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Framework for Equivalence Checking between Academic and Skills Through APEL Processes

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ABSTRACT

The Accreditation of Prior Experiential Learning (APEL) acknowledges and affirms an individual's past experiences and learning as well as their value through equivalence checking. This research was conducted to determine and develop preliminary descriptions for Levels 1 to 3 of qualification in the Malaysian Qualifications Framework (MQF), which will be proposed for use for equivalence checking between skills and academic and also to design a research framework of equivalence between academic and skills through APEL. Equivalence checking can facilitate the entry of an individual into institutions of higher learning by affirming the individual's pre-existing abilities relevant to the intended course of study. A qualitative approach was adopted for this research, and data were collected through three channels: document analysis, interviews and a questionnaire. The questionnaire was administered to 54 respondents from various institutions (UTHM, ADTEC, KKTM and IKBN), while the interview involved three respondents. The data collected was analysed using the software, Statistical Package for Social Sciences 20.0 (SPSS 20.0). This study found that the descriptions proposed in this study are suitable for describing the learning outcomes for Levels 1 to 3 in the aspects of knowledge, skills and competencies. Finally, an equivalence checking framework was developed based on feedback from the respondents and also synthesised from the collected data.

Keywords: Accreditation of Prior Experiential Learning (APEL), equivalence checking, Malaysian Qualifications Framework (MQF), qualification levels

INTRODUCTION

Technical and Vocational Education and Training (TVET) is a branch of education offered in many countries around the world

to enhance opportunities for students who opt for science and technology education to meet the needs of professionals and semi-professionals. According to Mohd Tahir and Mustafa (2009), TVET benefits dropouts from the study of academic subjects but is an excellent avenue for the development of human skills in different fields and, therefore, is crucial for the development of the national economy as a whole. In view of this, Malaysia should move away from a higher education system that only focusses on conventional university education to include TVET as well as a legitimate official curriculum. The implementation of lifelong learning programmes should be enhanced to promote the improvement of skills among all levels of society. Mohamed Rashid and Mohd Nasir (2003) stated that articulation is an important feature in education and training today as it leads to benefits and opportunities for extensive study for those who can afford to continue their studies. The Accreditation of Prior Experiential Learning (APEL) is an assessment method by which students can get recognition for knowledge, understanding, skills and competencies they already have. Kaprawi (2011) stated that students can use this official accreditation or certification to enrol in programmes in place of the usual entry qualifications or as a part of the final qualification to prevent them from repeating courses they have already mastered.

The education system in Malaysia should not be hindered only by the absence of a mechanism that allows the pursuit of higher TVET through leveraging knowledge and experience already acquired. Armed with experience and skills in the field of study, students should be eligible for credit transfer. This was supported by Mohammad (2002), who stated that the experience gained during work can be likened to knowledge acquired through formal education at university. Kaprawi (2011) mentioned that Malaysian universities do not as yet have in place a system that can assess and recognise prior learning and skills of groups who seek to pursue higher studies.

The problem for individuals who have experiences of more than three years who want to further their studies at a higher level is the award of credit hours. Balli and Razally (2011) stated that such individuals do not need the same number of credit hours as beginner students who enrol in the same programme. Prior learning and experience needs to be translated to provide an alternative route in preparation for higher studies and also to enable mobility between different fields of skills/vocational and academic modules. The problem is in assessing and recognising the prior learning and experiences of an individual possessing skills/vocational competencies in order for him or her to continue his/her studies in an academic institution. What is needed is a mechanism of equivalence checking between skills/vocations and academic for mobility and credit exemption to be possible.

To implement equivalence checking, determination of the level of qualifications held by these individuals should be based on the Malaysian Qualifications Framework

(MQF), which outlines the learning outcomes that should be possessed at each level of qualification. However, there are some issues in the implementation of equivalence checking, in which the first three qualification levels of the MQF, which consists of eight qualification levels, have no descriptors as do Levels 4 to 8, as in the Qualifications Framework of several other countries. This has created a barrier to the equivalence process; thus, it is difficult for APEL to be implemented.

Apart from that, the descriptors for each qualification level of the MQF based on three main domains i.e. knowledge, competencies and skills have also not been developed, as has been done in the established qualification frameworks like the European and Australian qualification frameworks. Thus, this study aimed to determine and develop the descriptors of three levels i.e. Level 1 to Level 3 of the eight levels of the MQF. The preliminary descriptors of qualification levels developed through this study will be proposed for use for equivalence checking between skills/ vocational and academic in Malaysia. This study also developed a framework for equivalence checking between the fields of skills/vocational and academic promoting mobility between skills/vocational and academic in Malaysia. The main objectives of this study were to identify descriptors for each qualification from Level 1 to Level 3 of the MQF that will be proposed for use for equivalence checking between academic and skills/vocational programmes through the APEL process. This research also designed a framework of equivalence checking between academic modules and skills/vocational through the APEL process.

METHODOLOGY

This study used a qualitative research design that involved exploration methods. Samples were selected based on purposive sampling. The population for this study was composed of the Dean, Deputy Dean and Head of Department of the faculty where they were individuals who were involved in curriculum development in academia at UTHM. As for skills, the population of this study was composed of the Director of the Institution, the Deputy Director and the Head of Programmes of three institutions, Kolej Kemahiran Tinggi MARA (KKTM), Pusat Latihan Teknologi Tinggi (ADTEC) and Institut Kemahiran Belia Negara (IKBN). All three institutions have individuals who are involved in the formation and development of the curriculum in vocational institutions. Fifty-four respondents returned feedback survey forms that were distributed.

The instruments used in this study were document analysis, questionnaires and semi-structured interviews. The researchers analysed the MQF documents using the European Qualifications Framework (EQF) and the Australian Qualifications Framework (AQF) as a benchmark for determining the description of the eligibility level for the MQF that could be proposed for use. The semi-structured interview was used to support the questionnaires and was

conducted with three personnel who had extensive knowledge and experience in the formation and development of academic curricula and research skills.

RESULTS

The details of the descriptors of the qualification level for each domain, knowledge, skills and competency, in the MQF is shown in Tables 1 to 3. The data analysis was obtained through questionnaires and semi-structured interviews. The analysis shows the descriptors of the qualifications for Level 1 to Level 3 for each domain, knowledge, skills and competency. in the MQF.

Table 1

Descriptors of the Qualification Levels of the 'Knowledge' Domain

KNOWLEDGE			
Items/Descriptors	MQF Level	Score Min	Suitability Level
Basic knowledge in the field of learning or work	1	4.70	* * *
Knowledge and understanding of basic facts in the field of learning or work	2	4.70	* * *
Knowledge of the facts, understanding, interpretation and use of technical information in a particular field of work and/or study	3	4.70	* * *

Table 2

Descriptors of the Qualification Levels of the 'Skills' Domain

SKILL			
Items/Descriptors	MQF Level	Score Min	Suitability Level
Basic skills in business processes and operations	1	4.61	* * *
Basic cognitive and practical skills to use information and appropriate techniques in scientific work processes, engineering design and problem solving	2	4.67	* * *
Cognitive and practical skills for using information and methods appropriate for the scientific work processes, engineering design, operational decision making and problem solving.		4.69	
Using self-study skills for further education	3	4.54	* * *

Table 3

Descriptors of the Qualifications Levels of the 'Competency' Domain

COMPETENCY			
Items/Descriptors	MQF Level	Score Min	Suitability Level
Apply knowledge and skills in delivering information, ideas, problems to experts and non-experts through effective communication with supervision	1	4.65	* * *
Apply knowledge and skills in delivering information, ideas and problems to experts and non-experts through effective communication with some limited autonomy		4.67	* * *
Teamwork and interpersonal skills that are appropriate for the job	2	4.63	* * *
Apply knowledge and skills in delivering information, ideas, problems and solutions to specialists and non-specialists through effective communication by taking into account social, scientific and ethical issues relevant to limited autonomy		4.63	* * *
Teamwork and interpersonal skills relevant to employment and to becoming responsible members of society	3	4.61	* * *

*** Very suitable

DISCUSSION

Based on the findings of the items that describe description eligibility levels for each domain, knowledge, skills and competency, in the MQF, the score for the overall description of the qualifications that can be proposed for implementation was very high. Most of the respondents strongly agreed with the descriptors of the qualifications level for the MQF that were intended for use for equivalence checking between skills and academic programmes in the three domains. The MQF consists of eight qualification levels, with each level having a descriptor except for Level 1 to 3, a fact that is a barrier for the implementation of the equivalence process. Thus, this study identified and developed the preliminary descriptors for qualification Levels 1 to 3 of the MQF, as is available in other qualification frameworks in countries such as Germany, Australia and South Africa. These countries have adopted the system of APEL and have implemented equivalence checking between skills and academic fields. The European Qualifications Framework (EQF) and the Australian Qualification Framework (AQF) have specific qualification descriptions for Levels 1 to 3. In this study, the researchers developed qualification descriptors for Levels 1 to 3 through benchmarking with the EQF and AQF descriptors and validated the descriptors with APEL practioners in Malaysia. The development of the equivalence framework (see Figure 1) will help the Malaysian government's mission to mainstream TVET. Equivalence checking should be supported by several core principles.
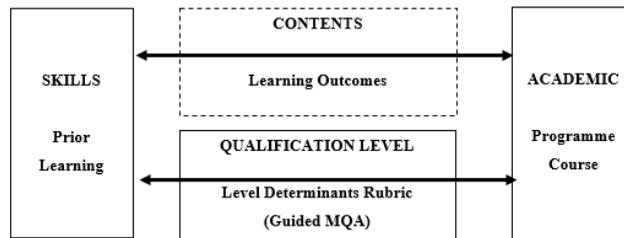
Figure 1. Framework for equivalence checking between skills/vocational and academic (Adapted and modified from OAM, Musken, 2006)

First, the learning modules should be mapped based on the content and levels of learning outcomes. Second, assessment must be based on evidence, equality, fairness (no prejudice), flexibility, validity and reliability. The evaluators should assess the extent to which the content and level of the learning outcomes of the skills/ vocational graduate corresponds to the academic programme and the value of credit to be awarded. For the implementation of equivalence checking, determination of the level of qualifications of each individual could be based on three main domains i.e. knowledge, skills and competency, each level should have specific descriptions.

CONCLUSION

It is hoped that the suggestions and recommendations set out by the researchers in this study can be addressed by the relevant authorities in establishing the APEL system in Malaysia. Among its recommendations is that Malaysian higher education institutions and agencies become involved with APEL, which regularly monitors and plans the APEL system, which must be implemented carefully. In addition, new guidelines must be developed for individuals with experience from skills/industry to further their studies in academic fields. Finally, collaboration between institutions specialising in skills and those specialising in academic studies is also important to improve mobility between skills/vocational and academic modules through the APEL processes.

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REFERENCES

Australian Qualifications Framework Implementation Handbook (AQF). (2005). *Australian Qualification Framework*: Second Edition. Retrieved from http:// www.aqf.edu.au/implem. htm.

Balli, B., & Razally, W. (2011). *Instrumen penilaian bagi Pengiktirafan Pengalaman Pembelajaran Terdahulu (PPPT) dalam konteks pembelajaran sepanjang hayat: Transformasi pendidikan politeknik di Malaysia.* CIE-TVT 2011, 2011, November 16-17, Pulau Pinang.

Garnett, J., Portwood, D., & Costley, C. (2004). *Bridging rhetoric and reality: Accreditation of Prior Experiential Learning (APEL) in the UK.* Bolton: University Vocational Awards Council.

Kaprawi, N. (2011). *Syarahan perdana 2011: Leveraging Accreditation of Prior Experiential Learning (APEL) for human capital development.* Batu Pahat: Universiti Tun Hussein Onn Malaysia Publication.

Maclean, R., & Pavlova, M. (2013). *Vocationalization of secondary and higher education: Pathways to the world of work.* UNESCO-UNEVOC: Revisiting Global Trends in TVET.

Malaysian Qualification Agency. (2007). *Malaysian qualifications framework.* Retrieved from http://www.mqa.gov.my/mqr/english/ePengenalanMQF.cfm

Mohamed Rashid, N. B., & Mohd Nasir, A. H. (2003). Lifelong learning in Malaysia. In International Policy Seminar Co-Organised by IIEP/UNESCO and KRIVET on Making Lifelong Learning a Reality, 2003, June 24-26, Seoul.

Mohammad, M. (2002). *Credit for work experience.* International Postgraduate Facilitator Management CENTRE, Malaysia.

Mohd Tahir, L., & Mustafa, N. Q. (2009). *Pendidikan teknik dan vokasional untuk pelajar berkeperluan khas.* Retrieved from http://web.usm.my/education/publication/JPP24_LokmanTahir_73-87.pdf

Muskens, W. (2006). P*ermebility between VET and HE: The experience of module level indicator in Germany and its application in Austria.* University Oldenburg.

National Qualifications Framework. (2009). *European Frameworks: The Bologna Framework and the European Qualifications Framework (EQF).* Retrieved from http://www.nfq.ie/nfq/en/frame_action/europe.html