

## MALAYSIAN QUALIFICATION FRAMEWORK: A NEED TO REVISIT

Usharani Balasingam  
University of Malaya, Kuala Lumpur, Malaysia  
*Email: usha@um.edu.my*

### Abstract.

Education is a tool of empowerment and the betterment of a nation and its citizens. The race to achieve our Malaysian Vision 2020 is premised on a highly developed human capital. As education is global and measured in a global scale we need to review the Malaysian Qualification framework to ensure that our levels are at least comparable to and stand on par on the requisite requirements at same levels across boundaries with international standards in order to achieve our Vision 2020 and beyond. It is noted that the Malaysian Qualification Framework does not have a degree with honours qualification descriptor. However as this paper will demonstrate the qualification of degree with honours is practised among the selected local public universities in this study. The requirements and differentiation of a degree and a degree with honours is gleaned from a review of standards requirements of other jurisdictions like Australia and England, Wales and Northern Ireland. It is suggested that the Malaysian Qualification Framework could be further reviewed and refined. Further that in the refinement exercise the vocational and technical aspects of qualification should also be considered. This is more so required now in light of the Malaysian Higher Education Development Plan (2015-2025).

**Keywords:** Bachelor degree, degree with honours, Malaysian Qualification Framework.

### 1. Introduction

The Malaysian Ministry of Higher Education has a key role to play in the realisation of the Malaysian national mission to achieve developed status by year 2020. This is by its endeavour to raise the capacity for knowledge and innovation, as well as encouraging a first class mind set. In line with the second thrust of the National Mission, Malaysia needs to produce human capital with a first class mind set in order to face developmental challenges in knowledge and innovation based economy. The desired human capital should be knowledgeable, skilful and possess a superior personality.

In relation to these needs, the National Higher Education Strategic Plan (NHESP) was formulated with the vision to transform higher education within the context of

establishing Malaysia as an international hub of excellence for higher education. This transformation is the foundation towards attaining merit and sustainability for the higher education system beyond 2020. PSPTN encompasses four phases: Phase 1 (2007- 2010): Laying the Foundation, Phase 2 (2011-2015): Strengthening and Enhancement, Phase 3 (2016 - 2020): Excellence, Phase 4 (Beyond 2020): Glory and Sustainability (MOHE, 2013).

The Malaysian Higher Education Development Plan (2015-2025) has drawn attention to the fact that that Malaysia has the highest investment input into education where it is ranked among its peers (Ministry of Education Malaysia, 2015). The report further highlights the fact that Malaysia in terms of investment into education stands 12<sup>th</sup> placed in contrast of the 50 countries studied. However, in contrast in terms of the output Malaysia garners only 44<sup>th</sup> position (pp. B14, U21,C6). The higher levels of education must be linked to increased levels of productivity or income generating endeavors to sustain and justify a high income level. It is submitted that an important factor that influences the same would be the precision and comprehensiveness of the qualification descriptors levels itself in the Malaysian Qualification framework.

The recognition of human capital as the engine of growth and development is evident from Chapter 5 of the 10<sup>th</sup> Malaysia plan titled Developing & Retaining a First World Talent Base by 2020. It is recognized that our labour force with tertiary education at 23.4% (OECD average 27.4% in 2007), skilled labour force at 28 % (OECD average 37.6% in 2008) and labour productivity at 26.6 % (OECD average 64.8% in 2009) (10th Malaysia Plan, 2010, p. 192) are all indicators of the need to relook and transform our education sector.

The integrated human capital and talent development framework for Malaysia (2011-2015) under the Economic Planning Unit targets three specific areas namely the school level by revamping the education system to raise student outcomes significantly. Secondly, at the tertiary level i.e. university, college, polytechnic, community colleges, Technical Education and Vocational Training (TEVT) Institutions to raise skills to increase employability and finally into the professional working life to reform the labour market to transform Malaysia into a high income nation (10th Malaysia Plan, 2010, p. 194).

In a press release titled Improving the Quality of Education Key for Sustained Growth (The World Bank, 2013) in Malaysia by the World Bank the highlight is that quality in education remains a concern. In standardized international assessments Malaysian students perform well below their peers in the high-income economies Malaysia aspires to compete with. For example, among the 65 countries participating in the 2012 Program for International Student Assessment (PISA), Malaysia ranks at number 52 for Math, 53 for Science and 59 for Reading. The Ministry of Education has launched a revamp directed to enhance the quality and standards at primary and secondary levels.

The above is a precursor and underlies the rationale for this paper and study. The recognition in that in order to attain the high human capital growth that is so desired, the need to focus in not just in meeting the number of degree and postgraduate holders that the university are driven to churn out given the objectives of Malaysia's

strategic thrust in education. The first strategic thrust envisages 50% of the population have access to higher education and 33 % of the workforce has tertiary education. The second strategic thrust emphasis on producing 100,000 Phd graduates. Underlying the strategic thrust is the word, quality, which seem to be so implicit that it is not specifically mentioned in Malaysia's seven strategic thrust in education (MOHE, 2013).

The Malaysian Qualification Framework must be benchmarked against prevailing international standards to gauge the Malaysian standing on an international platform. Hence the question pursued is whether the Malaysian qualification descriptors levels are comparable to other jurisdiction and put students who study under the Malaysian framework in equivalent, better or lower standing than their peers graduating from international universities on the same level of qualification. There is a need to mark Malaysia's own report card from a quality assurance standpoint in an objective manner.

The attainment of Vision 2020 of first world country status and actualisation of the vision of Malaysia as an international education hub, where the human capital power justifies the high income it targets to achieve necessitates these question to be addressed.

## **2. Objective and Method**

This paper will set to examine if the naming and level of qualifications being issued by institutions of higher learning in Malaysia conformsto the Malaysian Qualification framework. The Malaysian Qualification framework provides the qualification descriptor of a degree but not a degree with honours. In this regard the qualification of degree with honours will be of special focus.

The Malaysian Qualification Register will be assessed to examine the naming of qualification of a publicuniversity selected at random. The extraction of the data is reproduced in the annexure herein. It will be evident that the naming qualification includes the term honours in the qualification awarded. The need to contrast and differentiate a degree with honours and a degree without honours is discussed. In this regard the paper will attempt to feature some comparison with Australian Qualification Framework (2013) and the Framework for Higher Education Qualifications in England Wales and Northern Ireland (FHEQ 2008) with focus on the level of degree and degree with honours qualification descriptors. The mode of research will be one of documentation review of certain qualification levels of the different jurisdictions.

It is to be noted here that this paper will rely solely on and not look beyond the Malaysian Qualification Framework qualification descriptor (Malaysia Qualification Agency, 2008). The Malaysian Qualification Agency programme standards and other quality assurance documents cannot be a substitute for the same. The rationale is that the Malaysian Qualification Framework is the quality setting document from which the levels, learning outcomes,qualification descriptors and naming of qualifications that are set to control the standards within disciplines and programmes. The focus of

this paper is also on the academic pathway and not vocational, skills or lifelong learning.

### **3. Quality Assurance Agencies in Malaysia, Australia and United Kingdom**

In England, Wales and Northern Ireland in the provision of higher education is regulated by the Quality Assurance Agency for Higher Education (QAA) through the provision of The Framework for Higher Education Qualifications in England, Wales and Northern Ireland (FHEQ) (QAA, 2008). Within the United Kingdom and Ireland, there are frameworks of schools and vocational qualifications managed by Qualification and Curriculum Authority (QCA). In Australia, the Australian Qualifications Framework (AQF) (2<sup>nd</sup> edition 2013) is published by the Australian Qualification Framework Council (AQF, 2013). In Malaysia, we have the Malaysian Qualification Framework, which is enforced by the Malaysian Qualification Agency (MQA), was established on 1 November 2007 with the coming in force of the Malaysian Qualifications Agency Act 2007 (Malaysia Qualification Agency, 2008).

### **4. The Levels and Qualification Descriptors**

Basically, all jurisdictions under study have a common understanding of the term qualification descriptor. The levels are said to reflect intellectual attainment associated with the level (QAA, 2008, p. 7).

However it is highlighted that the Malaysian Qualification Framework does not have the level for Bachelors with Honours in its framework unlike the jurisdiction of Australia and United Kingdom.

In the Malaysian Qualification Framework (MQF) divides qualification in eight (8) levels and defines qualification descriptor is defined as a generic statement that explains the main learning outcomes for qualification at a particular level. The levels of qualification enumerated are certificates, diploma, advanced diploma, graduate certificate and diploma, bachelor's degree, postgraduate certificate and diploma, master's degree and doctoral degree. There is no level for bachelor for degree with honours (MQF, 2011, pp. ii, 9). The qualification level is said to indicate the level of capabilities anticipated from the student. Hence arguably there is a lacuna in level of capabilities to be expected from bachelor for degree with honours.

The United Kingdom FHEQ has 5 (five) levels which have subcategories within the levels (QAA, 2008, pp. 16-20). The fundamental premise is that the qualifications are awarded on the basis of outcome and attainment. Further that qualification descriptors set out the generic outcomes and attributes expected for the award of individual qualification. The levels 4-8 succeed levels 1-3 which precede higher education in the National Qualifications Framework and The Qualifications and Credit Framework. Within the level there are sublevels, the apex of the levels and the sublevels within are indicated as follows. Level 4: Certificate of higher education (including also of certificates of Higher Education and Higher National Certificates) , Level 5: Foundation Degree ( including also Diploma of Higher Education and Higher National Diplomas) , Level 6: Bachelor with Honours Degree ( including also bachelor

degrees, professional graduate certificate in education (PGCE) , graduate diplomas and graduate certificates) ; Level 7 Master’s Degree ( including integrated master’s degree, postgraduate diploma, postgraduate certificate in Education (PCGE) and postgraduate certificates) and doctoral degrees.

The AQF has 14 qualification types from across all education and training sectors and each (with the exception of the Senior Certificate of Education) is located at one of the 10 levels. Level criteria is defined as “AQF levels criteria describe the relative complexity and/or depth of achievement and the autonomy required to demonstrate that achievement from 1-10 (AQF, 2013, p. 97).” The structure of levels and qualifications is defined by taxonomy of learning outcomes (qualification descriptors). There is more detailed of the taxonomy of the learning outcomes in that it is expressed in the dimensions of knowledge, skills and the application of knowledge and skills. The concept of knowledge is explored in terms of depth, breadth, kinds of knowledge and complexity. Skills are referring to the ability of the holder of the qualification. Skills are described in the terms of the kinds and complexity of skills. Skills include cognitive and creative skills including the use of intuitive, logical and critical thinking, technical skills include dexterity and the use of methods, materials, tools and instruments, communication skills (written, oral, literacy and numeracy skills) and interpersonal and generic skills. Also relevant is the application of knowledge and skills in which context a graduate would apply the same. Application is seen in terms of (autonomy, responsibility and accountability). The context in which it is applied is assessed from the range of the norm and the non-routine.

The AQF qualification levels range from Senior Secondary Certificate of Education, Certificate (1 to 1V) , diploma, advanced diploma, associate degree, bachelor degree, bachelor of honours degree, graduate certificate , graduate diploma, masters and doctoral degree.

## **5. Degree Qualification Descriptor**

This section will consider the degree qualification descriptors of the jurisdictions under study. The Malaysian Qualification Framework has the salient points to note. The degree qualification typically covers 120 credit hours (which is typically translated to 3 years or 6 semesters). There is no distinction of for honours degree and basic bachelor degree. The qualification award is named as Bachelor degree. The depth, breadth, currency and complexity of knowledge is not detailed neither is the concepts of skill and the context of the application of skills and knowledge. The level of knowledge mention is at the lower levels of knowledge and comprehension. There is not an emphasis on higher order of critical analysis, synthesis and evaluation or new knowledge. In order to evidence the same, the qualification descriptor for degree is reproduced as follows:

“A Bachelor’s degree prepares students for general employment, entry into postgraduate programme and research as well as highly skilled careers. It enables the individuals to pair responsibilities which require great autonomy in the professional decision- making. The bachelor’s degree is conferred on individuals who are able to: Demonstrate knowledge and comprehension on fundamental principles of a field of study acquired from advanced textbook;

- i. Use the knowledge and comprehension through methods that indicate professionalism in employment;
- ii. Argue and solve problem in their field of study;
- iii. Show techniques and capabilities to search and use data to make decisions having considered social, scientific and relevant ethical issues;
- iv. Communicate effectively and convey information, ideas, problems and solutions to experts and non experts;
- v. Apply team and interpersonal skills which are suitable to employment; and
- vi. Possess independent study skills to continue further study with a high degree of autonomy (MQF, 2011, p. 9).”

However, it is to be noted that the programme learning outcomes of the Ministry of Higher Education and also the specific programme standard of relevant disciplines do delve into further these areas.

Nonetheless, it is submitted that the corresponding pegging of levels of cognitive levels within areas of qualification (degree, degree with honours, masters and doctorate) and other non-cognitive levels common to all disciplines should be demarcated within the mother of standards of MQF. Similarly, a qualification framework for vocational and technical qualifications should be addressed.

The MQF being the mother of the various level and qualification descriptors should have common bench mark standard setting notwithstanding the disciplines (which are further subjected to subject or discipline standards) within and among the different levels need to more explicit and detailed to describe the expectation of common standards of the different aspect of learning (knowledge, specific skill and generic skills) and application of the knowledge and skills at the different levels. In so setting the standards we need to benchmark against international levels.

To examine the practice of awards and the naming of degree levels, a study of the Malaysian Qualification Register (MQR) for a public university selected at random disclosed the practice of awarding degree with honours although the qualification type listed is bachelor degree under the MQR. The extract of the data is reproduced as Appendix 1.

**Table 2: Naming of qualifications in public University A**

University	Bachelor	General/Honours	Bachelor with Honours or (Hons) included qualification
A			88

**Source:** Malaysian Qualification Register.  
[www.mqa.gov.my/mqr/english/eperutusan.cfm](http://www.mqa.gov.my/mqr/english/eperutusan.cfm)  
 (Accessed 13 August 2015) exclude medical and dental qualification.

To sum, the point to be made here is that under the MQF standards there is no Bachelors of Honours level which runs counter to the prevailing practice of award of Bachelor with Honours in the naming of qualification when the type indicated is clearly at the level of Bachelors. The concept of the award of the title Honours requiring a higher level of attainment than that which is set in the degree level is not addressed. Further that the requirements imposed on the graduates under the MQF may fall short than that imposed by the Australian and United Kingdom jurisdictions for the qualification which carries the title Honours within its naming qualification. It is also necessary to consider the parity of the qualification descriptors of the requisite degree level under both the jurisdictions. Hence the same is also set out for comparison and differentiation.

### **Comparison with the Australian Qualification Framework (AQF) 2013**

The Australian Degree requires the qualifier in the context of knowledge to have a “board and coherent body of knowledge, with depth in the underlying principles and concepts in one or more disciplines as a basis for lifelong learning (AQF, 2013, p. 48).” Hence the level of knowledge is required to be in depth in one or more disciplines. Under the category of skills the cognitive skill attained is to “review critically, analyse, consolidate and synthesis knowledge; cognitive and technical skills to demonstrate a broad understanding of knowledge with depth in some areas; cognitive and creative skills to exercise critical thinking and judgement in identifying and solving problems with intellectual independence; communication skills to present a clear, coherent and independent exposition of knowledge and ideas(p. 48). “Under the aspects of application of knowledge and skills , the qualifier is required to demonstrate the same “ with initiative and judgement in planning, problem solving and decision making in professional practice and/or scholarship; to adapt knowledge and skills in diverse contexts ; with responsibility and accountability for own learning and professional practice and in collaboration with others within board parameters (p. 48).” The duration of study is about 3 to 4 years.

The Australian Degree with Honours requires the qualifier under the aspect of knowledge to “have coherent and advanced knowledge of the underlying principles and concepts in one or more disciplines and knowledge of research principles and methods (p. 51).” The skills set out to be attained are “ cognitive skills to review, analyse, consolidate and synthesise knowledge to identify and provide solutions to complex problems with intellectual independence ; cognitive and technical skills to demonstrate a broad understanding of a body of knowledge and theoretical concepts with advanced understanding in some areas; cognitive skills to exercise critical thinking and judgment in developing new understanding ; technical skills to design and use research in a project; communication skills to present a clear and coherent exposition of knowledge and ideas to a variety of audiences (p. 51).”

The application of knowledge and skills are to be demonstrated “with initiative and judgement in professional practice and/or scholarship; to adapt knowledge and skills in diverse contexts; with responsibility and accountability for own learning and practice and in collaboration with others within board parameters; to plan and execute project work and /or a piece of research and scholarship with some

independence (p. 51).” The duration of study is typically a year in addition to the degree.

Hence it is seen that for Honours degree the element of knowledge required goes beyond comprehension and depth (under degree) to more advanced depth in one or more disciplines with the added feature of mastery of research methodology to design and use research methods as opposed to data search and use. The levels of mastery and complexity of knowledge, skills and usage of research methods are emphasized in the Honours degree.

The MQF standards housing only degree qualifiers do not emphasise level and complexity of knowledge as indicated and the mastery of research methods (as opposed to search and use data). The other aspect of adaptability and maturity is also to be noted required under the Australian Honours degree.

The Australian qualification descriptor demarcates the Bachelor from Bachelor with Honours. The difference is not only in the volume of learning in terms of time for Bachelor with Honours in that it is a year over the Bachelor degree. The emphasis is also on the level of advanced knowledge in cognitive and technical skills of higher order thinking applied to complex problems with intellectual independence to reach new understanding and technical skills to design and use research. Other features include the requirement of research methods and principles and use of the same in research, project work and scholarship. Planning, execution and management decision making in complex situations.

### **Framework for Higher Education qualifications in England, Wales and Northern England August 2008.**

The framework houses Foundation Degree at Level 5 and Bachelor Degree with Honours at Level 6. Just to cite some area of difference with MQF, there is an element of critical understanding beyond knowledge and comprehension and methods of inquiry and ability to evaluate alternatives and limitations. The qualification descriptors for foundation degree reads “knowledge and critical understanding of the well-established principles of their area(s) of study, and of the way in which those principles have developed; ability to apply the underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context; knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study ; an understanding of the limits of their knowledge and how this influences analyses and interpretations based on that knowledge (QAA, 2008, p. 16).”

In the terms of outcome of the qualification holder will be able to “use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis; effectively communicate information , arguments and analysis in a -variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively; undertake further training, develop existing skills and acquire new competences that would



enable them to assume significant responsibility within organisations.” The qualification holder will have “the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making (p. 16).

The qualifiers of the Level 6 Bachelor’s degree with honours have a higher demand in the scale of the depth and boundaries of knowledge as evident below as follows, “a systematic understanding of key aspects of their field of study, including the acquisition of coherent and detailed knowledge , at least some of which is at, or informed by, the forefront of defined aspects of a discipline; an ability to deploy accurately established techniques of analysis and enquiry within a discipline; conceptual understanding that enables the student –to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline; to describe and comment upon particular aspects of current research or equivalent scholarship in the discipline; an appreciation of the uncertainty, ambiguity and limits of knowledge; ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example , referred research articles and /or original materials appropriate to the discipline) (QAA, 2008, pp. 18-20). “

Hence the requirement of an Honours student require development of a complex body of knowledge some of it at current boundaries of an academic discipline. This is a requirement that should also be evident under the MQF since there are named qualification of degree with honours which is not as yet regulated. The FHEQ goes on to describe abilities and attributes of the qualification holders for which there is no comparable description under the MQF (QAA, 2008, p. 19).

It is to be noted that the level of knowledge under FHEQ is pegged at current and abreast in some fields. MQF on the on degree level other hand only requires knowledge and comprehension of fundamental principles from advanced textbook. There is lack of emphasis of higher order thinking and research skills that is evident in differing degrees in FHEQ and AQF.

The Malaysian Qualification framework under the attributes of independent learning and teamwork focuses on the same being required for further studies. There is a need to address the element of professional practice and academic pathways.

In the Malaysian Higher Education Development Plan (2015-2025) there is also the recognition of technical and vocational learning (TVET) that is to be ranked equal alongside academic pathway and attaining degree qualifications(Ministry of Education Malaysia, 2015, p. c.2).

However, the current Malaysian Qualification framework lacks the requisite qualification descriptors for the same and the qualification level reaches currently advanced diploma level unlike the Malaysian Higher Education Development Plan that envisages a degree and beyond qualification (Appendix). There is a need of the framework to be reviewed to measure and describe the same.

FHEQ is similar to AQF wherein there is a need for accurately established methods and techniques for to carry out research, analytical, creative and innovative thinking with initiative, independence and decision making in uncertain environment to identify pertinent issues in problems and possible solutions.

The omission of the degree with honours level from MQF need to be addressed to allow for the distinction and differentiation of the degree and degree with honours qualifier descriptors to be embedded and assessed within the Malaysian higher education levels. This can be viewed from the perspective of the level of expectation of the requisite qualification in terms of knowledge ( depth, breadth, currency, complexity) , skill (specific and generic), application of skills and knowledge and management and decision making skills and the ability to design and conduct research.

Just to note the MQF is defined in 14 pages, whereas the FHEQ is reflected in 42 pages and the AQF just taking into consideration the qualification descriptors is set out in 66 pages. This point is made to reflect that there is much more than what is covered here in this paper that could be further pursued to review on measures to strengthen and solidify the MQF.

## CONCLUSION

In summary, the paper concludes by restating the following:

1. The need to revisit our MQF in the terms of the learning outcomes cum qualification descriptors and naming of qualifications at the various levels set therein benchmarked on international level to be comprehensively housed in the primary document of MQF. It is submitted that the cure is not to be found in housing added qualification descriptors, learning outcomes or programmes standards within the specific discipline.
2. The need for a demarcation of a Bachelor degree and a Bachelor with Honours degree with qualification descriptors and naming qualification within the Malaysian Qualification Framework.
3. The need for a review within the Malaysian Qualification Framework to incorporate the technical and vocational skills pathway levels and qualification descriptors.

## REFERENCES

- i. 10th Malaysia Plan, 2010. Chapter 5: Developing and Retaining a First-World Talent Base. In: *10th Malaysia Plan 2011-2015*. Putrajaya: The Economic Planning Unit, PM's Department, pp. 192-242.
- ii. AQF, 2013. *Australian Qualificaiton Framework*. [Online]  
Available at: <http://www.aqf.edu.au/wp-content/uploads/2013/05/AQF-2nd-Edition-January-2013.pdf>
- iii. Malaysia Qualification Agency, 2008. *Roadshow MQA 2008: KOD Amalan Akreditasi Program (Code of Practice for Programme Accreditation, COPPA)*. [Online]  
Available at: [http://kcn.kdupg.edu.my/webpage/TLC\\_docs/MQA\\_Calculation\\_of\\_Notional\\_Hour.ppt](http://kcn.kdupg.edu.my/webpage/TLC_docs/MQA_Calculation_of_Notional_Hour.ppt)[Accessed 2015].
- iv. Ministry of Education Malaysia, 2015. *Malaysia Education Blueprint 2015-2025 (Higher Education)*, Putrajaya, Malaysia: Kementerian Pendidikan Malaysia. MOHE, 2013. *PSPTN*. [Online]
- v. Available at: <http://www.mohe.gov.my/portal/en/psptn-faq.html> MQF, 2011. *Malaysian Qualifications Framework*. [Online]  
Available at: [http://www.mqa.gov.my/portalMQA/dokumen/MALAYSIAN%20QUALIFICATI ONS%20FRAMEWORK\\_2011.pdf](http://www.mqa.gov.my/portalMQA/dokumen/MALAYSIAN%20QUALIFICATI ONS%20FRAMEWORK_2011.pdf)
- vi. QAA, 2008. *The Bologna Process in higher education*. [Online]  
Available at: <http://www.qaa.ac.uk/en/Publications/Documents/Bologna-Process-in-HE.pdf>
- vii. QAA, 2008. *The framework for higher education qualifications in England, Wales and Northern Ireland*. [Online]  
Available at: <http://www.qaa.ac.uk/en/Publications/Documents/Framework-Higher-Education-Qualifications-08.pdf>
- viii. QCA, n.d. *Framework for Achievement*. [Online]  
Available at: <http://www.qca.org.uk/10710.html>
- ix. The World Bank, 2013. *Improving the Quality of Education Key for Sustained Growth in Malaysia*. [Online]  
Available at: <http://www.worldbank.org/en/news/press-release/2013/12/10/improving-the-quality-of-education-key-for-sustained-growth-in-malaysia>

## APPENDIX

### Appendix A

Sample of Malaysian Qualification Register of public University A assessed 13 August 2015

<b>O</b>	<b>NAME OF QUALIFICATION</b>	<b>QUALIFICATION TYPE</b>
<b>1</b>	<b>Bachelor (Hons) in Islamic Studies &amp; Civilization Studies</b>	<b>Bachelors Degree</b>
<b>2</b>	<b>Bachelor (Hons) in Islamic Studies (Al-Quran &amp; Al-Sunnah)</b>	<b>Bachelors Degree</b>
<b>3</b>	<b>Bachelor (Hons) in Islamic Studies (Dakwah&amp; Leadership)</b>	<b>Bachelors Degree</b>
<b>4</b>	<b>Bachelor (Hons) in Islamic Studies (Syariah)</b>	<b>Bachelors Degree</b>
<b>5</b>	<b>Bachelor of Accountancy (Honours)</b>	<b>Bachelors Degree</b>
<b>6</b>	<b>Bachelor of Arts With Honours (English Arts)</b>	<b>Bachelors Degree</b>
<b>7</b>	<b>Bachelor of Arts With Honours (English Studies)</b>	<b>Bachelors Degree</b>
<b>8</b>	<b>Bachelor of Arts With Honours (History)</b>	<b>Bachelors Degree</b>
<b>9</b>	<b>Bachelor of Arts With Honours (Malay Arts And Culture)</b>	<b>Bachelors Degree</b>
<b>10</b>	<b>Bachelor of Arts With Honours (Malay Literature)</b>	<b>Bachelors Degree</b>
<b>11</b>	<b>Bachelor of Arts With Honours (Malay Studies)</b>	<b>Bachelors Degree</b>
<b>12</b>	<b>Bachelor Of Audiology (Honours)</b>	<b>Bachelors Degree</b>
<b>13</b>	<b>Bachelor Of Biomedical Science (Honours)</b>	<b>Bachelors Degree</b>
<b>14</b>	<b>Bachelor of Business Administration With Honours</b>	<b>Bachelors Degree</b>
<b>15</b>	<b>Bachelor Of Diagnostic Imaging And Radiotherapy (Honours)</b>	<b>Bachelors Degree</b>

16	<b>Bachelor Of Dietetics (Honours)</b>	<b>Bachelors Degree</b>
17	<b>Bachelor of Economics With Honours</b>	<b>Bachelors Degree</b>
18	<b>Bachelor of Education (Honours) (Al-Quran Studies)</b>	<b>Bachelors Degree</b>
19	<b>Bachelor of Education (Honours) (Islamic Studies)</b>	<b>Bachelors Degree</b>
20	<b>Bachelor of Education With Honours (Biology)</b>	<b>Bachelors Degree</b>
21	<b>Bachelor of Education With Honours (Chemistry)</b>	<b>Bachelors Degree</b>
22	<b>Bachelor Of Education With Honours (Educational Management)</b>	<b>Bachelors Degree</b>
23	<b>Bachelor of Education With Honours (Mathematics)</b>	<b>Bachelors Degree</b>
24	<b>Bachelor of Education With Honours (Physics)</b>	<b>Bachelors Degree</b>
25	<b>Bachelor of Education With Honours (Special Education)</b>	<b>Bachelors Degree</b>
26	<b>Bachelor of Education With Honours (Sports and Recreational)</b>	<b>Bachelors Degree</b>
27	<b>Bachelor of Education With Honours (TESL)</b>	<b>Bachelors Degree</b>
28	<b>Bachelor of Engineering With Honours (Biochemical Engineering)</b>	<b>Bachelors Degree</b>
29	<b>Bachelor of Engineering With Honours (Chemical Engineering)</b>	<b>Bachelors Degree</b>
30	<b>Bachelor Of Engineering With Honours (Civil &amp; Environmental Engineering)</b>	<b>Bachelors Degree</b>
31	<b>Bachelor Of Engineering With Honours (Civil &amp; Structural</b>	<b>BachelorsDegree</b>

	<b>Engineering)</b>		
<b>32</b>	<b>Bachelor of Engineering With Honours (Communication &amp; Computer Engineering)</b>	<b>Bachelors Degree</b>	
<b>33</b>	<b>Bachelor of Engineering With Honours (Electrical &amp; Electronic Engineering)</b>	<b>Bachelors Degree</b>	
<b>34</b>	<b>Bachelor of Engineering With Honours (Manufacturing Engineering)</b>	<b>Bachelors Degree</b>	
<b>35</b>	<b>Bachelor of Engineering With Honours (Mechanical Engineering)</b>	<b>Bachelors Degree</b>	
<b>36</b>	<b>Bachelor of Engineering With Honours (Microelectronics Engineering)</b>	<b>Bachelors Degree</b>	
<b>37</b>	<b>Bachelor of Environmental Health (Honours)</b>	<b>Bachelors Degree</b>	
<b>38</b>	<b>Bachelor Of Forensic Science (Honours)</b>	<b>Bachelors Degree</b>	
<b>39</b>	<b>Bachelor of Information Technology With Honours (Computer Science)</b>	<b>Bachelors Degree</b>	
<b>40</b>	<b>Bachelor of Information Technology With Honours (Industrial Computing)</b>	<b>Bachelors Degree</b>	
<b>41</b>	<b>Bachelor of Information Technology With Honours (Information Science)</b>	<b>Bachelors Degree</b>	
<b>42</b>	<b>Bachelor of Information Technology with Honours (Intelligent System)</b>	<b>Bachelors Degree</b>	
<b>43</b>	<b>Bachelor of Information Technology With Honours (Multimedia Studies)</b>	<b>Bachelors Degree</b>	

44	<b>Bachelor of Information Technology With Honours (Science and Systems Management)</b>	<b>Bachelors Degree</b>
45	<b>Bachelor of Islamic Studies with Honours (Theology and Philosophy)</b>	<b>Bachelors Degree</b>
46	<b>Bachelor of Laws (Hons)</b>	<b>Bachelors Degree</b>
47	<b>Bachelor of Nursing with Honours</b>	<b>Bachelors Degree</b>
48	<b>Bachelor of Nutrition Science (Honours)</b>	<b>Bachelors Degree</b>
49	<b>Bachelor of Occupational Therapy (Honours)</b>	<b>Bachelors Degree</b>
50	<b>Bachelor of Optometry (Honours)</b>	<b>Bachelors Degree</b>
51	<b>Bachelor of Pharmacy (Honours)</b>	<b>Bachelors Degree</b>
52	<b>Bachelor of Physiotherapy (Honours)</b>	<b>Bachelors Degree</b>
53	<b>Bachelor of Science (Honours) Actuarial Science</b>	<b>Bachelors Degree</b>
54	<b>Bachelor of Science With Honours (Environmental Sciences)</b>	<b>Bachelors Degree</b>
55	<b>Bachelor of Science With Honours (Biochemistry)</b>	<b>Bachelors Degree</b>
56	<b>Bachelor of Science With Honours (Bioinformatics)</b>	<b>Bachelors Degree</b>
57	<b>Bachelor of Science With Honours (Biology)</b>	<b>Bachelors Degree</b>
58	<b>Bachelor of Science With Honours (Biotechnology With Management)</b>	<b>Bachelors Degree</b>
59	<b>Bachelor of Science With Honours (Chemical Technology)</b>	<b>Bachelors Degree</b>
60	<b>Bachelor of Science With Honours (Chemistry)</b>	<b>BachelorsDegree</b>

61	<b>Bachelor of Science With Honours (Food Sciences and Nutrition)</b>	<b>Bachelors Degree</b>
62	<b>Bachelor of Science With Honours (Food Sciences with Business Management)</b>	<b>Bachelors Degree</b>
63	<b>Bachelor of Science With Honours (Genetics)</b>	<b>Bachelors Degree</b>
64	<b>Bachelor of Science With Honours (Geology)</b>	<b>Bachelors Degree</b>
65	<b>Bachelor of Science With Honours (Marine Science)</b>	<b>Bachelors Degree</b>
66	<b>Bachelor of Science With Honours (Material Sciences)</b>	<b>Bachelors Degree</b>
67	<b>Bachelor of Science With Honours (Mathematics)</b>	<b>Bachelors Degree</b>
68	<b>Bachelor of Science With Honours (Microbiology)</b>	<b>Bachelors Degree</b>
69	<b>Bachelor of Science With Honours (Nuclear Sciences)</b>	<b>Bachelors Degree</b>
70	<b>Bachelor of Science with Honours (Oleochemistry)</b>	<b>Bachelors Degree</b>
71	<b>Bachelor of Science With Honours (Physics)</b>	<b>Bachelors Degree</b>
72	<b>Bachelor of Science With Honours (Plant Biotechnology)</b>	<b>Bachelors Degree</b>
73	<b>Bachelor of Science With Honours (Statistics)</b>	<b>Bachelors Degree</b>
74	<b>Bachelor of Science With Honours (Zoology)</b>	<b>Bachelors Degree</b>
75	<b>Bachelor of Social Science With Honours (Antropology and Sosiology)</b>	<b>Bachelors Degree</b>
76	<b>Bachelor of Social Science With Honours (Communication and Information Management)</b>	<b>Bachelors Degree</b>
77	<b>Bachelor of Social Science With Honours (Communication and Public Policy)</b>	<b>Bachelors Degree</b>
78	<b>Bachelor of Social Science With Honours (Developmental Science)</b>	<b>Bachelors Degree</b>
79	<b>Bachelor of Social Science</b>	<b>Bachelors</b>



	<b>With Honours (Geography)</b>	<b>Degree</b>
<b>80</b>	<b>Bachelor of Social Science With Honours (Human Development)</b>	<b>Bachelors Degree</b>
<b>81</b>	<b>Bachelor of Social Science With Honours (International Relation)</b>	<b>Bachelors Degree</b>
<b>82</b>	<b>Bachelor of Social Science With Honours (Linguistics)</b>	<b>Bachelors Degree</b>
<b>83</b>	<b>Bachelor of Social Science With Honours (Mass Communication)</b>	<b>Bachelors Degree</b>
<b>84</b>	<b>Bachelor of Social Science With Honours (Political Science)</b>	<b>Bachelors Degree</b>
<b>85</b>	<b>Bachelor of Social Science With Honours (Psychology)</b>	<b>Bachelors Degree</b>
<b>86</b>	<b>Bachelor of Social Science With Honours (Social Work Studies)</b>	<b>Bachelors Degree</b>
<b>87</b>	<b>Bachelor of Speech Science (Honours)</b>	<b>Bachelors Degree</b>
<b>88</b>	<b>Diploma in Nursing</b>	<b>Diploma</b>
<b>89</b>	<b>Doctor of Dental Surgery</b>	<b>Bachelors Degree</b>
<b>90</b>	<b>Doctor of Medicine-(MD)</b>	<b>Bachelors Degree</b>

<b>NO</b>	<b>NAME OF QUALIFICATION</b>	<b>TYPE</b>	<b>NO OF CREDITS</b>
<b>1</b>	<b>Bachelor of Science in Emergency Medicine with Honours</b>	<b>Bachelors Degree</b>	<b>162</b>