increase awareness and commitment at the faculty level. Second, there is a need for continuous engagement with industry, aimed at a systematic progression from the world of work to university, and from university back to the world of work. Third, for the purpose of monitoring and evaluating FLPs among equity groups, there is a need for a systematic data collection procedure and the development of a central database with frequent reporting related to equity groups in the UiTM system. In the final analysis, and above all, UiTM needs to revive and reinvigorate its traditional role as a socially responsible institution.

4.3.　In-depth study of the Wawasan Open University

4.3.1. Interviews and focus group discussions

Data collection at WOU followed the same methodology, procedures, and protocols as at UiTM. However, there was a slight change to the selection of participants for the FGDs. Data analysis followed the same method, using ATLAS.ti to organise the interview information into themes.

Stakeholder interviews

The stakeholder interviews at WOU followed the same methodology, procedure and protocol as at UiTM. Initially the researchers established contact with the Office of the Deputy Vice-Chancellor (Academic), who appointed her personal assistant as the key person to identify potential interviewees based on the study's requirements. A number of stakeholders were interviewed, and their positions are listed in *Table 6.* From this list, except for the top university and faculty management positions, the titles for other positions are different from those at UiTM. However, the job scope and functions were similar. These differences in titles for non-academic positions reflect the leanness of the WOU administrative structure, typical of a small private HEI.

Table 6. The stakeholders/respondents interviewed at WOU

University	Date	No	Role of the interviewee	Type of interview
Wawasan Open University	18 July 2019	1	Deputy Vice-Chancellor (Academic Programmes and Educational Technology)	In-person interview
	18 July 2019	1	Head of Quality Assurance Unit	In-person interview
	18 July 2019	1	Humanities/Social Sciences	In-person interview
	18 July 2019	1	Dean, School of Natural Sciences and Technology	In-person interview
	18 July 2019	1	Dean, Professional Programmes (Business)	In-person interview
	18 July 2019	1	Registry, Data Management Centre	In-person interview
	22 July 2019	1	Dean, School of Education, Language and Communication	In-person interview
	15 October 2019	1	Head of Academic and Career Advice and Guidance	In person interview
	15 October 2019	8	Current APEL students: Business Management, Computer Science, Finance, Engineering, Accounting, Logistics (4 females, 4 males)	Focus group discussion
	25 October 2019	1	Director of Regional Office	In-person interview
	25 October 2019	1	Advisor of Student Council	In-person interview
	19 – 20 November 2019	5	Alumni Distance Learning: Executive MBA Programme (3 females, 2 males)	Telephone interview

All interviews were conducted at the WOU Administration Building, led by the lead researcher, assisted by one research officer, and on two occasions other researchers participated in the interview sessions, including the FGDs. The same interview questions were used to extract information related to the study's main themes.

Focus group discussion with current students

The aim of the FGD was to gather information on how FLPs affect the main beneficiaries, and to focus on the higher education experience of these students and alumni. Eight students, four females and four males, agreed to participate in the FGD. Five of them were from the Faculty of Business and Administration (doing courses on Business Management, Business and Accounting, Business and Finance, and Logistic Management); and three were from the School of Science and Technology (doing courses in Software Engineering and Computer System Networks). For the alumni groups, the research took up a different strategy to secure participation. Instead of FGDs, telephone interviews were conducted.

Focus group discussion procedures

For the focus group discussions (FGD) with current FLP students at WOU, a senior academic and Dean of one of the faculties assisted the researcher by providing a list of potential participants. Invitation letters to take part in the FGD were sent out to the participants based on this list. Upon securing their agreement to participate in the FGD, dates and times were set with the participants. Researchers explained the research protocol to the participants before the interview sessions were conducted. After their permissions were obtained to audiotape the interview session, the interviews were conducted based on the line of enquiry outlined in the research proposal. Based on a summary note of the conversation together with other sources of data and information on FLPs, an in-depth narrative of the WOU case study was prepared.

Telephone interviews with alumni

The interviews with alumni were conducted via telephone because it was difficult to determine a suitable time and date to gather the participants from the alumni group. The Deputy Vice Chancellor (Academic) introduced the researcher to an alumnus of the university, and he provided us with names of other alumni in their social network. Invitation letters were sent directly to the alumni to take part in the study as per the recommendation of the first alumnus. Five alumni, comprising three males and two females, were interviewed separately via telephone.

This preceding subsection has briefly explained the common methodology, procedures, and protocol for both institutional case studies. Minor differences were highlighted in terms of the selection of participants for FGDs among alumni and currently enrolled students, because of the specific circumstances noted earlier.

4.3.2. Description of Wawasan Open University

The Wawasan Open University (WOU) is a private not-for-profit higher education institution established in 2006. Its main objective is to provide working Malaysians with access to quality higher education via Open and Distance Learning (ODL), regardless of their

educational, ethnic or socio-economic background. Guided by its vision "to be a vibrant learning community that inspires learning, supports innovation and nurtures all-round personal growth", WOU commits itself to "the expansion of opportunities in higher education and to teaching excellence aimed at increasing the level of knowledge and scholarship among all Malaysians" (STUDYMASTERS, 2020). In terms of governance arrangements and structure, at the apex of WOU's organizational structure is the Board of Governors, the executive body responsible for the overall management of the institution. The Board of Directors of Wawasan Education Foundation appoints the chair and members of the WOU's Board of Governors, which is the main funding agency for WOU (WOU, n.d.). The Senate is the academic authority of the university, which decides on academic programmes, teaching and research, the conduct of examinations, and the degrees and courses of study offered (WOU, n.d.).

As the "People's University", admitting students regardless of their background, "WOU did not collect data on students' non-academic profiles. Furthermore, the management saw such data collection as an unnecessary burden on the administrative system" (WOU, Staff, MY/Inst/RDMC/IDO2, in-person interview). However, one may argue that as a charity-based higher education institution, WOU has a commitment to the disadvantaged and marginalized through various corporate social responsibility activities. For these activities to be effective, there must be a database of target groups.

Since its establishment, WOU has catered and continues to cater to working Malaysians who wish to enter or re-enter higher education, either for self-enrichment or professional advancement, by actively implementing alternative admission pathways via open entry and APEL since 2011. The development and delivery of each WOU programme is very much driven by market and societal demands (Singh and Abeywardena, 2010). Currently, WOU reaches out to Malaysians through its Main Campus in Penang and six Regional Centres: Persiaran Green Hill in Ipoh, Cheras in Kuala Lumpur, Skudai in Johor Bahru, Kuching in Sarawak, Bandar Utama in Klang, and Subang in Subang Jaya.

WOU started with eight courses and 720 students in January 2007 (WOU, 2007). Since 2013, WOU has been offering 11 full-time diploma and degree programmes. Programmes are offered through six faculties with an academic strength of 50 staff. As of 2020, WOU offers no less than 31 ODL programmes at the certificate, diploma, and degree levels, with 11 full-time programmes and seven online postgraduate programmes (WOU, n.d.).

Based on data available since 2009, WOU's yearly intake has been on an upward trend, although this is not always sustained annually. 2015 was the best year for WOU in terms of new intake (see *Figure 13)*; two years earlier the MOHE had allowed it to offer full-time on-campus learning (OCL) undergraduate programmes for STPM (Malaysia Higher School Certificate) school leavers and diploma holders at its Main Campus in Penang (WOU, n.d).

WOU was already experiencing difficulties in sustaining its yearly intake of non-traditional students in 2013, and for this reason it applied to admit students with diploma and STPM qualifications in early 2013. From the data, when WOU began admitting students to undertake conventional programmes, its intake of non-traditional students continued to decline markedly. From the interviews with WOU's top management, WOU is experiencing stiff competition with Open University Malaysia for the non-traditional students' market. Open University Malaysia has more resources and offering wide-ranging programmes for non-traditional learners, such as teachers. Notably, from *Figure 14* and *Figure 15* show females dominate the enrolment at WOU.

Figure 13. WOU intake via conventional and non-conventional entry pathways (all students)
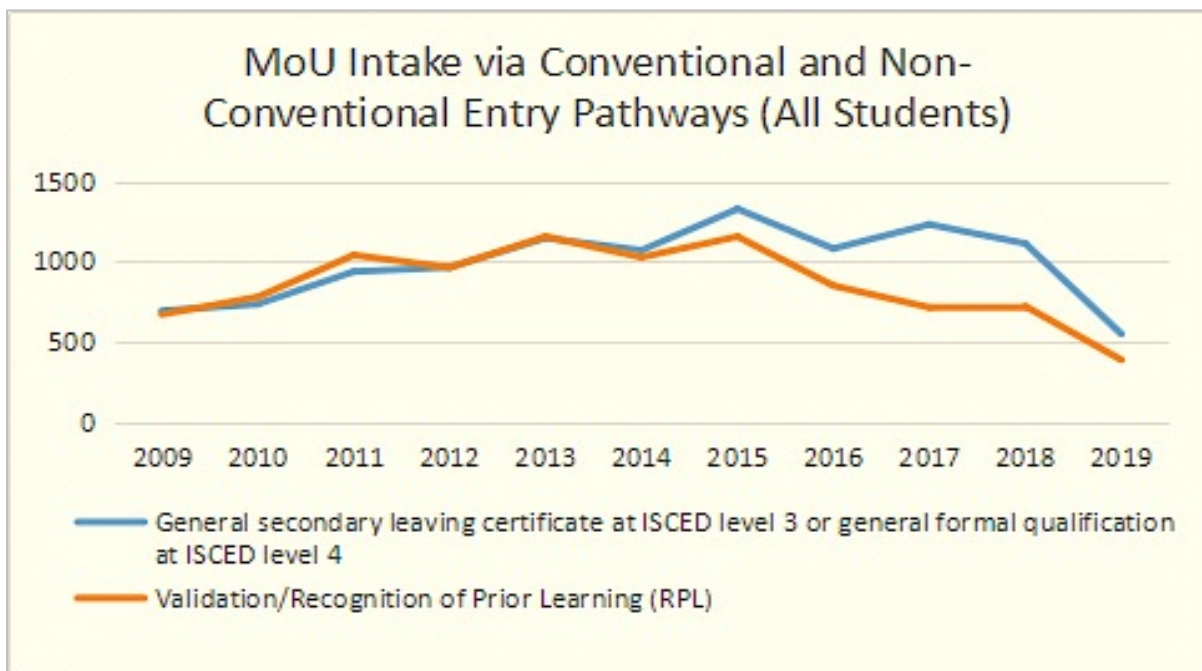
Source: WOU (2019).

Figure 14. WOU female intake via conventional and non-conventional entry pathways
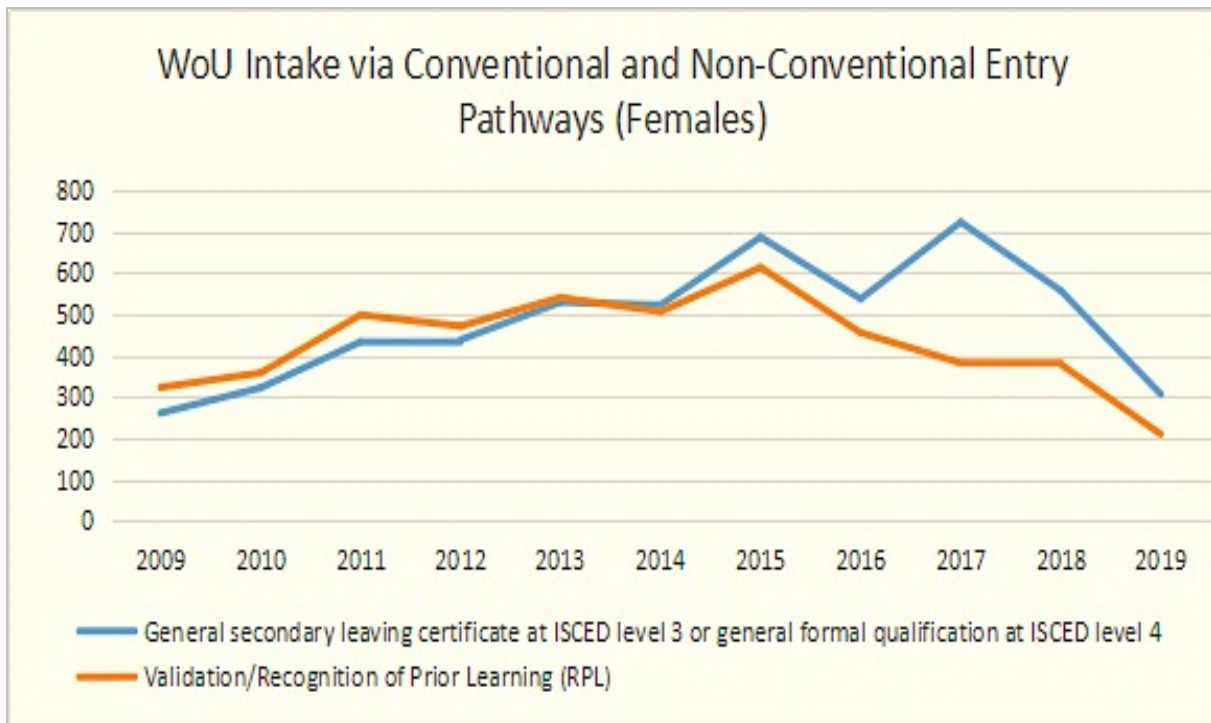

Source: WOU (2019).

Figure 15. WOU male intake via conventional and non-conventional entry pathways
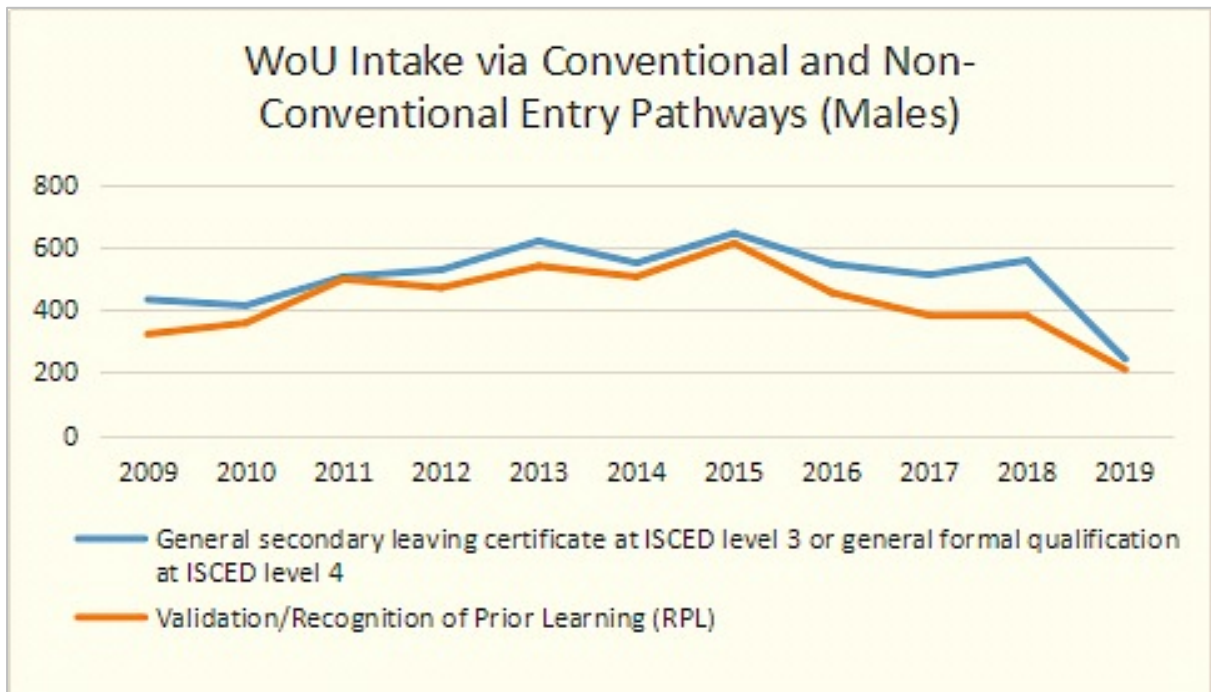
Source: WOU (2019).

4.3.3. Policies and practices of flexible learning pathways in WOU

Using ATLAS.ti software to analyse the transcribed interview texts, it was possible to categorize respondents' answers to questions on policies and practices in relation to FLPs at WOU into eight themes, namely support system for FLPs, flexible learning (with three sub-themes of flexible assessment and learning; support for flexible admission, learning, and study progression; flexible modes of teaching and learning), tuition fees, administrative flexibility, flexible entry or re-entry points, resources to deliver flexible learning pathways, support from professional bodies, flexible academic structures,

Support system for the FLPs
The first theme was the support system for the FLPs. WOU's APEL Centre has provided students with counselling and guidance to take the APEL test, providing information to potential students and students who register for new courses. As a university that was established based on ODL, "WOU has already a well-established support and counselling system, both institution-wide and at the faculty level" (WOU, top management, MY/Inst/DVC/ID02, in-person interview). As the total student population is small and the majority are working adults, counselling focused more on teaching and learning issues rather than on progression into the labour market.

For specific matters related to APEL, WOU is a national APEL Centre that provides counselling, guidance, and testing for both enrolled and prospective students.

> *In terms of policy, we do promote this flexible learning, so that it should not be a problem in terms of resources. All the RCs [regional centres] have their own APEL team to help their students go through all the APEL examination, portfolio, and whatever else. Our own academics are also familiar with what is necessary, and they have prepared the tools and everything* (WOU, top management, MY/Inst/DVC/ID02, in-person interview).

Figure 16 illustrates an overview of WOU's implementation of FLPs, based on the MQA's guidelines on APEL (A) and APEL (C). This promotion brochure provides potential applicant with various criteria, steps, and processes involved with application. APEL (Q) in the brochure is still being developed.

Figure 16. WOU's Guidance on APEL

WHO CAN APPLY APEL (A)?

- Malaysian citizen
- Minimum age
  - Certificate – 19 years old
  - Diploma – 20 years old
  - Degree – 21 years old
  - Master – 30 years old
- Formal qualification?
  - Only those wanting to pursue master's programme are required to have STPM/ Diploma/ equivalent
- Passes APEL assessment

APEL (A) METHOD OF ASSESSMENT?

- Aptitude Test – 4 aspects are tested:
  - Bahasa Malaysia
  - English
  - Mathematics
  - General Knowledge/ Critical Thinking
- Portfolio
  - Compilation of experience
  - Based on a format
- Interview
  - Master's candidate only
  - 45 minute
  - A panel of 2 interviewers

APEL (A) REFERENCE?

- Guidelines to Good Practices: APEL
- Handbook for Learners
- Handbook for Learners: Admission to Masters Level

WHO CONDUCTS APEL (A) ASSESSMENT?

- Certificate & Diploma Level: MQA
- Degree & Master: APEL Assessment Centre (PPA)
- PPA's which have been appointed as at Dec 2016:
  - Wawasan Open University (WOU)
  - Open University Malaysia (OUM)

ACCREDITATION OF PRIOR EXPERIENTIAL LEARNING

APEL (A) Access to HEP (from 2011) Enabling individuals to pursue education at HEP

APEL (Q) Acquire academic qualifications (expected 2020)

APEL (C) Credit Transfer (from 2016) Assessment of accumulated knowledge acquired through life experience in order to get courses exemption

- Conferring academic qualification to someone who **has not** undergone a programme in HEP but solely based on his/her experience
- Has been implemented in developed countries including Canada, Australia and others
- Will be implemented once APEL (C) is in place
- Expected to be launched in 2020

APEL (C) FOR WHOM?

- HEP students who have the work experience or accumulated short courses
- Malaysian citizens and non-citizens
- No minimum age requirement
- Has to pass APEL (C) assessment done by the HEP

WHO CONDUCTS APEL (C) ASSESSMENT?

- HEP approved by MQA
- HEP seeks approval to implement APEL HEPs which have been approved (as at Dec 2016):
  - UiTM
  - WOU
  - OUM
  - INTI International University

HOW IS APEL (C) ASSESSED?

- Depending on the courses to be credit transferred
- Methods of assessment that can be used are challenge test or portfolio

WHAT IS THE MAXIMUM CREDIT ALLOWED TO BE TRANSFERRED?

- 30% from the total credit hours

Source: WOU (2020).

Flexible assessment and learning

The second theme revolved around the assessment and learning process, which must reflect the need to be flexible to enable part-time students to work and study at the same time. WOU follows strictly the MQA's guidelines on these aspects, and its approach is that "they do not have to come to the campus; they only come for graduation" (WOU, Dean, MY/Inst/DELC/ID02, in-person interview).

However, underlying this statement was a more serious approach to assessing student learning outcomes at OUM. Ooi _et al_. (2018), adopting Luthans and Youssef's (2004) idea of psychological capital, referring to an individual's psychological state of mind and comprising four constructs (self-efficacy, optimism, hope, and resiliency), undertook a study on WOU students' learning experiences. They concluded that psychological capital is a predictor of academic performance in an online distance learning environment. They further argue that this generates new insights and understanding of online learners that will assist WOU educators to advise online learners about how to begin their academic journey in an online distance mode.

Support for flexible admission, learning, and study progression

A fourth theme was top management support for flexible admission, learning, and study progression. "Support comes from the top, from the senate level down to the faculty, particularly in matters involving admission, quality assurance, programme development, course development, delivery of programmes, learning support system, and assessment" (WOU, Head of Unit, MY/Inst/HQA/ID02, in-person interview). At the institutional level, WOU has been very receptive to criticism either with respect to policy or its implementation. In this respect, a respondent (WOU, Head of Centre, MY/Inst/HACAG/ID02, in-person interview) highlighted that "for the twelve years I have been with WOU, changes have been decided and executed". He cited an example to illustrate this point: "In 2007, WOU was one of the first universities to have an institutional policy on advanced learning. It was a policy that did not exist nationally, but academics saw the need for such a policy" (WOU, Head of Centre, MY/Inst/HACAG/ID02, in-person interview).

Flexible modes of teaching and learning

Flexible modes of teaching and learning emerged as the sixth theme. These flexibilities contributed towards the policies and practices related to flexible learning pathways in WOU. Teaching and learning activities are conducted via a combination of online and face-to-face classroom delivery, giving working adults the flexibility to attend classes and learn at their own pace. A respondent explained, "all the lessons were conducted on virtual platforms, using the learning management system (LMS)" (WOU, Dean, MY/Inst/DELC/ID02, in-person interview). In addition, most faculties would have face-to-face meetings about five times per semester, with students attending for tutorials once a month. "The rest of the time, during the weekdays and weekends they can study on their own, and then come for tutorial once every month, altogether five tutorials for each course" (WOU, Dean, MY/Inst/DELC/ID02, in-person interview).

This respondent, who is a dean, further explained that students who were working could take additional time to study in a flexible manner. Furthermore, technology allows them to study anywhere, anytime. This would not be possible if learning was only administered using the traditional method. "At WOU, some of the students were teachers. They were already teaching but they wanted to learn more, maybe of the theoretical aspects of teaching from courses offered at WOU" (WOU, Dean, MY/Inst/DELC/ID02, in-person interview). They learned online, and they were able to apply their knowledge in their teaching and learning situations in schools. WOU conducted teaching practice as well: "Although these students were teachers at school, they still have to take up teaching practice. But they may get an exemption. This is where the flexibility comes" (WOU, Dean, MY/Inst/DELC/ID02, in-person interview). Students confirmed the usefulness of the flexible learning system at WOU, which was "enjoyable and furthermore with excellent technology, the system is suitable for working adults" (WOU Alumni, FGD).

Tuition fees

In addition to a flexible learning process, the third theme revolved around the issue of tuition fees that are affordable for everyone, and fees discounts for students who score a good GPA. However, while support for equity groups was not expressed in very clear terms at WOU, affordable tuition meant that equity groups should be able to pursue studies according to their learning modes and at a speed they are comfortable with. In fact, "WOU was committed to keep all the programme fees as low as possible. But there were conditions attached to recipients of low tuition fees" (WOU, middle management, MY/Inst/RDMC/ID02, in-person interview). It was reported at the FGDs with students (WOU, Student, FGD) that if one received a 50 per cent reduction in tuition fee, one must consistently achieve a GPA of 2.75 or above.

Administrative flexibility

The fifth theme is the consideration of administrative flexibility at every level, from admission to the delivery and management of the academic system. Indeed, based on the interviews it could be briefly summarized that the successful delivery of a quality flexible programme at WOU should be attributed to the cooperation of all parties. There should be no strict demarcation of responsibilities, as the implementation of FLPs was not the task of one specific unit within the institution, although a single unit may be responsible for certain aspects of the process. To this effect, from the QA perspective a respondent noted:

> *At the programme level, quality is everyone's business. It is not the task of just a specific unit. The specific unit is just managing it. At the school level, the school is entrusted to look at the whole model of the programme and its delivery right from its development up to the training of the students and the undergraduates. The whole chains of processes are subject to quality indicators* (WOU, Head of entre, MY/Inst/HQA/ID02, in-person interview).

Flexible entry or re-entry points

The seventh theme concerned flexible entry or re-entry points to higher education at WOU. Working adults who had missed the chance to pursue their studies before are now presented with the opportunity to continue their university education via flexible admission requirements. "It is about giving school leavers a second chance, as it opens up opportunities for people who must work first due to unfortunate circumstances in life" (WOU Alumni, FGD). "Those with one year of working experience may apply for courses offered by WOU via APEL (A)" (WOU Student, telephone interview). Indeed, re-entry to higher education was very flexible, and WOU pioneered this flexible system based on an Open Entry policy. In fact, WOU and Open University Malaysia (OUM) were specifically established to implement an open entry policy.

> *In connection with flexible admission, it was pointed out that WOU was one of the pioneering institutions to be established when policy on open entry was introduced.*

WOU is a pioneer also with respect to distance learning, without the need for regular face-to-face contact with lecturers in the classroom. Therefore, it was not surprising that ODL emerged as the eighth theme of interest when flexible learning environment was mentioned. Presently, WOU enjoys the benefit of having both off- and on-campus students in the Business School (WOU, middle management, MY/Inst/RDMC/ID02, in-person interview).

Resources to deliver flexible learning pathways

Resources to deliver flexible learning pathways emerged as the ninth theme in the conversations. Resources refer to financial, material, and other assets that were combined to deliver FLPs. In the context of a private HEI such as WOU, financial resources were needed to upgrade facilities, which were critical for implementing a flexible learning environment. One of the Deans lamented: "the fact is that the major constraints in implementing flexible learning, was money, resources, and of course, the leadership" (WOU, Dean, MY/Inst/DNST/ID02, in-person interview). She further explained that apart from financial resources,

WOU needs leadership with strategic directions if the institution is to continue to excel in ODL, and other FLPs based on RPL. Leadership, resources and technical skills were just some of the critical components for a successful FLP. In the final analysis, it was about time, commitment and spirit (MY/Inst/DNST/ID02).

Support from professional bodies

Support from professional bodies for the implementation of FLPs goes a long way with respect to the certification of graduates and emerging interest in micro-credentials. However, all these new developments need accreditation from the MQA. A respondent highlighted that "the MQA released its guidelines on micro-credentials and this instrument should facilitate learning and certification at the institutional level" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview). The respondent was of the view that the MQA, through this guideline, "was promoting the adoption of micro-credentials, a professional certificate that could give sets of skills to the workforce". However, the respondent felt that "the MQA's promotion of micro-credentials is not in line with its own policy, that is, professional certificates are not accredited by the MQA" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview).

Flexible academic structures

The last theme that emerged was flexible academic structures; these were raised by several deans. While the system that was being practised ensured flexibility for students to enrol in the academic courses offered, that flexibility should not result in students enrolling in unrelated courses or courses that are not appropriate to their level of study. In addition, to monitor students' progression the faculties have put in place a system whereby:

In the first semester, when the students come in, we encourage them to do the foundation courses and language courses first. In one course, we teach them learning skills for university studies. We ask all our undergraduates to take it. These are the courses that we encourage students to take. After that they will move on to other courses. For some students, the issue is not so much about the APEL entry, even the regular entry students also sometimes find it a bit difficult. This is because we give them the flexibility to choose whatever courses they want. They ended up taking level 200 and 300 courses. Sometimes students do some very strange things (WOU, Dean, MY/Inst/DHSS/ID02, in-person interview).

WOU is an institution that grew initially, and continues to be based on ODL. Its internal policies and practices have been developed over the years, to ensure quality education and relevance in the market place. WOU's APEL Centre is the main counselling and guidance centre for APEL, which has played an important part in moving the FLP agenda forward in WOU. Arguably, WOU's academics and students would like to see this notion of flexibility being implemented throughout the WOU system, be it policy or practice.

4.3.4. Role of national policies and instruments in supporting FLPS

Based on the interviews with top management, including the dean, four themes emerged that were related to the role of national policies and instruments to support FLPs. The four themes were the provision of guidelines on the implementation of FLPs based on national policies, the vulnerability of FLPs, support for FLP implementation, and ensuring the quality of FLPs within frameworks and standards.

Guidelines on the implementation of FLPs
Provision of guidelines on the implementation of FLPs based on national policies emerged as the first theme. One respondent (WOU, top management, MY/Inst/DVC/ID02, in-person interview) summarised: "the general frustrations with the MQA guidelines, not national policies (lifelong learning, RPL), which were inflexible in the context of FLPs". It was argued that the current WOU inflexibility actually comes from external entities: "[s]ince the formulation of national policy on open entry in 2006 and ODL at WOU in 2012, the institution had an institutional policy on the implementation of FLPs. WOU's business model was based on these national policies" (WOU, Head of centre, MY/Inst/HACAG/ID02, in-person interview). At that time, WOU and other HEIs were allowed to be creative and innovative in the implementation of these policies, but under the MQA guidelines WOU had no choice but to revise its policy to be in line with the national framework. WOU had to review its credit transfer scheme, since it had practised a different credit transfers system since 2012. These despondent attitudes, expressed by deans, could be summarised as: "take advantage of it or interpret it according to the needs of the institution and the market" (WOU, Head of centre, MY/Inst/HACAG/ID02, in-person interview). There was a perception that there was no room for creativity and innovation, and the academic autonomy of the

HEIs was being clawed back; this was expressed by one of the deans (WOU, Dean, MY/Inst/DNST/ID02, in-person interview) as follows:

> *Another important factor is the ministry. To me, somehow, the ministry gives us a lot of rules and regulations, to tie us up in our flexible learning. We need to get a lot of accreditations. So, during this accreditation process, sometimes the rules given by the ministry are not so consistent. I have gone through the full accreditation system for my 4 to 5 programmes and tendered them for audit, full accreditation audit. Actually, there were 10 to 20 programmes. I dealt with the audit panel from MQA. These people came from a local university. Somehow, these people, they have never been involved with flexible learning. So, it is very difficult for me as a pioneer of flexible learning to be assessed by a panel of technical people without a background in flexible learning. They tried to tie us up by trying to impose a lot of what they think is good into the programme according to their perspective* (WOU, Dean, MY/Inst/DNST/ID02, in-person interview).

Vulnerability of FLPs

The vulnerability of FLPs emerged as the second theme. This refers to loopholes in the MOHE's regulations and the MQA's guidelines regarding flexibility, which may be abused by HEIs. For instance, some HEIs could offer shorter courses at reduced costs, or courses of lower quality. According to one respondent this was not a hypothetical case:

> *There are some institutions that may abuse this system by allowing students to come in and giving them credit transfer without managing the courses properly. This could be one of the weaknesses that certain institutions are doing. When we come to assess their pricing, the fees are lower because actually they awarded credits to their students, and from then on the duration of their studies was shortened. Some of them are selling this idea to the public, saying that they can offer programmes to you with a shorter time at certain costs, so come and join them. However, at some institutions, the quality may not be there. Their only idea is to expedite their programme by awarding credits. That is one story* (WOU, top management, MY/Inst/DVC/ID02, in-person interview).

In view of these possible abuses of the system, policing becomes necessary, and "private HEIs in particular were being closely regulated in terms of the degree of academic flexibility" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview). Respondents stressed: "WOU is very clear about the need to follow the MQA's rules and regulations, and thus there was not really much flexibility in providing customized programmes for students who were mostly working adults" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview) – and more importantly, to meet the specific requirements of certain sectors of the economy.

However, flexibility could be interpreted differently by the owners or Boards of Directors of HEIs. "WOU developed academic programmes, the plan was for these to be relevant for the

next three years or more. But with changes in the economy, WOU, as an HEI that was sensitive to market demands, had to design and implement marketable courses" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview). Thus, academics had to plan courses with a short life-span. In other words, these deans were saying that the Board of Governors of WOU was interpreting flexibility loosely, to the detriment of academic quality. "Even though WOU's programmes were about developing skills and competencies, which adult students require in the workplace, the designing and implementation of these programmes requires time" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview).

Support for the implementation of FLPs

The third theme that emerged was support for the implementation of FLPs. Currently, private HEIs are implementing FLPs on their own account, recognizing an opportunity for their institutions to increase student numbers. However, apart from the MQA's guidelines and code of good practice, there are no other incentives for private HEIs to encourage them to implement FLPs. It is argued that government support for flexible learning, such as "providing tax-exemptions for students enrolling in life-long learning programmes and for HEIs in terms of investments and infrastructure" would be most welcomed (WOU, top management, MY/Inst/DVC/ID02, in-person interview). This comment was relevant as tax deductions were applicable for full-time but not part-time study. The respondent was very clear about the need for the MOHE and MQA to provide answers to some technical issues, in order to support the implementation of FLP policy (specifically MOOCs and micro-credentials) at the institutional level. For example, "a student that had taken and completed MOOCs or online learning, and been awarded a certificate, should not be required to show their e-portfolio and made to take another competency examination for graduation" (WOU, top management, MY/Inst/DVC/ID02, in-person interview).

In terms of the implementation of micro-credentials, which was regarded as very promising among HEIs, there were still technical issues that needed to be addressed. From the interviews, the general feelings and issues related to micro-credentials may be summarized as follows. The first part of the micro-credential mechanism had been approved by the MQA council, but the MOHE was still looking at courses from accredited programmes as micro-credential offerings. If this could be done, then credit transfer was possible without having to go through the process of e-portfolio assessment. However, the second part, which was seen as critical and requiring explicit policy guidance, involved what could be done when previous courses were not from accredited programmes.

> *I attended a seminar on flexible education a week ago. A question on that was raised. Now, we have taken all these packages, maybe 5 or 6 packages that make up different credentials to total different degrees. So, how can a student be awarded a credit transfer? Is it through APEL (A) or..[not sure]?* (WOU, top management, MY/Inst/DVC/ID02, in-person interview).

Ensuring the quality of FLPs

The last theme was related to the need to ensure the quality of FLPs within the MQA's frameworks and standards. Respondents stressed that there seemed to be a number of conflicts in following the MQA standards with respect to the current programmes run by WOU, including credit transfer. One respondent (WOU, Dean, MY/Inst/DELC/ID02, in-person interview) agreed that "the WOU had marking schemes and grading of assignments to ensure the quality and in line with the MQA standards", while another dean (WOU, Dean, MY/Inst/DNST/ID02, in-person interview) highlighted "great challenges when the MQA insisted that WOU include the body of knowledge in a particular subject to its programme standards. That was very tough because the whole programme was only 120 credits".
One dean highlighted that for WOU,

> *there was an issue with respect to the quality of qualifications from overseas institutions. When WOU decided to adopt the national policy of credit transfer, it had to find a solution for applicants with a diploma in economics from the University of London from the early 1970s* (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview).

According to the MQA standards, WOU cannot give such individuals an exemption because this diploma is not an accredited diploma as far as the MQA was concerned. "But to WOU, the diploma was from the University of London and not from any run-of-the-mill universities" (WOU, Dean, MY/Inst/DPPB/ID02, in-person interview).

Notably, from the above, while WOU accepted the fact that the national policies on lifelong learning and RPL were exactly the types of policies that would suit its ODL ethos, the MQA's instruments and guidelines for the implementation of FLPs since 2012 were actually restricting WOU's well-established practices. Thus, there were many adaptations and realignments that needed to be undertaken in order for WOU qualifications based on FLPs to be accredited by the MQA.

4.3.5. Monitoring the implementation of FLPs, including for equity groups

Only one theme was identified as being connected with the monitoring of the implementation of FLPs, namely the practice of credit transfer which, based on interviews, were undertaken by the Office of Quality Assurance at WOU together with the deans of faculties. Implementation issues would be reported to the Senate, and solutions would then be reported to the WOU's Board of Governors, especially when these solutions involved an allocation of resources. As highlighted by one of the WOU's dean, the roles of a dean are to monitor and ensure the implementation of flexible learning in their respective faculties to reflect the objective and mission of the university as a whole.

> *The deans led the university community to execute the objectives, the plan and the standard operating procedures (SOP) in line with the scope of their area of*

responsibility. They monitored staffs that were assessing applicants based on the APEL (A) and criteria specifically on entry requirements to be admitted to the Bachelor's degree and Master's degree. Subsequently, the deans were responsible to monitor the design and delivery of programmes until the exit point, and more important in this regard, to determine when the assessment needs to be held (WOU, Dean, MY/Inst/DNST/ID02, in-person interviews).

Based on FGDs with currently enrolled FLP students, the following were a sample of their evaluations of FLPs at WOU, which were generally favourable. Overall, the general feeling was that as working adults, time was a major constraint. At WOU, however, flexibility in the learning environment was being practised and the onus was on the students to achieve a good work-study balance. Based on the students' responses, their working experience made them more conscious of the importance of time management and the need to prioritise financial commitments.

For the alumni, time management was also very important in balancing study, work, and family. However, good WOU modules and the application of technology made studying enjoyable. Their courses helped them to make the transition to better positions in the workplace, and made some salary adjustments possible after they had achieved higher qualifications. More importantly to the alumni, however, WOU's FLP programmes were an important source of motivation for further study at Master's or PhD level.

As far as equity groups were concerned, the interviews reconfirmed an earlier statement by the respondent in charge of data and statistics that WOU did not have data on specific equity groups. Both the currently enrolled students and the alumni did highlight the fact that WOU offered a 50 per cent reduction in tuition fees, but during FGDs, phone interviews with alumni, and interviews with top level management and deans, no one had mentioned any internal policies towards equity groups. However, based on the governance arrangements at WOU, and because it is a charitable organization, it is likely that such a policy was decided by the Board of Directors of Wawasan Education Foundation, the main funding agency for WOU.

4.3.6. *Evaluation of effectiveness, enablers and factors lacking in implementation of FLPs*

With regard to the evaluation of FLPs and related instruments, based on the data, three themes identified in the WOU data were suboptimal performance of students, maximizing internal resources, and students' commitment and perseverance. WOU is a private HEI that has to operate on the basis of a financial 'bottom line'. Based on its business model, volume is an important factor, and this could affect the quality of its education provision.

Suboptimal performance

Suboptimal performance among WOU students in this context refers to the performance of students which is below the acceptable standard or level. Based on interviews with deans, they did not discount the possibility that students with low academic achievement might be admitted using the FLP mechanism. However, they were unanimous that the implementation of FLP policies was intended to provide opportunities for non-traditional learners. The challenge was for the academics to be effective in their lesson delivery and take into account the students' learning styles. Based on interviews with the deans, failures or ineffectiveness on the part of academics would be reflected in poor examination performance by students. One respondent underscored this concern about suboptimal performance as follows:

> *When we talk about effectiveness and ineffectiveness, they come out when we analyse the examination results. Sometimes, the results show very poor performance. When talking about poor performance, there must be other reasons that contribute to the poor performance. It could be the way the questions were developed. It could also be way the lessons were delivered. Those are the quality aspects that we will check – the school, the course coordinators, and the lecturers. We will dive into that and investigate the factors that have contributed to the poor performance of the students* (WOU, Head of Unit, MY/Inst/HQA/ID02, in-person interview).

Maximizing internal resources

A recent study by Chuah and Lim (2018:61) provided an excellent context when evaluating FLP implementation at WOU. The study addressed three challenges faced by WOU as a private HEI with limited resources giving rise to blurred jurisdiction on inter-department processes relating to student matter.

> *WOU operates in a resource-constrained environment. Each department focuses on the tasks defined for the department and has been functioning well as such. However, when a student service process involves various departments such as the faculty member, registry, enrolment and information technology departments; the grey areas between departments are often not well addressed. Another issue with cross-department collaboration is the weakness of information sharing. Manually collected data are often stored in a file at the department and failed to be disseminated to the point of decision-making. This has caused lapses in services and frustrations among the affected students. Another problem is the poor visibility of weak students thereby allowing these students to fail beyond the redemption point and subsequently drop out from the university.*

Students' commitment and perseverance

Students' commitment and perseverance, especially among non-traditional learners (part-timers, students with family commitments), were viewed as major concerns, both at the

present time and in the near future. Inevitably, these issues would have implications for WOU's future situation, when their new intake and total enrolment must take into account higher drop-out rates at the beginning of each semester. In fact, according to one respondent,

> *a high percentage of dropouts were noted in the first two semesters. At least 40 per cent tend to drop out for various reasons, an important one being the inability to balance work and study commitments. They became inactive after that, and that was why the first two semesters were crucial* (WOU, Dean, MY/Inst/DHSS/ID02, in-person interview).

As WOU caters primarily for non-traditional learners, it follows that tuition fees are generally low. Thus, trying to achieve a comfortable bottom line is a challenge, especially for academic staff. The quality of programmes offered to non-traditional learners is key to the financial sustainability of higher education institutions, and academic staff have an important role to play in this respect. The implementation of FLPs, especially with respect to micro-credentials, opens up opportunities for the future. However, deans were cautious, as there were many technical issues that needed to be resolved.

4.3.7. Priorities for the future

Based on the interviews and the FGDs, WOU is very positive about the role of a flexible admission system and a flexible learning environment, as these will increase access to better qualifications for the non-traditional learners who were its main target group. As far as the future and WOU were concerned, based on our ATLAS.ti analysis of the data, five items emerged as highly relevant: learning support systems, the sustainability of flexible learning pathways, the changing roles of HEIs, micro-credentials, and the diversity of HEI programmes.

In conjunction with the recent 2020 Convocation, the Vice-Chancellor of WOU has reiterated that ODL is among the future priorities for this institution:

> *WOU has found its right footing by being one of the pioneering institutions offering ODL in Malaysia at a time when the cost of traditional tertiary education is escalating around the world. The ODL mode of study employs technologies to enable students to access course contents online and communicate with faculty and tutors. The future of education will increasingly rely on such distance learning platforms* (WOU, 2020: 5).

The MQA released guidelines on MOOCs in 2016 and on micro-credentials in 2019. Based on our interviews, WOU, as a private university, needs to diversify its products to attract both traditional and non-traditional learners in order to remain financially sustainable and claim its position in the non-traditional learners' market. Thus, according to one respondent

(MY/Inst/DVC/ID02), the next priorities after ODL should be MOOCs and micro-credentials. Indeed, the MQA's guidelines on micro-credentials have opened other possibilities for flexible learning, and WOU was looking at this positively. Earning a micro-credential was like taking a shortened university/college course provided online or in a classroom setting. Employers and employees who were potential non-traditional learners were in favour of gaining skills/competencies as part of their professional development through micro-credentials.

> *I think they really welcome this idea because, if you look at the history of courses, on micro-credentials, for example, if I am in the industry of sales departments, I want to improve the sales and services. So, then I would probably come to the university and say, could you look at the micro-credentials that could enhance the skills of my staff on services. Then you can now pull a few courses together and put it as a micro-credential and offer it to my staff and me. This is another flexible learning pathway that the WOU and the rest of the institutions are now exploring. It is because with the latest introduction of these micro-credentials by MQA and MOE, a lot of people are jumping into this boat* (WOU, Top management, MY/Inst/DVC/ID02, in-person interview).

However, all these future priorities need to be promoted and marketed based on some evidence of positive learning experiences and outcomes for WOU students. In a very competitive market situation, it would be very difficult to attract students without such evidence-based marketing. In this regard, one respondent described the following action plan, which would need to be widely emphasized in the future to ensure effective learning at WOU.

> *When the students come in, we give them an orientation. We give them almost one full day of student orientation, to tell them what is available in WOU, how they are supposed to cope with our learner's support system. … giving them "Learning guides at WOU", a series of guidebooks on learning skills at WOU. The first book is on getting started. To make sure that when they come in, they come in through the flexible learning pathways and all those things related to it. When they come in, they must also exit. The point is, how do they exit. So, we are getting these books out…They have to start from setting goals, staying motivated, to understanding each of the learning support systems* (WOU, top management, MY/Inst/DVC/ID02).

As a higher education institution, WOU is focused on providing quality education that would result in positive outcomes for its graduates. In this regard, the learning process and an improved and effective learning support system are critical components to achieve its institutional objectives. These would necessarily involve the administration, the support staff, and the lecturers or instructors beyond merely the development of the formal delivery of contents or skills/competencies. As an institution that has admitted students based on open entry from the mid-2000s, WOU is keen to support all students, but especially non-traditional learners, to complete their studies within a reasonable time period, if not on time. The intention is to achieve this objective through innovative approaches, but still in

compliance with the MQA's rules and regulations. Based on interviews with top management and deans of faculties, there was a need to properly orientate new students, especially non-traditional students, to life as part-time students at WOU. Many been out of school for quite a while, and going back to studying with additional work commitments was a challenge. The WOU newsletter, *Wawasanlink*, published many inspiring stories about enrolled students and alumni, especially with regard to balancing work and study and finally success.

While focusing on flexibility in admission, learning, and delivery of courses as defined by WOU, it was also important that government policies and instruments consider the sustainability of institutions that promote and undertake programmes for non-traditional learners. From the interviews, respondents from top management to the faculty deans were aware that the MOHE, or for that matter the government as a whole, did not provide financial assistance or incentives to private HEIs, except by making study loans available to their enrolled students who were taking accredited courses. However, on an annual basis the MOHE would make observations and recommendations on the financial status of an HEI based on its revenue and expenditure statements, and this was done primarily to safeguard the interests of the students. On the financial sustainability of HEIs such as WOU, it was the responsibility of the Board of Directors of the Wawasan Education Foundation to make decisions, as long as these decisions were according to the Private Higher Educational Institutions Act, 1996. Respondents were well aware of the reality of the market for students at the present time:

> *there are so many universities out there and everybody is going into the same market; therefore, there is an issue of sustainability. We must think hard about how to remain sustainable. I am sure that every university is going through the same process. This is my opinion, I find other universities are rushing into this online learning, into the MOOCs and into, the next would be the micro-credentialing, by unbounding their courses. But then, my question is that: is this a healthy competition? Then, to the point of some private institutions selling their micro-credentials at very low costs. And, in my opinion, if we want to do the same, I do not think it can be sustainable in the long run* (WOU, top management, MY/Inst/DVC/ID02, in-person interview).

From the interviews, a common thread in the arguments was that Malaysian universities, both private and public, must play several roles. Online teaching was a challenge for an institution such as WOU, particularly in the context of non-traditional learners. Increasingly, research universities were also adopting online teaching as this mode is flexible, giving more time for academics to undertake other roles. Online teaching also allowed research universities offering distance education to take a share of the non-traditional markets through non-conventional teaching modes. WOU, which was a pioneer in ODL, had to be good to maintain its fair share of the market.

In the future, flexibility should not be limited to only admission or learning modes; there should also be flexibility in terms of diversity of programmes. Programmes offered at HEIs should not only consider flexibility in the learning process; there must be flexibility with respect to permission to offer diverse programmes that are deemed important by the institution. Some ministry-prescribed courses may not be relevant after a time, and curriculums might need reassessment in terms of their relevance and appropriateness (MY/Inst/DVC/ID02). MOOCs and micro-credentials were viewed favourably by the WOU's deans from the perspective of their potentials in the market in the future. They were still grappling with the finer details of the implementation of micro-credentials, since the MQA's guideline on micro-credentials was not comprehensive with regards to the role of academics.

4.3.8. Conclusion

As a pioneering private higher education institution in terms of open entry and ODL, WOU has the potential to further enhance FLPs in Malaysia. However, and this may have its roots in the philosophy of the establishment of WOU, the institution has not been very open about its policy regarding providing access to B40 households or marginalized and disadvantaged groups. Presumably, as a university that was established as a charity, this concern would be expected to form part of the institution's guiding agenda.

National policies on lifelong learning and RPL, using instruments such as ODL, APEL, MOOCs and micro-credentials, were seriously pursued at WOU as it endeavoured to offer more diversified products to the market. Since its establishment in 2007, WOU's student population comprised mainly part-time working adults, and indeed the university was established primarily to offer a second chance for this group to improve their qualifications. However, since 2013, because of concerns over financial sustainability, WOU has had to enrol full-time, traditional students based on conventional entry requirements.

WOU is adept at utilizing technology for the delivery of its academic courses. Other factors that could determine WOU's ability to fulfil national policy objectives on lifelong learning and RPL were as follows. First, it is dependent on the quality and commitment of its staff. For the moment, many of the WOU's teaching staff members are retired academics from public universities, and obviously there is an issue of sustainability here. The WOU community as a whole is committed to ODL and RPL; they often have benefited from this mode of education delivery and entry to their institution based on APEL. For WOU, the MQA's guidelines were already available, and its APEL Centre has provided guidance, counselling, and testing to enable a systematic and effective implementation of FLPs, which could also facilitate activities to further enhance the level of awareness and commitment to this mode of access at the faculty level.

Second, WOU's Business School in particular has demonstrated a commendable level of engagement with industry, aimed at a systematic progression from the world of work to the university, and then from the university back to the world of work. Such engagement should be a major source of students for enrolment in FLPs, not only at degree level but also, more importantly, at the Masters or PhD level (level 8 in the MQF).

Third, for the purpose of monitoring and evaluation of FLPs among equity groups, there was a need for systematic data collection and the development of a central database, with frequent reporting in relation to equity groups such as the B40 and persons with disabilities. This needs to be done as there are national policies aimed at improving the socio-economic situation of the B40 and persons with disabilities. Furthermore, as WOU is a charity-based private HEI, this should be given priority when the national policy was about targeting the B40. On the part of the government, the National Higher Education Fund Corporation (PTPTN) should offer study loans to WOU's part-time and full-time students who are from the B40 category, to either partially or fully cover the tuition fees of their diploma or Bachelor's degree programme.

CHAPTER 5. COMPARATIVE ANALYSIS OF POLICIES AND PRACTICES FOR FLPS, CONCLUSIONS AND RECOMMENDATIONS

5.1.   Introduction

This chapter will begin with a summary of the provision of FLPs and its evolution in the Malaysian context since 2006, and in particular the development trend since 2011 in parallel with other changes in the higher education landscape. Following the summary, a comparative analysis of the adoption and implementation of national policies at the institutional level will be presented. Specifically, this analysis will bring to the fore the linkages between national policies, instruments, and practices at the level of the HEIs. In so doing, the effectiveness of the policies, instruments, and practices that support FLPs will become apparent, and so will the lessons that may be learned. Ultimately, practices and implementation that support FLPs at the institutional level should be reflected back on the regulatory regime, regulations, national policies, the national stakeholders, and the characteristics of the HEIs themselves. What are the implications of the interplay between national policies, instruments, practices, and role of the stakeholders at the institutional level? A synthesis of our findings will be the basis for the study's recommendations to improve policies, implementation, and monitoring of FLPs for the benefit of equity groups.

5.2.   Summary of FLPs in Malaysia

In the early 2000s, the government viewed lifelong learning as a necessary investment to develop Malaysia based on the knowledge-based economy. To achieve this objective, education and human capital training were seen as a logical area for special policy focus. As outlined in the Eighth Malaysia Plan 2001–2005, the government introduced the policy on lifelong learning that formed the basis for the development of strategic initiatives at the ministry level. Following that, based on the national strategic directions outlined in the Ninth Malaysia Plan 2006–2010, the MOHE introduced the policy on the open entry system, and open and distance learning (ODL) in Malaysia's higher education system. This policy was implemented in 2006, which allowed for the establishment of universities specifically to admit learners based on the assessment of their prior learning experience.

The Ninth Malaysia Plan 2006–2010 also placed high priority on increasing accessibility to higher education to create a critical mass of trained, skilled, and knowledgeable workers who would be able to sustain economic growth, increase competitiveness, and support a knowledge-based economy. The National Higher Education Strategic Plan 2020

(NHESP2020), launched in 2007, outlined a strategic objective for the "enculturation of lifelong learning" in the higher education sector. Primarily, this was to recognize and support lifelong learning based on open entry and through its various modalities of education delivery, including open and distance learning, e-learning, and workplace and part-time learning, for human capital development.

The MOHE then launched its Blueprint on the Enculturation of Lifelong Learning for Malaysia, as part of the National Higher Education Action Plan 2011–2015. This blueprint has addressed several lifelong learning issues and challenges since its implementation in the mid-2000s. One of the recommendations, the recognition of lifelong learning, needs to be implemented through the Malaysian Qualifications Framework (MQF). Based on the national policy on the recognition of prior learning (RPL), the Accreditation of Prior Experiential Learning for admission purposes (APEL A) was implemented in 2011. To ensure that the strategies were successfully implemented, a set of performance objectives, performance and accountability metrics, strategic targets, and sponsoring organizations for each of the initiatives were identified (UNESCO Institute of Lifelong Learning, 2011). The MQA defined APEL as a systematic process that involves the identification, documentation, and assessment of prior experiential learning, such as knowledge, skills, and attitudes, to determine the level at which an individual has achieved the desired learning outcomes, to be used to determine access to a programme of study and/or the award of credits (MQA, 2012). Based on APEL, not only could working adults gain admission into universities by leveraging their prior learning experiences, they could also use their experiences to earn credits (APEL C) in order to shorten their study duration.

Malaysia was introduced to massive open online courses (MOOCs) as a way of learning when Taylor's University initiated the first MOOC in 2013 (MQA, 2016). The Malaysia Education Blueprint (Higher Education) 2015–2025, which was launched in 2015, leveraged MOOCs as a way to take advantage of technology to improve quality and widen access to education. This marked the adoption of lifelong learning to widen access to higher education. Access for non-traditional learners to higher education, particularly the B40 group and persons with disabilities, was clearly spelt out as an important strategic direction in the Eleventh Malaysia Plan 2016–2020. With the adoption and subsequent implementation of the Sustainable Development Goals (SDGs), and in particular SDG4 – Quality Education, increasing access to higher education was given a special focus. Notably, the national policy has shifted from lifelong learning for human resource development and Malaysia's competitiveness to giving equity groups access to higher education.

The MQA then prepared several guidelines, one of which was to provide recognition through the award of credits for participation in MOOCs (MQA, 2016). With the implementation of APEL, the notion of implementing a complementary instrument was explored. Micro-credentials, which represent a certification of learning based on 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 (MQA, 2019, 5-6), were viewed as suitable for non-traditional learners. This category of learners would have the opportunity to get a formal qualification through the micro-credentials programme. Even though the MQA has produced a "Guideline on Micro-credentials" to provide HEIs and stakeholders with information about principles and good practice in the implementation of micro-credentials, this has not yet been developed into full "Guidelines for Good Practice", which could address all types of Micro-credentials and provider issues, and integrate micro-credentials into traditional awards and qualifications (Rozana, 2019).

5.3.   Comparative analysis of policies and practices for FLPs

The two universities selected for in-depth study were established based on different enabling acts. Universiti Teknologi MARA (UiTM) was established based on Act 173 of 1999, to enhance its status from an institute to a full-fledged public university. Meanwhile, WOU was established based on the Private Higher Educational Institutions Act 1996 (Act 555) and the Companies Act, 1965 (and subsequent amendments). However, both universities are expected to comply with MOHE policies and the MQA's rule, regulations, and prescribed instruments, such as ODL, APEL, MOOCs, and micro-credentials, if they wanted their courses to be accredited and their qualifications recognized. Policy relevance and effectiveness in meeting the desired outcomes in terms of improving access to higher education, as well as ensuring successful progression for non-traditional learners and disadvantaged groups, could be gauged by assessing the administrative and management arrangements for these purposes within the institutions. These practices may not have been listed in the MQA's guidelines, but the institutions took it upon themselves to introduce initiatives to increase the level of awareness and provide support systems among the university community, especially in relation to non-traditional learners. The dimensions of FLPs for which good practices are put in place relate to the students' entry pathways to HEIs, pathways for the students to get through HEIs, and their pathways for getting out our HEIs and becoming gainfully employed in the labour market.

In short, all MOHE policies with respect to lifelong learning and RPL, including the MQA's codes of good practice and guidelines, were well received by all HEIs. However, the linkages between national policies, MQA instruments, and institutional policies and practices may differ depending on the nature of the institutions. In particular, private and public universities have different governance arrangements and degrees of autonomy, which may result in different modes of implementation.

At this juncture, it is important to restate Malaysia's lifelong learning polices and the strategies as the starting point to trace linkages to the institutions. Based on the National

Higher Education Strategic Plan 2020, and particularly the MOHE's Blueprint on the Enculturation of Lifelong Learning, 2011, in the context of this study on FLPs, two strategies are relevant: (1) ensure continuity and appreciation: increase acceptance of open entry; assess prior experiential learning and online lifelong learning; and increase mobility of learners, and (2) provide financial support: provide funding mechanisms; engage private funding; make loans available from private financial institutions; and consider tax incentives. In terms of the particular feature of the strategies as these relate to higher education, the previous sections have explained these according to the various modalities of education delivery allowed by the MOHE. As far as FLP instruments are concerned, the MQA has introduced the following guidelines to facilitate implementation at the institutional level:

- Open and distance learning (ODL), 2nd edition, 2019;
- Guideline to good practice: APEL A, 2013;
- Guideline to good practice: APEL C, 2016;
- Guidelines on credit transfer for massive open online courses (MOOC), 2016;
- Guideline on micro-credentials, 2019.

The MQA guidelines on FLPs form the basis of evaluations to determine whether courses can be accredited and qualifications recognized. Once a higher education institution has decided that it wants to implement FLPs, the adoption of FLP instruments would require compliance to the criteria, process, and procedures as outlined in the guidelines or codes of good practice highlighted in *Chapter 4*. In other words, there is no flexibility with respect to the adoption and operationalization of the instruments.

Based on *Chapter 3* and the stakeholders' interviews in *Chapter 4*, it is immediately apparent that Malaysian higher education is highly centralized, with legislations in place to govern and supervise public universities and regulate the private higher education sector. The general response from stakeholders at the MOHE, in so far as their roles and responsibilities were concerned, has cascaded to the MQA and the HEIs for the implementation of FLPs. While policy-makers took note of some weaknesses in the implementation of FLPs, the common response was that it was for the MQA and the HEIs to look into these issues and take remedial action. Even back in 2016, such comments were often heard from the MOHE and researchers (see Noraini, Wahid, & Wan Nor Syahira, 2015) and it was for this reason that the MQA (2016) survey was conducted to examine the acceptance and achievement of APEL students at HEIs in 2016. The findings of this were highlighted in *Chapter 3*, but one main conclusion was that the HEIs welcome and support the implementation of APEL. However, the survey did not specifically study institutional factors that have influenced the implementation of FLPs, and which have resulted in both subtle and marked differences in institutional practices.

5.4. Implementations of FLPs at the institutional level

Based on literature reviews and the findings from interviews with stakeholders, FGDs, and telephone interviews with currently enrolled students and alumni on the implementation of FLPs and related practices at the institutional level, there were reasons to conclude that practices vary as a result of institutional specific factors. The factors are described below.

5.4.1. History and core business of WOU and UiTM

An openness to and acceptance of FLP practices by private institutions such as WOU were more widespread than in public HEIs. WOU was more adaptable to new innovations, open to creative ways to attract candidates from industry and the public, seeking alternatives and flexible learning pathways for their career advancement, and creating opportunities for students to enter or re-enter higher education. WOU also catered for the personal development of working adults. Therefore, WOU has established a regional centre for academic and career counselling and guidance, in order to tap into the market among working adults and those wanting to re-enter higher education. Since WOU has an APEL Centre that is responsible for the guidance, counselling, and testing of students, there was a need for the institution to be strategic since the provision of FLPs continued to be its core business, and would therefore determine its survival.

The history of a public university such as UiTM clearly shows that it was set up with a mission to address the needs of the indigenous population, which was seen as a disadvantaged group in the years after independence and, more importantly, after the racial riots of 1969. In this respect, it was UiTM's responsibility to provide accessibility to higher education for this group of students, particularly those in rural areas. It is for this reason that UiTM has branches in every state in Malaysia, in order to provide easy access to higher education. It also offered professional courses for working adults with the same objectives as WOU. A centre was established in the institution to centralize FLP courses/programmes by providing support systems and administration. Unlike WOU, UiTM had no difficulty in securing intake, and achieves a respectable enrolment from its main target group. Enrolment of non-traditional learners was actually an added responsibility for UiTM, since they already experience an overwhelming demand from conventional students.

5.4.2. FLP implementation

From the interviews with top management and deans at WOU, financial sustainability was viewed as an institutional priority, for which they have to be innovative in implementing FLPs with learning outcomes as a major focus. Positive learning for both traditional and non-traditional students would result in increases in student numbers. As such, continuous evaluation of the implementation of FLPs, particularly in terms of curriculum design and

offerings, was very important. However, in the process institutions need to remain mindful of the need to comply with the MQA's criteria and requirements to ensure quality provision. In the case of UiTM, in view of the complex university system and the huge student numbers, exceeding 180,000, the top management and deans did not have enough resources and time to be innovative beyond what was considered acceptable by the MOHE and the MQA. Thus, the implementation of FLPs strictly followed the MOHE rules and MQA guidelines and code of good practice. Any attempt to be overly innovative would result in disruptions in the implementation of the process. Again, in view of the complex system, collaborations among the various faculties and departments regarding FLP implementation, evaluation, and monitoring became unwieldy. Non-compliance with the MQA accreditation process would result in the MOHE coming down hard on a public university. "Business as usual" is the best term to describe the implementation of FLPs in UiTM.

Flexibility in getting access to higher education
According to the MQA's guideline on APEL (A), non-traditional learners who are interested in entering or re-entering higher education must sit the APEL (A) Aptitude Exam, and must write/produce portfolios about their backgrounds, especially their work experience. In this connection, even though the Persons with Disabilities Act 2008 stipulated improved access to higher education as one of its expected outcomes, it was only in 2019 that the MOHE introduced a policy on improving access and proper management for persons with disabilities in higher education institutions. At the time of the survey, while respondents at the MOHE expressed the need for universities to implement guidelines for persons with disabilities, the APEL Centres at WOU and UiTM had not yet implemented testing instruments for persons with visual impairments for the purpose of APEL (A) assessment.

Another issue with the APEL Centres relates to a monitoring mechanism or system to ensure ethical practices on the part of these centres. A potential area of conflict emerged when these centres were conducting tests and at the same time promoting their institutions as an institution of choice for potential learners. A periodic assessment and reaccreditation of these centres based on best practice at the APEL Centre at OUM would be a step in the right direction. Open University Malaysia (OUM) is a private university, established by a consortium of public universities primarily to conduct ODL based on open entry. It organized its activities based on the best practices of the private sector to ensure institutional financial sustainability, and those of the public higher education sector in terms of social responsibility and quality assurance mechanisms.

Flexibility in getting through higher learning education
For our respondents, WOU and UiTM had no major issues with APEL (A) – that is, flexible entry to HEIs. The APEL Centres were given responsibility for testing potential applicants. The focus should now be on flexible learning progression. Based on responses from alumni and currently enrolled learners, they were admitted to higher education institutions such as

UiTM based on the flexible admission system, but once enrolled they were expected to survive in the system in the same way as conventional students. The WOU, being a long-established institution catering for the needs of working adults, did not have the same issue, as they were familiar with learning arrangements for non-traditional students. However, in the process of implementing their FLP support systems, neither institution had made arrangements for students with disabilities in terms of learning, and in the case of UiTM, for learning and living on campus.

Based on interviews with the deans at WOU, flexibility in getting through higher education, or progression in the higher education environment, requires flexibility in the teaching and learning (T&L) of the courses/programmes offered to non-traditional learners in particular. WOU had no issue with implementing FLPs based on such flexibility, as it was based on an open entry policy and ODL. However, flexibility that includes creative and innovative approaches to delivering courses, as well as flexibility in the time/duration and also the locations of classes, must comply with the MQA standards for programmes and guidelines. In fact, deans told us that the Code of Practice for Programme Accreditation published by the MQA provided quality assurance guidelines for HEIs. In addition, they were aware that the agency required HEIs to undertake continuous improvement in their teaching and support processes. For this, it was reported that WOU has adopted a "plan, do, check and action" (PDCA) strategy in selected areas of the university's operations.

From the interviews with the deans, and with the students and alumni at WOU and UiTM, technology has provided a solution to flexible learning – for example, iClasses at UiTM, which could be accessed anytime and anywhere with reliable internet access. Similarly, virtual classes were available at WOU. Again, however, this technology does not take the learning requirements of people with disabilities into consideration.

A lack of expertise in relation to local knowledge of FLPs was highlighted as one of the most significant challenges in terms of APEL (see also Noraini, Wahid, and Wan Nor Syahira, 2015; Dharam Singh *et al*., 2011). Such comments were more common at WOU, especially in relation to professional courses. It has been argued, and this was repeated at WOU, that panel committee members appointed by the MQA to audit WOU did not have the required professional expertise to make informed decisions on FLPs at higher education institutions; they imposed rules and regulations that contradicted the essence and practices of FLPs. Similar comments were not very common in the case of UiTM, since many of the panel assessors were public university academics, and they understood the governance arrangement at UiTM and the power of the Senate. At public universities such as UiTM, there was a persistent struggle as to who has the upper hand in deciding academic matters; was it the university Senate, or the MQA? Even the policy makers at the MOHE highlighted the "autonomy" of the university Senate in academic matters. However, the MQA's position on this issue depends on the CEO's background and his/her interpretation of institutional

autonomy. There was no such issue at private universities such as WOU; there, academic matters are always about compliance with the MQA.

Flexibility in getting out and joining the labour market

Based on our interviews, except for faculties such as Business and Management and Education Studies, which had substantial engagement with potential employers and industry, flexibility in getting out of HEIs was not given much focus in the implementation of FLPs. Getting out of HEIs should also include job opportunities and security in the labour market for disadvantaged groups such as PWD and women. For single mothers there should always be opportunities to be gainfully employed by working from home. Both universities participated in the Graduate Employability Survey conducted by the MOHE, to obtain information on the performance of their students six months after graduation. However, at both UiTM and WOU, faculties with active connections with industry also conducted their own alumni surveys. Undertaking a university-wide survey for UiTM was seen as very difficult, as it would have required collaboration between many faculties and departments. According to Singh and Abeywardna (2014), at WOU the Schools and the Marketing Unit of the university regularly conduct market surveys, as well as gathering feedback from various channels. These include:

- Feedback from WOU Council members;
- Feedback from members of the School's APG (Academic Planning Group);
- Feedback from Regional Offices of WOU;
- Feedback from the public through market surveys and road-shows conducted regularly by the Marketing Unit;
- Dialogues with representatives of industries;
- Dialogues with professional organizations.

Such continuous engagement and feedback provide important updates on market sentiments, which need to be factored in when planning courses.

5.4.3. Challenges towards improved implementation and practice

The issue of missing data or lack of detailed data on students admitted under FLPs poses the biggest challenge to the effective planning and implementation of FLPs in institutions of higher learning. It also makes the proper assessment of policy implementations of FLPs at the institutional level a challenge. The reason for this lack of data is that there is no dedicated unit in the MOHE, the MQA, or in HEIs to focus on equity groups in higher education. More should be done to oversee, implement, monitor, and evaluate programmes related to disadvantaged groups in HEIs. The deans we interviewed at WOU cautioned that lack of monitoring has resulted in abuses of flexible systems by institutions that offer courses with shorter durations and at lower costs – and also with questionable standards.

Another challenge is to establish proper and effective channels to cascade information on policy/regulations to all levels of government and institutions, and to all departments within institutions. Forms of communications need to be improved (technology is an option) to ensure the effective implementation of FLPs. Without awareness and understanding of policy and guidelines, adoption and implementation will be very slow, and in a worst-case scenario they may be misaligned. Based on the interviews with deans, this was true at UiTM but not at WOU. In this situation, the complexity of the governance and administrative arrangements in a university such as UiTM adversely impacts communication channels.

In practising FLPs, the MQA's regulations and guidelines may be limiting and inflexible. Therefore, it may be challenging for any institution, especially a private institution, to customize programmes for working adults. This means that any new innovations with respect to the implementation of FLPs, particularly those aimed at catering for the needs of specific segments of potential or existing non-traditional learners, could be in conflict with the current MQA guidelines. Here too, arguably, there should be flexibility in the MQA's guidelines.

Emerging from the above comparative analysis, there are three types of tensions that may have a negative impact on the effectiveness of FLPs for potential and existing non-traditional learners in Malaysia. First, based on our summary, there was a tension at the policy level in terms of the shifting objectives of lifelong learning and other relevant policies on RPL at the national and the MOHE level. Initially, the goal was workforce development and improving the nation's competitiveness by creating a knowledge-based economy. Later, with the implementation of the SDGs, access to higher education for equity groups emerged as a primary objective of FLPs. These national policies did not necessarily merge in terms of their objectives.

Second, there is an increasing tendency for higher education delivery to be influenced by the market, which means that FLP implementation was seen at the institutional level as an income-generating activity, certainly in private institutions but also increasingly in public universities. The need to be financially sustainable for private universities such as WOU, and since 2015, for public universities such as UiTM, has given a different meaning to FLPs. Originally aimed at non-conventional learners and equity groups, FLPs are now targeting working adults who could afford higher tuition fees. Third, there was tension between WOU academics and the MQA in terms of a lack of flexibility for the former to be creative and innovative in offering FLPs. For the MQA, creativity and innovativeness need to remain within the MQA's guidelines and code of best practices. Fourth, there was a tension between UiTM and the MQA with respect to institutional autonomy in academic matters. Finally, at WOU there was an internal tension between the deans and the WOU's governing board in terms of institutional financial sustainability versus quality of academic provision.

The linkages between national policies, strategies, instruments, and practice related to FLPs have not been very smooth and straightforward as far as implementation is concerned. For one, feedback from the implementation of FLPs has not been consistently addressed at the MOHE level or used in policy formulation. At the institutional level, FLPs were implemented to cater for working adults, and indeed they have benefited enormously from FLPs, in terms of entry to higher education, the learning environments in universities, and progression to the labour market. However, FLPs for the B40 and other equity groups needs to be given priority, because the gaps would be significant if FLP implementation as a whole was viewed in the light of the government's aspiration for the implementation of the UN's SDGs in Malaysia. In other words, government concern with SDG4 – Quality Education must be aligned with the facilitation of FLPs for equity groups.

5.5. Recommendations

An effective implementation of FLPs needs a good support system and collaboration at the national and institutional levels, including various stakeholders to achieve transformative results based on policies and the MQF's objectives and goals. Towards this end, the MOHE and MQA must focus on exploring and investing on structures and mechanisms within government to support the establishment of FLPs, with a focus on disadvantaged groups in the education system and the labour market.

Five challenges/barriers to implementing FLPs have been identified: the lack of quality data; the lack of structure (or any dedicated entity) in the planning and implementation framework to focus on equity groups; the lack of expertise, especially local experts, to develop relevant instruments for FLPs; the lack of holistic implementation and practice of FLPs in the three dimensions of getting into, getting through, and getting out of HEIs, including securing jobs in the labour market; and finally, the lack of engagements/smart partnerships and bottom-up processes in planning and developing FLPs.

The recognition of FLPs among professional bodies is a pertinent issue. In the case of UiTM, some headway has been made with a small number of professional bodies, such as the Nursing Board of Malaysia. In addition, the Malaysian Optical Council (MOC) has already accepted qualifications based on FLPs and allowed applicants to be registered as members to enable them to practise. More efforts need to be made to convince other professional bodies to come on board with FLPs by highlighting practices in other countries.

In the effort to make FLPs through APEL, ODL, MOOCs, and micro-credentials into a backbone of increasing access to higher education and subsequent progression, the following recommendations are put forward.

A national policy framework on integrated data management systems

A national policy framework on data management systems should include details of the students in HEIs. More importantly, it should focus on data related to marginalized and disadvantaged groups in HEIs in Malaysia. The current process of data collection and management is not standardized within the MOHE or across the ministries and institutional levels, including the database of the Central Admission Unit (UPU) for public HEIs. Moreover, the definitions of disadvantaged groups in data collection were not standardized across ministries, resulting in data discrepancies and misinterpretations. The issue of missing or inadequate data gave rise to gaps and barriers to the implementation of FLPs. The data needs to be broken down into more detailed levels or categories, and must be inclusive and comprehensive in nature.

It is also important for the MOHE and the HEIs to make their data available to the public at regular intervals as the databases are collected and updated.

A dedicated entity on equity groups in HEIs

A dedicated entity that focuses on equity groups should be established at the national level to realize the objective of FLPs for disadvantaged groups. This entity needs to be linked to the institutional level for overseeing and monitoring the implementation of policy objectives in terms of relevant, appropriate, and innovative practices at HEIs, according to the established MQA framework. The entity should be responsible for data collection and data management systems related to students' progression, particularly the development of equity groups.

Flexible learning support systems for disadvantaged groups

The instruments and practice of FLPs at the institutional level need to be innovative and creative enough to cater to the different needs of people/students in HEIs – for example, people with disabilities (PWD) and job prospects for women in industry. The support system should include all three dimensions of FLPs, including pathways for getting into HEIs, getting through the HEI system, and getting out of HEIs after study is complete, including job prospects in the labour market.

Pathways for getting into HEIs

An innovative instrument for PWD groups entering HEIs through alternative admission pathways like APEL (A) needs to be created. The Aptitude exam for APEL (A) needs to cater to the needs of the visually impaired.

Pathways for getting through the education system

In 2002, the UNESCO Forum on the Impact of Open Courseware introduced the (Inclusive) Open Education Resources (OER) for Higher Education in Developing Countries. The OER is an open sharing educational resource, a new global phenomenon which has become part of

the resources for teaching and learning strategies in education institutions. This should necessarily involve a consideration of the needs of PWD in the context of flexible learning at HEIs. Malaysia is interested to be part of this global phenomenon, and is now in partnership with UNESCO in the process of developing a policy on IOER to ensure inclusive and equitable access to education for all. This platform will be used for the benefit of FLPs in Malaysia, currently operating in the context of APEL (A); IOER could provide an appropriate mode of delivery for course content and examinations at HEIs for PWD groups.

Pathways for getting out of HEIs and into joint labour sectors
One of the concerns is the security of job prospects in the labour market for disadvantaged groups after graduation. Current students and alumni of FLPs are already employed; the concern here is more with respect to PWD groups and the job market. There is no data to show how they have fared in this area.

Single mothers
Another group of great concern is women. Even though they have formed a majority group in HEIs for the past few years, their subsequent involvement in the labour market is low compared with men. Many barriers and factors are contributing to this. In moving forward to become a modern nation-state, women represent a great untapped talent pool that must be utilized. Here, the concern is specifically with single mothers who may have qualifications based on FLPs. Policy recommendations in this respect relate to inducements for single mothers to continue productive activity or work at home rather than work in the job market.

Single mothers are frequently challenged by resources and time constraints, and they may struggle to balance family demand, household chores, work and study. These issues may be overcome by good support systems such as: (a) adequate/affordable childcare facilities at HEIs and/or workplaces; (b) support for their development and expansion of skills such as incentives/allowances for childcare, study and exam leave, etc.; (c) family-friendly employment strategies that include flexi-working hours and work from home options; and (d) support groups for single mothers at HEIs through the career and counselling units.

Local expertise in developing relevant instruments for FLPs
FLPs in Malaysia need experts to produce relevant instruments for users, and to assist in practising FLPs at the institutional level. There is an urgent need to build the capacity of local expertise in the implementation of FLPs to bring about transformative change through appropriate policies, legal frameworks, institutions, and human resource development. Local expertise should comprise independent experts to address issues of biases. Indeed, all APEL assessors need to undergo continuous training to further enhance their assessment skills.

Engagements with all stakeholders and equity groups must be strengthened

Engagements with stakeholders at all levels, including experts, industries, and the public, and especially marginalized and disadvantaged groups in society, are important and must be strengthened to create committed partnerships towards achieving FLP objectives in Malaysia. Such partnerships should contribute to informed decision-making for the future planning and implementation of FLPs. A systemic framework for partnerships that adopt top-down and bottom-up approaches between different interest groups is necessary to achieve policy objectives and ensure the successful implementation of FLPs at the institutional level, prioritizing the nation-building agenda and contributing to increasing human capital in the labour market.

Malaysia's higher education sector has and continues to experience changes and re-alignments in parallel with global and regional transformations. Polices and strategies were introduced as a national response to these transformations. In the context of higher education, lifelong learning and the recognition of prior learning have been acknowledged, and relevant instruments have been introduced to implement flexible learning pathways. It has been about 14 years since the first FLPs were introduced, and this is therefore an appropriate time to examine and analyse their impact. The focus should be on the linkages between policies, strategies, instruments, and practices in terms of the FLPs that have been implemented in Malaysia.

This case study has shown that there are lessons to be learned, drawing from the experiences of UiTM and WOU. While the development of linkages appears to be in tandem with the broad strategic intent as outlined in government plans, our in-depth investigation seems to suggest that there may be further unexplored opportunities in the implementation of FLPs at the institutional level. However, the shortcomings in implementation at the institutional level are of concern. Ensuring access to higher education, creating a flexible learning environment, and ensuring a smooth progression to the labour market among B40 households, persons with disabilities, and disadvantaged and marginalized groups based on FLPs appears to be a 'work in progress' at both the national and institutional levels. Arguably, while the need to meet societal and market demands may be the expressed mission of universities in the current context of higher education development in Malaysia, in practice this balancing act appears to be very challenging. In the final analysis, for private HEIs the overriding concern would be the financial health of the institution. Public HEIs are operating in an increasingly resource-constrained environment, and it appears they are gradually moving along the same pathway as private institutions. Universities, particularly public universities, are socially responsible public institutions, and they must resist this temptation. For private HEIs, there are opportunities to take both societal and market aspects into account in their operations.

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ANNEX

Table 1. Coding of stakeholders/respondents – national level

Body/ Organization	Interviewees	Coding
Ministry of Higher Education Malaysia (MOHE)	Director General of Higher Education	MY/Nat/DG/ID01
	Deputy Undersecretary of Policy, Planning and Coordination Division, Higher Education Sector	MY/Nat/HPP/ID01
	Director-General, Department of Polytechnic and Community Colleges	MY/Nat/DDPPC/ID01
	Deputy Undersecretary Secretary of Coordination Division (Data Management)	MY/Nat/DSCD/ID01
Malaysian Qualifications Agency (MQA)	Chief Executive Officer (CEO)	MY/Nat/CQA/ID02
	Head, Quality Assurance and Accreditation	MY/Nat/HQAA/ID02
Malaysian Employers Federation (MEF)	Chief Executive Officer (CEO)	MY/Nat/DEF/ID03

Table 2. Coding of stakeholders/respondents – institutional level

University	Interviewees	Coding
Universiti Teknologi MARA (UiTM)	Deputy Vice-Chancellor (Academic and International)	MY/Inst/DVC/ID01
	Head of Academic Affairs Division	MY/Inst/HAAD/ID01
	Assistant of Deputy VC of Quality Assurance Unit	MY/Inst/ADVCQAU/ID01
	Head of Academic and Career Advice and Guidance	MY/Inst/HACAG/ID01
	Director of Institute of NEO Education (iNED)	MY/Inst/DINE/ID01
	Dean of Humanities/Social Sciences	MY/Inst/DHSS/ID01
	Dean of Applied Sciences	MY/Inst/DAS/ID01
	Dean of Professional Programmes (Accountancy)	MY/Inst/DPP/ID01
	Head of Data Management Centre	MY/Inst/Pub/HDM/ID01
	Head of Student Association	MY/Inst/HSA/ID01
	Exco of Student Association	MY/Inst/ESA/ID01
	Current APEL students: Business, Policy Administration, Hotel Management (1 female, 3 males)	Nil
	Alumni Distance Learning: Education, Public Administration (3 females)	Nil
Wawasan Open University (WOU)	Deputy Vice-Chancellor (Academic Programmes and Educational Technology)	MY/Inst/DVC/ID02
	Head of Quality Assurance Unit	MY/Inst/HQA/ID02
	Head of Academic and Career Advice and Guidance	MY/Inst/HACAG/ID02
	Director of Regional Office	MY/Inst/DRO/ID02

	Dean, Humanities/Social Sciences	MY/Inst/DHSS/ID02
	Dean, School of Natural Sciences and Technology	MY/Inst/DNST/ID02
	Dean, Professional Programmes (Business)	MY/Inst/DPPB/ID02
	Dean, School of Education, Language and Communication	MY/Inst/DELC/ID02
	Registry, Data Management Centre	MY/Inst/RDMC/ID02
	Advisor of Student Council	MY/Inst/HSC/ID02
	Current APEL students: Business Management, Computer Science, Finance, Engineering, Accounting, Logistics (4 females, 4 males)	Nil
	Alumni Distance Learning: Executive MBA Programme (3 females, 2 males)	Nil