



OCCUPATIONAL ANALYSIS

EDUCATION AND TRAINING SERVICES INDUSTRY



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ABSTRACT

An Occupational Analysis (OA) is the process of identifying the work scope of the occupational sub-area in terms of competencies. It is used to analyse skilled human resource competency requirements for the industry. The development of the Occupational Structure is a preliminary process in developing relevant National Occupational Skills Standard (NOSS). The NOSS in turn will be developed to be used as the basis to conduct skills training and certification of competent personnel. This document is divided into several chapters, the first being an industrial overview highlighting the definition and scope of the industry, the current analysis of the local industry and its skilled worker requirements, Government bodies and development plans supporting the growth of the industry, then the next chapter will explain the methodology used in Occupational Analysis development such as qualitative and quantitative analysis through focus group discussion and statistical data analysis. Workshops were held to get a better understanding of the organisational structure, job titles, hierarchy objectives and main activities of the specified positions. The final chapters will present the findings of the Occupational Analysis that is translated into the Occupational Structures, levels of competencies and critical sub-areas. In order to conduct the Occupational Analysis on the Education & Training Services Industry, all the information related to the aforesaid industry was gathered through literature/document review and further discussed in workshop sessions with experts from the industry. During the development workshops, the panel members **identified two (2) sub sectors, five (5) job areas, 53 sub areas and a total of 188 job titles** that reflect the main category of Education & Training Services Industry in Malaysia. The two sub sectors are Education Services and Training Services.

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LIST OF ABBREVIATIONS

DESCUM	Development of Standard and Curriculum
DSD	Department of Skill Development
ETP	Economic Transformation Programme
EU	European Union
GDP	Gross Domestic Product
OA	Occupational Analysis
OAA	Occupational Area Analysis
OD	Occupational Description
OS	Occupational Structure
OAS	Occupational Area Structure
MOSQF	Malaysian Occupational Skills Qualification Framework
MQA	Malaysia Qualification Agency
MSC	Malaysian Skills Certificate
NOSS	National Occupational Skills Standard

1. INTRODUCTION

1.1 Introduction

Malaysia has made great progress in education on many fronts including increased access to pre-school education and secondary education, as well as expanded opportunities to pursue post-secondary and tertiary education. Measures have also been taken to address inequities in the system, including support programmes for poor students, and the focus on narrowing the gap between rural and urban populations by upgrading and expanding educational facilities and deployment of more qualified teachers, have produced tangible results (Source: Malaysia, Education for All 2015 National Review).

This chapter will discuss and describe the background of the study, study objectives, scope of occupational analysis, and problem statement for the Education and Training Services. An Occupational Analysis (OA) is a systematic process of identifying the sectors, sub-sectors, job areas and job titles for a specific industry in the form of Occupational Structure (OS). The Occupational Analysis (OA) will also look at other elements such as common job titles and levels of competency for skilled personnel in the industry, job functions, industry overview and skills demand. Every job title will be identified according to its level as defined in the Malaysian Occupational Skills Qualification Framework (MOSQF) level descriptor **(Refer to Annex 1)**. It is important to note that the Occupational Structure should not replicate the Organisational Structure but rather the competency levels and possible career path for personnel under a particular sector in the industry.

In addition, OA demands input from all stakeholders especially among the industry major players, statutory bodies and training institutions, among others. The classified job titles gathered during the OA will be utilized as reference points during National Occupational Skills Standard (NOSS) development. By developing the NOSS, personnel in

the industry undergoing three methods of skills training certification can be considered as certified.

1.2 Background Study of the Education and Training Services Industry

Globalization provides several challenges to every country in the world, especially developing countries, including Malaysia. To address these challenges, Malaysia needs to develop plans and strategies accordingly. The new economic model stipulates that for Malaysia to achieve developed country status by 2020, three objectives must be fulfilled - high income economy, inclusiveness and sustainability (Source: *Plan Induk Pembudayaan Pembelajaran Sepanjang Hayat Peringkat Nasional 2011-2020*).

Given the growing number of population reaching 34.3 million and the working age population (15-64 years), about 26.2 million in 2020, the need for employment and training becomes more critical. Although formal education in universities and colleges continues to be an important component of the national education system, the development of human capital should be increased through training for life as this will provide an opportunity for residents to reach the level of higher education (Source: *Plan Induk Pembudayaan Pembelajaran Sepanjang Hayat Peringkat Nasional 2011-2020*).

Therefore, challenges in the education and training services are essentially driven by economic and globalization pressures, technological changes, political pressures, and socio-demographic developments. Structural changes can open new opportunities and expose workers and companies to rapidly evolving knowledge, skills and competence needs. Against these circumstances, better understanding of development and changes in occupational and labour skills structure is vital or imperative than in the past (Source: *Plan Induk Pembudayaan Pembelajaran Sepanjang Hayat Peringkat Nasional 2011-2020*).

1.3 Objectives of the Education and Training Services Industry Occupational Analysis

The objectives of this Occupational Analysis are as follows:

- i) To identify the Occupational Structure and Occupational Area Structure of the Education and Training Services; and
- ii) To identify critical job titles for Education and Training Services workforce.

1.4 Scope of Occupational Analysis

The scope of this particular OA is focused on the Education and Training Services and all areas that are defined to be under the Education and Training Services. The scope of this OA relevant to the objectives stated above is as follows:

- i) Objective 1: To identify the Occupational Structure and Occupational Area Structure of the Education and Training Services

The scope of this particular OA is focused on the Education and Training Services and all its sub-sectors that are defined to be under the Education and Training Services.

- ii) Objective 2: To identify critical job titles for Education and Training Services workforce.

Critical job refers to new job requirements in the education and training industry. It refers also to current jobs that have been identified that are needed by the industry for the next 1-5 years. The identification of critical jobs was done through primary data collection. A focus groups was identified and telephone surveys were conducted. For the

telephone survey, respondents were from the top management of public and private education and training providers. They were rated on the jobs that are critical for the industry on a 3-point Likert-type scale, ranging from 1 = Critical, 2 =Moderately Critical and 3 = Highly Critical. For the focus group, a list of panel members from the Development Panel determined the critical job requirements by the industry.

1.5 Problem Statement

The Malaysian economy is an open economy driven primarily by foreign direct investment and export growth. Thus, the education system must recognise the changing demand conditions in terms of the needs of multinational and large corporations. This is important to ensure the country is able to produce adequately and appropriately trained human resource and does not face a skills-shortage problem. Currently, deficiencies are seen in the areas of communication, ICT knowledge and professional and technical skills which have resulted in an insufficient supply of employable graduates. This situation is further aggravated by university students not pursuing fields of study that are relevant to industry. Another cause of the problem is the perceived low priority for training among firms, notwithstanding the fact that Malaysia possesses a good infrastructure for skills development (Source: The National Graduate Employability Blueprint 2012-2017).

There have been various National Occupational Skills Standard (NOSS) documents developed so far but not in the Education and Training Services. The Occupational Structure of the Education and Training Services seems arbitrary and require a complete analysis for it to become more focused in line with international standards for Education and Training Services. Therefore, in order to ascertain the overall structure and available career paths in the industry, the Occupational Analysis must be developed or prepared on the Education and Training Services.

1.6 Conclusion

Globalization has created challenges to the industry and to address this challenge, Malaysia has developed plans and strategies under the new economic model of 2020, where three objectives must be fulfilled, that are high income economy, inclusiveness and sustainability. However, the high growth in education and training industry in Malaysia was due to the well structured education from pre-school education and secondary education, as well as expanded opportunities to pursue post-secondary and tertiary education. However, there were deficiencies in the areas of communication, ICT knowledge and professional and technical skills which have resulted in an insufficient supply of employable graduates.

Multinational and large corporations had also recognised the needs of skilled workers and this is further aggravated by university students' not pursuing fields of study that are relevant to the industry. Low priority of importance in skills training among would be graduates is another cause of the problem of the shortage though that Malaysia possesses a good infrastructure for skills development. Though there have been various National Occupational Skills Standard (NOSS) documents being developed so far, the NOSS for the Education and Training Services thus far still has not been developed. The focus should be in line with international standards for Education and Training Services.

2. OVERVIEW OF THE EDUCATION AND TRAINING INDUSTRY

2.1 Chapter Introduction

This chapter will focus on explaining the Malaysia Education and Training Services, the current situation in Malaysia, introduction to Malaysia government policies, government bodies and benchmark countries pertaining to the Education and Training Services.

Findings in this chapter were obtained through literature/document review, observation, interviews with industry practitioners and discussions during workshops with development panel members. This literature/document review will be further discussed with panel members to obtain insights into the matter at hand from a practitioner's perspective.

2.2 Description of the Education and Training Industry

2.2.1 Ministry of Education Goals

Basically, there are six (6) goals that have been established by the Ministry of Education in the new education blueprint:

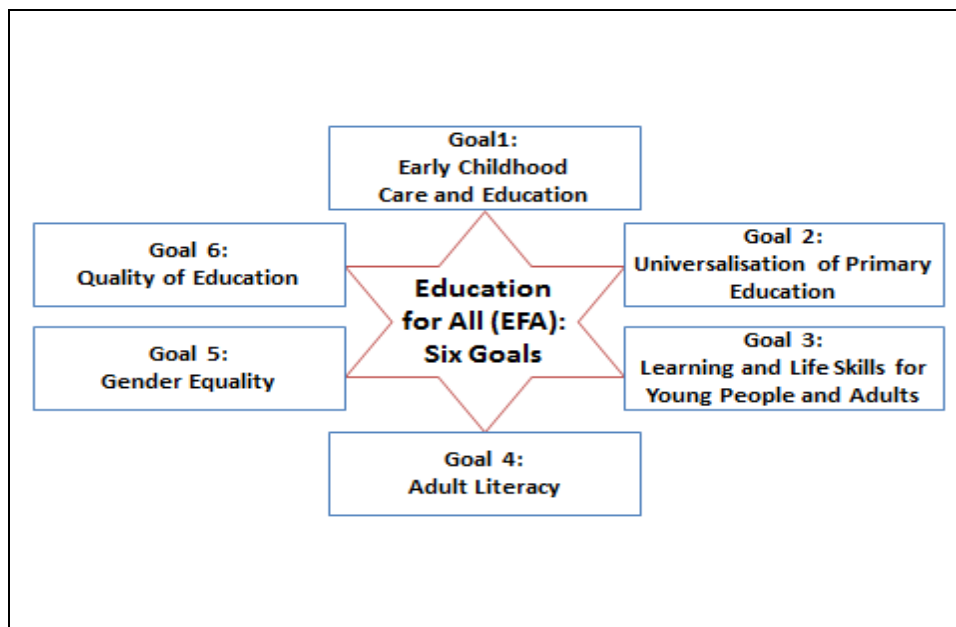


Figure 2.1: The Six (6) Goals of the Ministry of Education
(Source: Malaysia, Education for All 2015 National Review).

- Goal 1:** Early Childhood Care and Education – Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.
- Goal 2:** Universalization of Primary Education – Ensuring that by 2015 all children, particularly girls, children in different circumstances, and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality.
- Goal 3:** Learning and Life Skills for Young People and Adults – Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.
- Goal 4:** Adult Literacy – Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.
- Goal 5:** Gender Equality – Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls’ full and equal access to and achievement in basic education of good quality.
- Goal 6:** Quality of Education – Improving all aspects of the quality of education and ensuring excellence of all so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills. (*Source: Malaysia, Education for All 2015 National Review*)

2.2.2 The National Education System

The National Education System was incorporated in the Malaysia Education Act 1996 framework. The Malaysian Education System has gone through a transformation process so as to ensure its functions and roles to be more efficient. The Education Act of 1996, stipulated the policy that directed education leaders and administrators to manage the industry to be world class.

According to the Education Act 1996, Section 15, the national education system consists of the following:

- (a) Pre-school education;
- (b) Primary education;
- (c) Secondary education;
- (d) Higher secondary education; and
- (e) Higher learning education except education at expatriate school (international schools).

Section 16 of the Education Act 1996 has also listed three national educational institution categories:

- (a) Government educational institution;
- (b) Government-aided educational institution; and
- (c) Private educational institution.

i. Pre-school Education

According to National Association for the Education of Young Children, early childhood refers to the period from birth to age eight. Early childhood programmes are mostly carry out in centres, homes, and institutions, kindergartens and primary school. They are being managed either part-day or full-day programs. In Malaysia, the early childhood education is under jurisdiction of Social Welfare Department (JKM). JKM is the regulatory body for early childhood education programmes which inclusive of related occupation and training of the personnel. The programmes can be divided into two groupings namely: *TASKA or Nursery* (Taman Asuhan Kanak-Kanak) and *TADIKA* (Taman Didikan Kanak-Kanak) for Preschool. Table 1 on following page shows the most common types of early care and education category.

Figure 2.5: Type of Early Care and Education Centers

Particulars	Nursery	Preschool
Age	Birth to 4 years old	5 to 6 years old
Type of Center	Home-based Serving fewer than 10 children	Center-based Serving 10 or more children
Teacher-child Ratio	1:10	1:25
Percentage of the Center in the Country	38%	62%

Source: Ministry of Education, Malaysia, 2005.

According to the Ministry of Education (2015) TASKA provides education services to young children from birth to four years old; while TADIKa offers services to young children between five to six years old. When they reach seven years old, they have to attend their primary education which is compulsory. The Ministry of Education provides the guidelines for curriculum for children 4-6 years of age under the Education Act of 1996. However, there are no specific curriculum guidelines for children under the age of four (Source: Malaysia, Education for All 2015 National Review).

ii. Primary and Secondary Education

a. Primary education

Primary education usually takes six years and it's mandatory that Malaysian children commence their primary education from age seven. Primary School children need to sit for Primary School Achievement Test (*Ujian Pencapaian Sekolah Rendah*), UPSR in short, before progressing to secondary education. They will be evaluated in selected subjects namely: comprehension, writing and oral in Malay and English, Science and Mathematics.

School types and medium of instruction:

The two groups of medium of instructions are:

- i. Malay-medium commonly known as National Schools (*Sekolah Kebangsaan*, SK)
- ii. Non-Malay-medium National-type Schools (*Sekolah Jenis Kebangsaan*, SJK), also known as "vernacular schools" alienated into:
 - o National-type School (Chinese) (*Sekolah Jenis Kebangsaan (Cina)*, SJK(C),
 - o National-type School (Tamil) (*Sekolah Jenis Kebangsaan (Tamil)*, SJK (T)),

b. Secondary education

According to Ministry of Education (MOE), secondary education can be categorized into two stages:

- Lower secondary education (Form 1 to Form 3)
- Upper secondary education (Form 4 to Form 5)

There are various categories of national secondary schools: -

- a. National secondary school (regular)
- b. Secondary school (fully residential)
- c. Arts and sports secondary school
- d. Technical/vocational secondary school
- e. National religious secondary school
- f. National religious assisted secondary school

National Secondary Schools (*Sekolah Menengah Kebangsaan*, SMK) falls under the category of public secondary education in Malaysia and use Malay language as the main medium of instruction with English is a compulsory subject. Students have to undergo five years in secondary education of which usually referred to as Forms (*Tingkatan*) 1 to 5. The education at this level is broken into two divisions, namely: Form 1 to Form 3 are

known as Lower Secondary (*Menengah Rendah*), while Form 4 and 5 are known as Upper Secondary (*Menengah Atas*).

There are two main assessments for this stage of education. At the end of Year 3 or Form 3, the students have to sit for *Pentaksiran Tingkatan 3* (PT3) or Lower Secondary Evaluation. Students are given three streams of studies to choose which would be based on their PT3 namely: Academic Stream (Science/Art), Technical and Vocational Stream, and Religious Stream. At the end of Form 5, students would sit for *Sijil Pelajaran Malaysia* (SPM) or Malaysian Certificate of Education examination, before graduating from secondary school. They will then proceed to further their studies in Form 6 or matriculation or pursue semi-professional education. Some might even go into the job market at this stage.

Other types of government or government-aided secondary schools include Religious Secondary School (*Sekolah Menengah Agama*), Technical Schools (*Sekolah Menengah Teknik*), Fully Residential Schools and MARA Junior Science College (*Maktab Rendah Sains MARA*). Exemption is given to children to be home-schooled if they have chronic health condition which requires close attention by the guardian.

Residential schools or *Sekolah Berasrama Penuh* were introduced to nurture Bumiputras who have outstanding academic aptitude, excel in sports and possess leadership quality. The schools are modeled after the British Boarding School and since RMK2, 10 such schools have been founded in Malaysia, such as the Malay College Kuala Kangsar, Sekolah Tunku Khursiah, and Sekolah Tun Fatimah.

However, students who are inclined toward science and technology can choose to pursue technical and vocational education. Under the Technical and Vocational Education Division, semi-professional programmes in various technical and engineering fields to meet the manpower requirement of the nation's industry are being offered.

Other special schools found in Malaysia are the religious secondary school (*Sekolah Menengah Agama*) that has to be registered with the Ministry of Education (MOE) while the state religious curriculum is maintained. There is also another type of school that focuses on culture or commonly known as Sekolah Seni Malaysia that is

aimed at enhancing, preserving and instilling the Malaysian culture among the younger generations. This will be in line with the vision of the Kementerian Kebudayaan, Kesenian dan Warisan (KeKKWa).

Under the 5th Malaysia Plan (1991 – 1995), the Ministry of Education, recognizing the important role of sports in fostering national unity and the need to produce high caliber athletes, established the sports schools. Two Malaysian sports schools were built at the National Sports Complex in Bukit Jalil and in Kota Tinggi.

Realizing the need to build the human capital for special needs children, the ministry established a Special Education Program to nurture them to be independent and competent citizens. To ensure the special needs children are part of the system, the Buddy System in schools was introduced. It aims mainly to promote collaboration and interaction between normal students with students with special needs. It was implemented in several selected schools in the country.

c. Post-secondary education

After SPM, students from public secondary schools would have an option of either proceed to Form 6 or matriculation (pre-university). Form 6 studies would take two years (Lower Form 6 and Upper Form 6). Two streams are offered in Form 6: Humanities and Science. They will be assessed through another examination process at the end of their studies: the Malaysian Higher School Certificate, *Sijil Tinggi Persekolahan Malaysia* (STPM) examination at the end of Form 6.

Alternatively, students may also apply for admission to matriculation instead. Unlike STPM, the matriculation certificate is only valid for universities in Malaysia. All matriculation programmes are managed fully by the Matriculation Division under MOE except those by the International Islamic University and Centre for Foundation Studies in Science of the University of Malaya. The studies normally take two (2) semesters and the programme curriculum focuses on the academic and co-curricular aspect. Matriculation programmes are also being conducted at matriculation colleges and MARA Colleges in the country.

On the other hand, students that wish to pursue foreign university degrees can undertake their pre-university studies in private colleges. The programmes offered are British 'A' Level, the Canadian matriculation programme or the equivalent of other national systems – namely the Australian NSW Board of Studies Higher School Certificate and the American High School Diploma with AP subjects. (Source: Malaysia, Education for All 2015 National Review).

d. Tertiary Education

Students also have the option of enrolling in public or private tertiary institutions after completing their matriculation or STPM studies. The quality controls on the private tertiary educations are under the purview of the Malaysian Qualifications Framework (MQF). The agency was formed to ensure the standards of post-secondary qualifications offered on a national basis both in the vocational as well as higher educational sectors are of world standard. However, all levels of tertiary education in Malaysia has to be registered and approved by MoE. (Source: Malaysia, Education for All 2015 National Review).

The classifications of tertiary education in Malaysia are as follows:

i. Public Institutions of Higher Education

Before the year 2013, pre-school up to secondary and post-secondary education (matriculation and Form 6) was under the jurisdiction Ministry of Education (MoE) while tertiary or higher education was with the Ministry of Higher Education (MoHE). However, the two ministries merged in 2013 and are now recognized as Ministry of Education.

The Public Institutions of Higher Education (PIHE) were designed to produce talents needed by the country that are resilient and able to meet the globalization challenges as well as being creative and innovative. Normally, it takes about 12-13 years of schooling before students are able to enrol at the universities. Most of the universities

in Malaysia offer degree and postgraduates courses. Apart from the universities, there are also colleges and university colleges that offer diploma programmes as well. Usually after graduation the graduates seek jobs or further their studies in the various post-graduates programmes.

ii. Private Institutions of Higher Education

Students have the choice of enrolling in private tertiary institutions after completing their secondary studies. Private universities offer homegrown curriculum or programmes in co-operation with a foreign institutes or universities, such as from the United States, the United Kingdom or Australia. Some private college universities/colleges offer "twinning" programmes, where they have the option to study abroad at the end of their course. There are also foreign branch campuses or 'offshore campus' of foreign universities in Malaysia, which offer similar programmes as their home campus.

iii. Malaysian Technical University Network (MTUN)

Under the purview of MTUN, four (4) technology-based universities in Malaysia, namely Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Teknikal Malaysia Melaka (UTEM), Universiti Malaysia Pahang (UMP) and Universiti Malaysia Perlis (UniMAP), were formed. The objective of the establishment of these technical universities is to produce technologists who are capable, competent and able to perform any tasks, practically and theoretically required by the industrial sector and job market demand. The programmes thus are designed to meet the current industrial needs. MTUN offer premier technical professional programmes such as Bachelor in Engineering Technology and Bachelor in Engineering. As of 2014, a total of 43 engineering technology first degree programmes are offered by MTUN universities with a total of 6,365 students registering in the programmes.

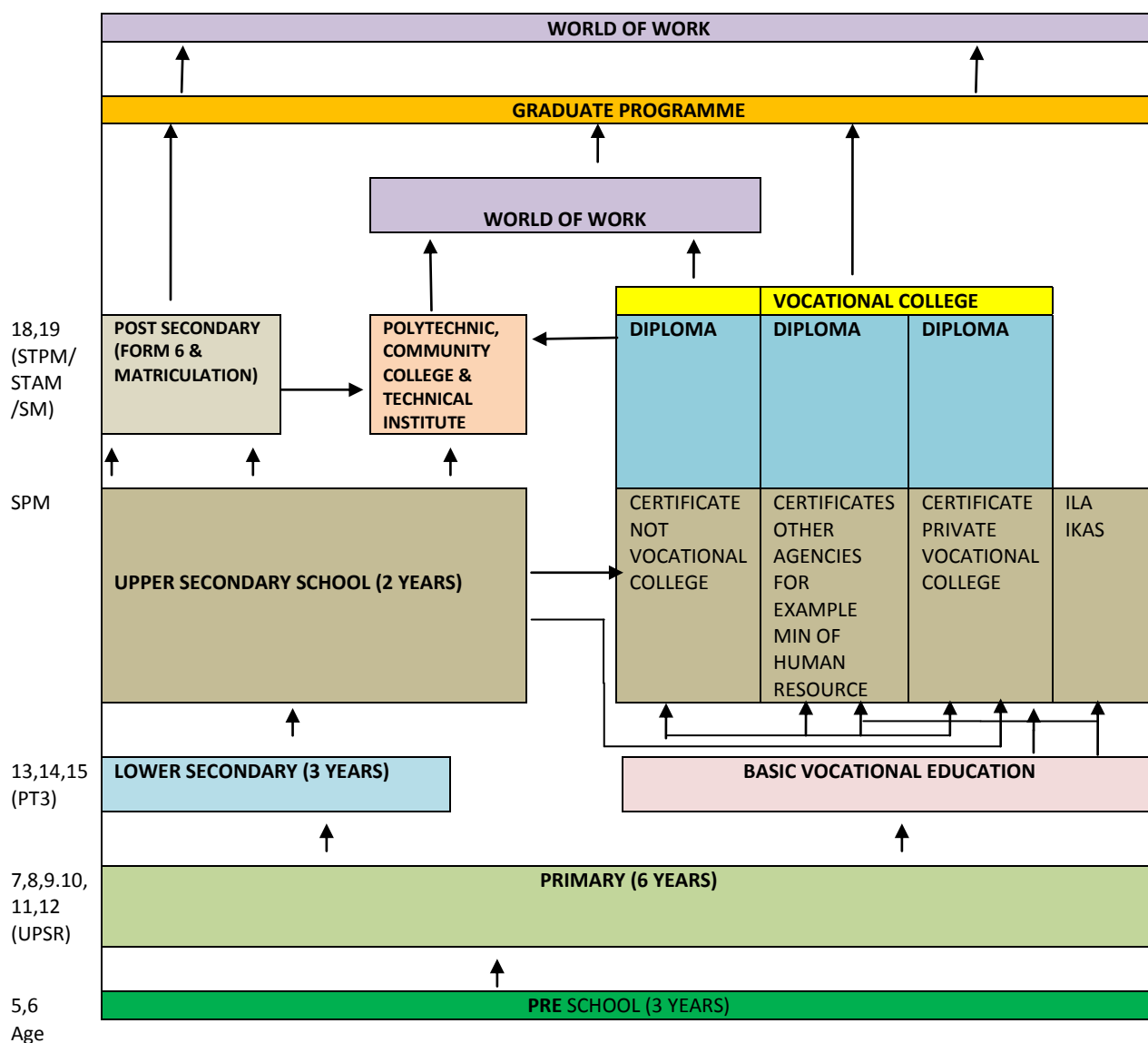
MTUN is a pathway diploma holder of TVET programmes for diploma holders from both the public and private institutions. Currently between 15 to 20% of admission into MTUN first degree programmes are from among diploma holders and it is expected that more than 20% of diploma holders are expected to enter MTUN.

iv. Community colleges

Community colleges were set up initially to assist in educating local communities. The colleges concentrated in departing knowledge and skills, as well as inculcation of positive values and ethics through education and training programmes to local communities. It also provides professional Lifelong Learning Environment (LLE) for its learners. In addition, the community colleges also foster an entrepreneurial culture to support the socio-economic development programmes of the local communities.

v. Polytechnics

Polytechnics were established to meet the requirements of the New Economic Model (NEM), aiming at structuring and development of the human capital with new technical skills emphasizing on future innovation and creativity. Along with this transformation plan, polytechnics were set to produce innovative human capital with first class mentality and high employability. Polytechnics are given not only the responsibility to produce a highly knowledgeable and highly skilled workforce but also to meet the country's target to increase the percentage of highly skilled workers in Malaysia from 23% to 37% by 2015. Consequently, Technical Education and Vocational Training (TEVT) has been placed in the mainstream in meeting the nation's future endeavor. The education system is displayed in Figure 2.1.



(Source: Malaysia, Education for All 2015 National Review).

Figure 2.2: Education System and Assessment Programmes

2.2.3 Ministry of Human Resources

Ministry of Human Resources Malaysia aims to be the leading agency in the development and management of a World Class Workforce in Malaysia.

Ministry of Human Resources (MOHR) mission:

- To develop a workforce that is productive, informative, discipline, caring and responsive to the changing labor environment towards increasing the economic growth and hence create more job opportunities.
- To encourage and maintain conducive and harmonized industrial relation between employers, employees and trade unions for the nation's economic development and wellness of people.
- To uphold social justice and ensure harmonious industrial relations through solving industrial dispute between employer and employee and awarding collective agreement.
- To ensure trade unions practice democracy, orderly and is responsible to assist achieving the objective of industrial harmony.
- To be the leader in development of nation's human resources.
- To ensure safety and health of workforce is assured.
- To develop skilled, knowledgeable and competitive workforce in a harmonious industrial relations with social justice.

Ministry of Human Resources (MOHR) Roles and Responsibilities

- To update and implement labor policies and laws to create efficient, productive and discipline workforce with positive values and good work ethics.
- To update and implement occupational safety and health policies and laws to ensure a healthy and safe work environment.
- To efficiently manage and independently resolve industrial dispute between employer and employee in order to create a conducive work environment.
- To monitor and facilitate development and movement of trade unions to be orderly for the benefit of the nation.
- To manage international relations in Labor Management field, technical co-operation in labor related matters and human resources development.
- To encourage and coordinate tripartisme among employees, employers and Government and to create harmonized relation toward Vision 2020.

- To plan and develop human resource through control and labor market analysis to formulate policies relating to employment, development of skilled workforce and productivity linked wage system.
- To create job opportunities and job placement.
- To update and implement National Vocational Training Policy and strategies that will fulfil the training needs in the private sector.
- To revise, update and develop the syllabus of skills training (NOSS), Skills Certification System (MOSQ) and skills standard for implementation.
- To update and effective implementation of social safety facility to ensure sufficient safety net for workers.

2.2.4 Skills Training and Development

Employees in an organisation need continuous training to remain competent or to prepare themselves with new work practices. Training is a responsibility shared by different departments in an organization not just human resource department. Some organisations allocate high budget in employee training throughout the year and some may even offer training services to other companies. For example, Malaysia Airlines (MAS) built its own complex for training activities, i.e. MAS Academy at Kelana Jaya. MAS also offers its services to other airlines. Generally, training and development have many advantages even though the cost involved cannot be measured financially. To calculate the cost incurred to conduct a training programme is easy but to calculate the output of the training is very complicated. Although it is difficult to measure the advantages in monetary value, the benefits that can be noticed include: (i) increase in employee productivity (ii) increase in job satisfaction (iii) increase in employee knowledge (iv) increase in employee motivation.

In Malaysia training and development can either be managed or conducted by training agencies either run privately or by public sector. Training can be divided into professional or development training services and skills training services. There are also corporations that handle cooperative training programmes that offer courses both in various management and skills training. One such organization is the Malaysian Technical Cooperation Programme (MTCP) that was initiated at the First Commonwealth Heads of Government Meeting (CHOGM) for Asia Pacific Region in 1978. MTCP offers

more than 100 short-term courses in various disciplines at its 79 MTCP training institutions. Thus far, more than 25,000 participants from 140 countries have benefited from the programmes (source: <http://mtcp.kln.gov.my/about-mtcp>)

There are also small private training companies that offer professional and skill certificates in Malaysia. To sustain their business, most of them will target organisations that contribute to Human Resources Development Fund (HRDF) .To date, there are more than 2190 centres that have registered with the human resource department. Under this programme, employers that contribute to Human Resources Development Fund (HRDF) and pay levy are eligible to apply for training grants (financial assistance) for training must be in the area of direct benefit to their business operations. (Source: <http://www.hrdf.com.my/>).

Other agencies that are into implementing skills training are Kementerian Sumber Manusia, (Jabatan Tenaga Manusia), Majlis Amanah Rakyat through IKM and pusat Giat Mara, Kementerian Belia & Sukan through IKBN and Kementerian Pelajaran/Pengajian Tinggi- through its Kolej Komuniti, Politeknik and universities.

List of Private Professional Bodies offering Professional Certification Programmes

- i. The **International Council of Electronic Commerce Consultants (EC-Council)** is a leading provider of IT Security certification and is a member driven international organization of academicians, industry practitioners and professionals from the e-Business domain. EC-Council provides professional certification and facilitates peer interaction to build and enhance the knowledge, skill and professional growth of its members. EC-Council has trained more than 90,000 professionals in over 80 countries globally. EC-Council certification compliments all the major certifications from Microsoft, CISCO, IC2, ISACA and many more. EC-Council certification covers the appropriate industry standards while remaining as vendor neutral as possible. Although some content are technology or vendor specific, only widely adopted technologies and standards are covered.

- ii. **Cisco** is building teams that are expanding their technology solutions in the mobile, cloud, security, IT, and big data spaces, including software and consulting services. Cisco delivers the network that powers the Internet, they are connecting the unconnected. Revolutionary ideas will impact everything from retail, healthcare, and entertainment, to public and private sectors, and far beyond. Collaborate with like-minded innovators in a fun and flexible culture that has earned Cisco global recognition. With roughly 10 billion connected things in the world now and over 50 billion estimated in the future, your career has exponential possibilities at Cisco.
- iii. **The Fiber School/FiberOptic.com** offers a comprehensive around the world training that helps build technical solutions and stay competitive today and in the future. The Fiber School offers Fiber Optic Fundamentals course to advanced skills training and Professional Level certifications. Expand knowledge and get ahead in the information transport systems industry. The Fiber School offers courses in Kuala Lumpur on a regular basis. TFS Courses currently offered in Kuala Lumpur: Certified Fiber Optic Installer – This certified fiber optic installer training course is designed for those who layout, install or maintain fiber optic cabling systems. It identifies you as an installer able to demonstrate a practical knowledge of fiber optic theory, codes, standards and practices widely accepted in the fiber optics industry. In addition, this training incorporates two days of individual hands-on training validating installer skills, including fiber terminations, cable preparations, fusion splicing, OTDR and optical loss testing. These skills are applicable to all the requirements to safely and competently install, maintain, and test fiber optic cabling systems.
- iv. **Malaysian Institute of Management (MIM)** provide management leadership, development, training, and education to practicing managers with the aims of increasing the competency and excellence of these managers in their effort to be productive, innovative, and competitive, thereby supporting the nation building agenda in human capital development and realizing Malaysia's Wawasan 2020 of

achieving developed nation status. MIM offered programmes in areas such as: *Professional Certification Programmes* (such as Certified Professional Trainer, Certified Professional Manager, Certified professional Franchise Manager, Certified Professional Entrepreneur, Project Management Professional, and etc.) and *Training Programmes* (such as Quality Management, Communication, Creativity and Innovation, Finance, HRM, and many more).

- v. **Malaysian Institute of Human Resource Management (MIHRM)** is the first Malaysia's professional body promoting the practice of Human Resource Management. As the leading and independent body for Human Resource Management in Malaysia, MIHRM has trained more than 20,000 competent HR professionals and practitioners in both the private and public sectors. The wide array of professional training courses, public programmes, consultation and support for organizations and individuals has put MIHRM at the forefront of the industry as the sole authority on Human Resource Management in the country. This is consistent with its reputation as the only professional body authorized to certify HR practitioners in Malaysia. MIHRM is also affiliated with the World Federation of People Management Association (USA) and Asia Pacific Federation of Human Resource Management (APFHRM) and other reputable regional Human Resource Management Associations.
- vi. **FMM Institute**, a subsidiary company of the Federation of Malaysian Manufacturers, was established to provide industry-relevant skills training for the manufacturing and services sectors for the continuing development of the human capital. The Institute on average conducts 1,000 programmes and trains 18,000 participants in various categories of programmes nation-wide annually. FMM Institute also offers a wide range of functional corporate training programmes to cater to the needs of the manufacturing and services sectors. The institute is also approved by the SME Corporation Malaysia to conduct SMEs Skills Upgrading Programmes for SMEs so as to enjoy the 70% SMEs Skills Upgrading Grant. Training Programmes can be specially

customised to meet the training needs of industries and be conducted on in-house basis. The range of Certificate programmes offered provides the opportunity for working personnel to gain qualifications to upgrade themselves for career advancements. FMM Institute has a total of eight Branches and two Representative Offices nation-wide.

- vii. **Institute of Value Management Malaysia (IVMM)** was established in May 2000 under the Organisation Act 1966, the institute offered programme: Certified Value Manager and Certification Route.
- viii. **Malaysian Institute of Accountants (MIA)** is a statutory body established under the Accountants Act, 1967 to regulate and develop the accountancy profession in Malaysia. To date, MIA has 32,069 members. MIA's responsibilities include education and quality assurance as well as enforcement which are carried out to ensure that the credibility of the profession is maintained and that public interest is continuously upheld. Since its establishment more than 40 years ago, MIA has also been an active partner in nation-building as it actively contributes views and ideas for the well-being of the nation and its economy. In addition, MIA monitors international and local accounting trends and developments, and consults regularly with the government and regulatory bodies. In the international and regional arena, MIA plays a significant role in developing and advancing the global accounting profession through its involvement in organisations such as: Asean Federation of Accountants (AFA) and International Federation of Accountants (IFAC). In Malaysia, the word 'accountant' is protected as provided for under the provisions of the Act which states that no one can hold himself out or practise as an accountant unless he is registered as a member of MIA.
- ix. **The Association of Chartered Certified Accountants (ACCA)** is the global body for professional accountants. We aim to offer business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management. ACCA aims to

develop capacity in the profession and encourage the adoption of global standards. ACCA values are aligned to the needs of employers in all sectors and ensure that, through their qualifications, they prepare accountants for business. ACCA is seeking to meet the diverse needs of trainee professionals and their employers. ACCA works to strengthen a global profession based on the application of consistent standards, which they believe best supports international business and the desire of talented people to have successful, international careers. ACCA champion the needs of small and medium sized business (SMEs) and emerging economies, and promote the value of sustainable business. To achieve this we work with global bodies such as the International Federation of Accountants (IFAC) and with more than 80 global accountancy partnerships. ACCA works in the public interest, assuring that its members are appropriately regulated for the work they carry out and, promoting principles-based approaches to regulation.

- x. **Chartered Institute of Management Accountants (CIMA)** is the world's largest and leading professional body of management accountants. The mission is to help people and businesses to succeed in the public and private sectors. They work at the heart of business in industry, commerce and not for profit organisations. CIMA have strong relationships with employers, and sponsor leading research. Constantly update their qualification, professional experience requirements and CPD programme. This ensures that their members and students are first choice for employers who are recruiting financially trained business leaders.
- xi. **The Malaysian Institute of Certified Public Accountants (MICPA)** has been developing the accounting profession in Malaysia by providing accounting graduates with an avenue to become a Certified Public Accountant, or better known as CPA since 1958. MICPA has been a cornerstone in the setting of accounting standards since then and has played a technical advisory role for Malaysian regulatory bodies responsible for carving out the business and financial landscape of this nation since its formation. Members of the Institute are entitled to the description "certified

public accountant” and to the designation CPA. The depth of technical accounting knowledge and understanding of the Malaysian business environment has helped MICPA shape its core professional accountancy programme. The partnership between MICPA and ICAA has widened the horizons of programme graduates in terms of international opportunities and access to resources such as the Global Accounting Alliance (GAA) which provides support from a network of professional accounting bodies in 11 different countries.

- xii. **The Chartered Institute of Marketing (CIM)** is uniquely placed not only to be the voice for the marketing community, but an active participant – catalyzing and shaping the future of this ever-changing profession. CIM has been supporting, representing and developing marketers, teams, leaders and the profession as a whole. CIM networks have an unrivalled breadth, depth and diversity – making this not just the largest community of marketers, but one with impact. CIM is independent, trusted and connected, with access to unmatched ideas, insights and resources to help marketers navigate from problem diagnosis to practical solutions. And, as the only Chartered body for marketing, CIM offered certificate, diploma and chartered programmes in marketing.
- xiii. **The Institute of Marketing Malaysia (IMM)** is the only registered Institute in the country established for the purpose of serving the marketing fraternity in Malaysia. Formed under the Society’s Act in 1979, the Institute has assisted and will continue to assist, train and bring together marketers from various businesses and industries with one common goal and that is to improve the marketing skills of its members. The primary objective of the Institute as enshrined in its Constitution is “ to organise, oversee, maintain, promote, protect and assist by all lawful means the rights and interests of marketing practitioners in Malaysia, especially those who are members of the Institute”. Members of IMM are affiliated to the esteemed Asia Pacific Marketing Federation (APMF) as well as the World Marketing Association (WMA). IMM and its members currently have global access to a truly international platform

for marketing networks, which is a valuable 'infrastructure' for building business in the emerging, borderless world.

- xiv. **The International Advertising Association (IAA)** is a worldwide network of the most influential and inspirational marketing, advertising and media professionals that sets and maintains the standards in our industry. The IAA provides a leading platform for sharing knowledge on industry issues, best practices and insights in a rapidly changing business environment. The IAA has never been more relevant. With so many changes in the way we use advertising to communicate, it's important for everyone in the industry to have a trusted body they can turn to for advice and support. What do we do for the advertising industry? Encourage the exchange of knowledge and expertise amongst marketing peers around the world, and Provide professional development through education and training for the marketing communications industry.
- xv. **The Financial Planning Association of Malaysia (FPAM)** is the peak professional body for financial planning in Malaysia. It is a not-for profit organization with the twin mission of continuously professionalizing the industry and educating the public on the importance of financial planning. It administers the Certified Financial Planner® certification and the Islamic Financial Planner qualification programs, both of which are recognized by the Securities Commission and Bank Negara Malaysia for licensing purposes. FPAM has more than 40 Charter and Corporate members, many of whom are among the most established financial institutions in their sector. FPAM is an affiliate member of the international organization, Financial Planning Standards Board Ltd.
- xvi. **International Centre for Education in Islamic Finance (INCEIF)** was set up in 2005 by Bank Negara Malaysia (the Central Bank of Malaysia). It is one of many initiatives undertaken by Malaysia to develop and nurture talents and experts under the MIFC (Malaysia International Islamic Finance Centre). INCEIF is governed by a Governing Council which is chaired by a Director and comprises representatives from the

financial industry, regulators and members of international repute. The Senate, i.e. the Professional Development Panel is also chaired by a Director and comprises of CEOs from Islamic banks and Takaful companies, regulators and representatives from the financial industry. INCEIF offers three postgraduate programmes in Islamic finance, namely Masters in Islamic Finance Practice (MIFP), Master of Science in Islamic Finance (MSc) and PhD in Islamic Finance. To complement its mission to produce world-class talent for the global Islamic finance industry, INCEIF, as a knowledge leader in Islamic finance, offers industry-focused executive education that includes customised executive programmes. INCEIF's research unit carries out academic and commercial research which provides trend analysis, economic growth indicators and specific cross border business strategy.

2.2.5 The Technical And Vocational Education and Training (TVET) System

The Technical and Vocational Education (TVE) system in Malaysia started with the enforcement of the Razak Report 1956 and the Education Ordinance 1957. Other education reports and education memorandums such as the Rahman Talib Report and the Education Act 1961, the Mahathir Report 1979, the Cabinet Memorandums 1995, 1998 and 1999 had further sustained the policies, system, curriculum and direction of the National Education Philosophy (NEP).

Presently, the TVE program in is carried out mainly at the:

- Technical and Vocational Education at National Secondary School (SMK)
- Technical Education at Technical Secondary School (SMT)
- Vocational Education at Vocational Colleges (KV)
- Providers of Technical and Vocational Education in Malaysia

The TVE program in schools is executed in three stages. The stages are:

a. Primary School Level

At the primary school level, pupils from Year 4 to Year 6 are introduced to a pre-vocational subject called **Living Skills**. This particular subject is introduced with the aim of developing the manipulative, entrepreneurial and self-management capabilities amongst primary pupils. These capabilities are acquired through practical skills and knowledge as well as instilling positive attributes based on technology and entrepreneurship.

b. Lower Secondary Level

Pre-vocational education is further continued and strengthened at the lower secondary level with the introduction of Integrated Living Skills. Recently in 2012, MOE has introduced Junior Vocational Education (PAV) for Form 1 students who are inclined towards skills or hands-on teaching and learning. Currently PAV is offered at 85 National Secondary Schools (SMK).

c. Upper Secondary Level

The general aim of the vocational education (VE) is to develop skills in relevant enterprises that would enable students to seek employment, start business or pursue higher levels of vocational training. In the upper secondary school level, VE is offered at 80 Vocational Colleges (KV). Students who are vocationally inclined have the option to choose any of the 54 vocational subjects of their interest. It shows that MOE provide upper secondary schools students with greater access and wider array of elective subjects to select from according to their interests and aptitudes.

Technical and Vocational Education at Secondary Academic Schools

In order to put TVE programme in a more established position in the Secondary Academic Schools, the MOE has introduced six technical subjects namely Engineering Technology, Engineering Drawing, Agricultural Science, Principle of Accounting, Commerce and Home Economics to participating fully-residential schools, religious national secondary schools and secondary academic schools.

Technical and Vocational Education at Technical Secondary School and Vocational College

Basically, there are three education streams offered in 9 Technical Secondary Schools (SMT) and 80 Vocational Colleges (KV) in the country namely technical, vocational and skills.

a. Technical

Technical stream is targeted for students with high academic result in their Lower Certificate Education (PMR). The courses offered enable these students to go for further education in engineering, commerce and professional fields and to become professional workers. Four fields of studies are offered in the technical stream. The subjects are Mechanical Engineering Studies, Civil Engineering Studies, Electrical and Electronic Engineering Studies, Agriculture, Apparel Studies and Food Management.

b. Vocational

Whereas the vocational stream is offered to students who obtain good to average result in their Lower Certificate of Education (PMR). The four year program is designed to enable them to fulfil the nation needs for skilled professional workforce. They can go for further training and studies at **Malaysian Technical Universities Network** (MTUN) such as *Universiti Tun Hussein Onn*, *Universiti Teknikal Malaysia Melaka*, *Universiti Malaysia Perlis* and *Universiti Malaysia Pahang*. The Standard Vocational College Curriculum (KSKV) also emphasizes on preparing the students with employability skills and entrepreneurship to get them ready in becoming entrepreneurs.

There are twelve fields offered to students who opted for this stream which consist of:

1.	Manufacturing & Mechanical Engineering Technology	4
2.	Civil Engineering Technology	3
3.	Electrical and Electronics Engineering Technology	4
4.	Information and Communication Technology	4
5.	Agro-technology	11
6.	Business	7
7.	Hospitality	6
8.	Support System For Arts and Culture	2
9.	Health Sciences	6
10.	Transportation	2
11.	Marine Technology	2
12.	Sports Industry	1
TOTAL		52

c. Skills

The skills stream is tailored for students who are less inclined towards academic studies but are more interested in hands-on. The courses are offered in accordance to National Occupational Skills Standard (NOSS) which is developed by Department of Skills Development, Ministry of Human Resource. Among the courses available in skills stream are Electrical, Electronics, Machine Workshop Practice, Welding, Automotive, Catering, Cosmetology and, Fashion Designing and Garment Making. Most of the courses offered comply with industry needs.

Another area in skill training is the apprenticeship program (SLDN) where students will experience real work experience. The program will run for 2 years with 3 months for academic study, 3 months of vocational training and 6 months of on-the-job training (OJT).

Vocational College Under The Ministry Of Education

Concurrent with the launch of the Vocational Education Transformation by the YAB Deputy Prime Minister on 6 January 2012, a total of 15 vocational schools have been upgraded to Vocational College (KV) under the Pilot Project. Two major programs offered by MOE Vocational Colleges (KV), are the four year study program leading to a Diploma and the Apprenticeship Program. Students who successfully completed the KV program will be awarded with a Malaysia Vocational Diploma (DVM). The Apprenticeship' Program is a collaboration with the National Dual Training System (SLDN) mode which take 2 year (flexible) to complete, and students will be awarded with the Malaysia Skills Certificate (SKM) Level 2-3 upon completion of the course. In general, Vocational College Programmes are divided into three types:

Vocational College Programme Under The Ministry of Education (KV KPM)

One of the main components of the Transformation of the Vocational Education is the upgrading of Vocational Secondary Schools to Vocational Colleges. In 2012, 15 Vocational Colleges were established followed by 72 Vocational Colleges in the year 2013 and finally in 2014 all 80 Vocational Colleges were upgraded. However, the number of existing Vocational Colleges could only accommodate 20,000 students per year.

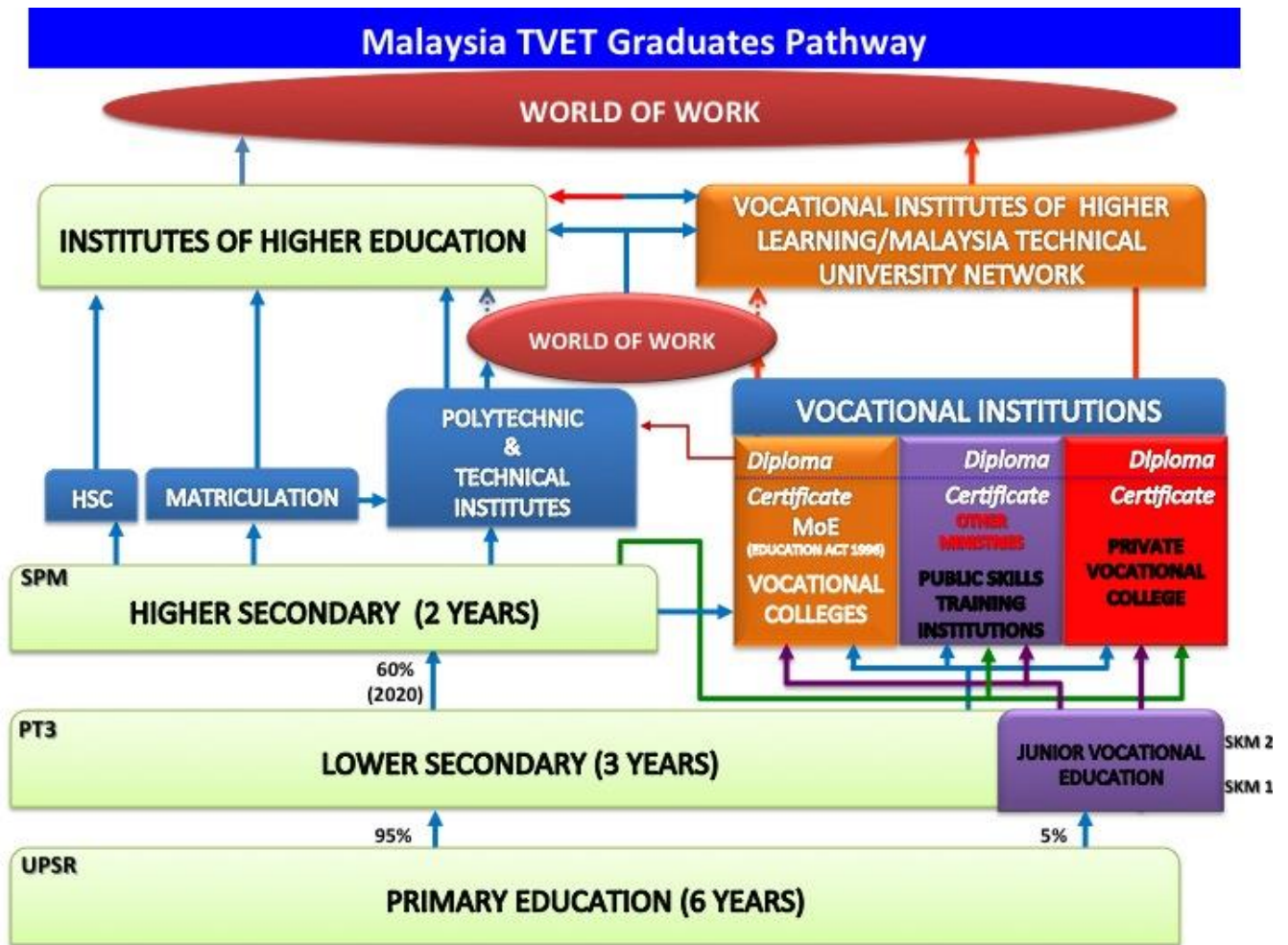
Vocational College Programme in Public Skills Training Institutes (*Institut Latihan Kemahiran Awam* -ILKA)

With the increasing demand for vocational education by students, in line with the National Blue Ocean Strategy (NBOS) with the Ministry of Education has gained the cooperation of Public Skills Training Institutes (*Institut Latihan Kemahiran Awam* -ILKA) to provide places for students who have completed the PT3 Assessment. The programmes offered through ILKAs are implemented based on the concept of collaboration by sharing infrastructure, equipment and human resources belonging to other ministries. The implementation of the programmes is determined by the courses that are available in the respective ILKAs. The Standard Curriculum for Vocational Colleges is developed by the officers from the Ministry of Education and the teaching staff of the ILKAs. In 2014, this programme was implemented in 14 Industrial Training Institutes (*Institut Latihan Perindustrian*-ILP) under the Ministry of Human Resource (MOHR) and will be expanded to other ILKAs in the future.

Vocational College Programme in Private Skills Training Institutes (*Institut Latihan Kemahiran Swasta* -ILKS)

The Ministry Of Education has also identified Private Skills Training Institutes (*Institut Latihan Kemahiran Swasta* -ILKS) that are suitable to offer Vocational College Programmes through the method of *buying seats*. The Vocational College Programme that is implemented consists of high impact courses. Courses are carried out on the premises of the ILKSs using their facilities, equipment and their teaching staff. The Standard Curriculum for Vocational Colleges is developed by the officers from the Ministry of Education and the teaching staff of the ILKSs. The cost of the courses is fully borne by the Ministry of Education.

In transforming Malaysia as a developed and high-income nation by the year 2020, MOE has created a pathway for students to access to the world of work and to further their studies as shown in Figure 2.3 below.



(Source: Technical And Vocational Education And Training (TVET) Ministry Of Education Malaysia ,2015)

Figure 2.3: Malaysia TVET Graduates Pathway

Public Agencies that offer skills training programmes are the Centre for Instructor & Advanced Skill Training (CIAST) (Manpower Department, Ministry of Human Resources), Home Affairs Ministry (*Kementerian Dalam Negeri*), Ministry of Defense (*Kementerian Pertahanan*), *Majlis Amanah Raayat* (Giat Mara), Ministry of Agriculture and Agro Based (*Kementerian Pertanian Dan Asas Tani*), Social Welfare Department Under Ministry Of Women, Family and Community Development (*Kementerian Pembangunan Wanita, Keluarga Dan Masyarakat*), and also the state governments (*Kerajaan-Kerajaan*

Negeri) such as PSDC, KISMEC, PESDEC and SHRDC through their academy or training institutes.

CIAST is an acronym for "Centre for Instructor & Advanced Skill Training" in Malaysia is one major player to prepare skilled and competent instructors for training centres and industries for training centres and industries. The center has been operational since 1984 and under the purview of the Manpower Department, Ministry of Human Resources. The centre offers courses in Instructor Training, Supervisory Training and Advanced Skill Training for instructors, supervisors and skilled workers from the private and public sectors. As shown in Figure 2.0 below, CIAST has conducted more than 168 international projects as at 31 March 2015, jointly assisted by the government of Japan by providing assistance to developing countries such as Laos, Cambodia, Vietnam and Myanmar especially with the establishment of the Department of Vocational Training Research and Development (DVTRD) and the National Instructor Training Programme (NITP). CIAST has also provided SLDN (Sistem Latihan Dual Nasional) programmes where attendees from individual participants were 68,793 and company participants were 4,500.

GIATMARA, another important establishment under MARA, an agency under the Ministry of Rural Development, aims to provide technical and vocational skills training to youth in rural areas and in the city. This is to enable the youths to gain skills in preparation to become a skilled workforce and technical entrepreneurs to meet industry needs and the needs of economic and entrepreneurial activities for the nation. GIATMARA budget operations are fully funded by the government through the allocation channeled through MARA. GIATMARA commenced operations in January, 1986 in Kubang Pasu with its first intake of 60 trainees in the field of Electricity, Brick and Wood Industry. Currently GIATMARA offers 39 types of courses under 12 different types of clusters Mechanical, Architecture, Transportation, Manufacturing, Printing, Electrical, Computer & IT, Fabrics, Electronics / Mechatronics, Culinary, Hairdressing &

Cosmetology and Hospitality. At the end of the RMK 10 GIATMARA centres are expected to grow to 231 nationwide.

Industrial Training Institute Kuala Lumpur (ILPKL) is one of the skills training institutes under the purview of the Department of Manpower (JTM), Ministry of Human Resources that was established in 1964. The institute was first established by the government offering vocational training. It started as a small training center offering apprenticeship courses in various trades such as electrical, fitters, printing and carpentry, and has grown rapidly ever since to become one of the largest skills training institutes in Malaysia.

In line with Vision 2020, the country hopes to target 50% of highly skilled workers through the development of technical expertise in existing industries while producing experts in certain sectors. The institute currently provides a range of technical training programmes to meet the demand for skilled labor in the country. Equipped with the latest technology and equipment supported by expert teachers with the relevant skilled and experience, the institute has grown to be a leader in the skills / vocational training with *Institut Teknologi Jepun Malaysia* (JMTI), eight *Pusat Latihan Teknologi Tinggi* (ADTEC) and 23 *Institut Latihan Perindustrian* (ILP). The programme may take between 6 months to over 3 years. The certification for all levels from certificate, diploma and advanced diploma are undertaken by Jabatan Pembangunan Negara (formerly known as MLVK). Some of the programmes offered are Electronics Engineering Technology, Computer Engineering Technology, Mechatronics Engineering Technology, Manufacturing Engineering Technology and Precision Machining Engineering Technology. More than 80% of their graduates were employed within 6 months of graduation. Graduates can also further their education at other institutions of higher learning in the country that offer technical programmes

2.3 Existing National Occupational Skills Standards (NOSS) Related to Education and Training Industry

National Occupational Skills Standards (NOSS) is the specification of competencies expected of a skilled worker who has been successfully employed in Malaysia for a specific occupational of an area, level and pathway. In order to examine the Education and Training Services Industry, the existing National Occupational Skills Standard (NOSS) was used as a reference. In accordance to the Department of Skills Development (DSD), NOSS Registry (March 2015), the current NOSS for Education and Training Services is depicted in Table 2.1 as follow.

Table 2.1: Overall Existing NOSS for Education and Training Services Industry

SEKTOR 21: ET: PENDIDIKAN & PERKHIDMATAN LATIHAN / EDUCATION & TRAINING SERVICES								
BIL. NO.	SUB-SEKTOR/SUB-SECTOR	Kod/ Code	T1/ L1	T2/ L2	T3/ L3	T4/ L4	T5/ L5	Jumlah/ (Total)
21.1	Pengurusan Hal Ehwal Islam/ <i>Islamic Related Management</i>	ET	0	0	1	1	1	3
21.2	Pengajar/ <i>Instructor</i>	I/ET	1	1	9	4	3	18
21.3	Penyeliaan/ <i>Supervisory</i>	T	0	0	1	0	0	1
	Jumlah/Total		1	1	11	5	4	22

2.4 Main Stakeholders and Key Players

The main stakeholders/key players for the Education and Training Services role is to support the realisation of education and training sector goals, in particular for the purpose of EFA. The industry consists of several main stakeholders/key players that affirm the obligations of the Government and for all citizens to claim their rights to education. The most important stakeholders/key players, which apply to several EFA goals are as follows:

a. Main Stakeholders

NO	STAKEHOLDERS	EXPLANATION
1.	Ministry of Education	<p>The mission of MOE is to develop and create a superior education environment that promote Malaysia as the premier knowledge hub and develop Malaysian to be competent, innovative and having high moral values to meet national and international requirements.</p> <p>The Ministry of Education pledges to remain steadfast in its determination and commitment to ensure that:</p> <ol style="list-style-type: none"> 1. Notification of admission offers to public educational institutions will be made as follows: <ol style="list-style-type: none"> i. For post-Primary School Achievement Test (UPSR) students applying to: <ul style="list-style-type: none"> • Fully residential schools (SBP) – within 27 working days upon announcement of the examination results ; • National religious secondary schools (SMKA) – within 30 working days days upon announcement of the examination results ; • Malaysian arts schools (SSeM) – within 45 working days upon announcement of the examination results ii. For post-Lower Secondary Assessment (PMR) students applying to vocational colleges (KV)/ technical secondary schools (SMT)/ fully residential schools (SBP)/ national religious secondary schools (SMKA) – within 30 working days upon announcement of the examination results ; iii. For post-Malaysian Certificate of Education (SPM) students applying to matriculation colleges – within 30 working days upon announcement of the examination

NO	STAKEHOLDERS	EXPLANATION
		<p>results; and</p> <p>iv. For post-Malaysian Certificate of Education (SPM) students applying to Form Six – within 30 working days upon announcement of the examination results.</p> <p>2. Status of applications for re-sits student transfers will be issued within 15 working days of receipt of completed applications forms.</p> <p>3. All students will receive textbooks under the Textbook Loan Scheme (SPBT) on the first day of school.</p> <p>4. Status of applications for teacher placement and transfer shall be issued no later than 15 working days prior to the first day of reporting for work.</p> <p>5. Recommendations for substantive promotion and promotion based on excellent service record of education officers shall be processed for submission to the Education Service Promotion Board within 60 working days upon receipt of the completed application documents.</p> <p>6. Issuance of offer letters for scholarships or loans to in-service officers and undergraduates shall be within seven (7) working days of notification of approval from the relevant approving body.</p> <p>7. Status of application for the establishment of a private or international school which meets the terms and conditions stipulated, will be issued within seven (7) working days of approval by the Registrar-General.</p>
1.	Ministry of Human Resources (MOHR) (Department of Skills Development)	<p>The main purpose of the establishment of the Department of Skills Development or Jabatan Pembangunan Kemahiran (JPK) under the Ministry of Human Resource is to promote and formulate strategies and coordinate skills training</p>

NO	STAKEHOLDERS	EXPLANATION
		<p>programs in line with the needs and developments in technology and the economy.</p> <ul style="list-style-type: none"> • Among the responsibilities of JPK is the Development of National Occupational Skills Standards (NOSS), implementation of Malaysia Skills Certificate (Level 1 Malaysia (Level 1-5) through training institute accredited centres (PB) and the accreditation of prior achievement (PPT) through industry oriented training (NDTS). • JPK is also responsible to develop industry experts and industry training instructor for the skills training. Besides that JPK also carry out in-service training for teachers for vocational training in and outside the country sponsored by the PSD, MySkills among trainers and development of national industrial expert directory (DPIN). • JPK is also responsible to promote and develop functional skills training for example organizing Skills Competition (National / Asean / Skills Olympics), giving career guidance, organizing training expo, produce publications etc. • JPK also conduct research in skills training as well as accrediting and recognition training program. It had identified more than 22 Industry sectors dedication for training and Malaysia Skill Certification. Certification can be through various manner namely: a) Through Training Institution Training Center-; b)

NO	STAKEHOLDERS	EXPLANATION
		<p>through Industry Oriented Training (SLDN) - industry-oriented training method that combines workplace training and training institutions are to produce K-Workers.</p> <p>Source: www.mohr.gov.my</p>
2.	Ministry of Agriculture And Agro-Base Industry (MOA)	<p>MOA was given the responsibility to produce multi-skilled workers and entrepreneurs in the agriculture sector through agriculture training. Its target is to produce modern, dynamic and competitive agriculturist in facing the global market. For MOA, under the National Key Economic Area (NKEA) of the Economic Transformation Programme (Economic Transformation Programme) (ETP) had identified 16 Project Starters (Entry Point Project) (EPP) and 11 Potential Commerce (Business Opportunities) (BO) which will provide overall Revenue mainly to the Gross National Income (GNI) to the country.</p> <p>Among the MOA functions are:</p> <ul style="list-style-type: none"> • To prepare the National Occupational Skills Standard (NOSS) that would include the training packages, learning facilities and skilled instructors based on NOSS for all agricultural fields. • Coordinate the physical requirement of all agricultural training institutes. Among the training institute under their preview are Institute of Fisheries (DOF), Department of Agriculture (DOA) and Department of Veterinary Services (DVS). • Coordinate and enhance the agriculture skills training

NO	STAKEHOLDERS	EXPLANATION
		at all agricultural training institutes as well as plan for dual training system.
3.	Ministry of Tourism and Culture Malaysia (MOTAC)	<p>MOTAC was given the responsibility to promote Malaysia as a tourist destination and to be a world-class cultural and national identity based on arts, culture and heritage. In order to achieve this, MOTAC has developed several in-house training programmes along with the Ministry of Human Resources. Among the programmes are:</p> <ul style="list-style-type: none"> • Spa Therapist Training Programme was established to develop local expertise while giving new career opportunities to Malaysian youths. It also aims to regulate the spa industry and to reduce Malaysians dependency on foreign therapists. Upon successful completion of the programme, trainees will be awarded certification in spa therapy and obtain Malaysian Skills Certificate (Level 3) from the Department of Skills Development, Ministry of Human Resources. • Local Nature Tourist Guide Level 2: Malaysians that have a passion for tourism and the nature while having good discipline can sit for Level 2 Local Nature Tourist Guide Course which is conducted by PERHILITAN (Peninsular Malaysia) to be a nature tourist guide. They will also need to pass the examination conducted by the Ministry of Tourism. • Tourist Guide Level 3 Basic Tourist Guide Course (Level 3) is for individuals

NO	STAKEHOLDERS	EXPLANATION
		<p>who aspire to be a City Tourist Guide. To be certified and prior obtaining a license from the Ministry of Tourism and Culture(CEC), candidates must successfully attend courses and pass a written exam and a practical exam.</p> <ul style="list-style-type: none"> • Other courses conducted by MOTAC are: <ul style="list-style-type: none"> ○ Travel and Tours Management Course (TTMC) & Travel and Tours Enhancement Course (TTEC): This course was introduced to ensure that travel agencies and travel operators are equipped with current and relevant information on current issues and the future direction of the Ministry of Tourism and Culture. ○ Eco-Host Malaysia: was introduced to promote public awareness on the need to preserve and conserve the natural environment. It also aims to educate the public on the current environmental situation and how human activities affect the eco-system ○ Tourist Boat Operation aims to raise the competency and knowledge of parties involved in the maritime transport industry. ○ Malaysia Welcomes The World (MWW): It is an updated version of Mesra Malaysia which is a more comprehensive course to train all tourism front liners.

NO	STAKEHOLDERS	EXPLANATION
4.	The Federation Of Malaysian Skills Development Center (State Government)	<p>The Federation Of Malaysian Skills Development Center (FMSDC) was founded in 1992 under the “Societies Act 1966” on the initiatives of the Federal government in collaboration with the private sectors representing the industries and are fully supported by state governments. FMSDC main objective is to produce high income skilled manpower through developing competitive human capital, continuous learning opportunities and technology driven culture. FMSDC has 12 Skills Development Centres in Malaysia except in the states of Perlis and Kelantan. All the centres are under the State and Federal Government with private sector initiatives.</p> <p>Source: fmsdc.org.my/</p> <p>The skill centers are as follows:</p> <ul style="list-style-type: none"> • Kedah Industrial Skills And Management Development Centre (KISMEC) • Perak Entrepreneur And Skills Development Centre (PESDC) • Melaka Industrial Skills Development • Negeri Sembilan Skills Development Centre • Pahang Skills Development Centre (PDC) • Penang Skills Development Centre (PSDC) • Pusat Pembangunan Kemahiran Sarawak (PPKS) • Selangor Human Resource Development Center (SHRDC)

NO	STAKEHOLDERS	EXPLANATION
		<ul style="list-style-type: none"> • Sabah Skills & Technology Centre (SSTC) • Johor Skill Development Center (PUSPATRI) • Terengganu Advanced Technical Institute University College (TATIUC)
5.	Ministry of Rural and Regional Development	<p>The Ministry of Rural and Regional Development, is responsible in determining the policies and direction to achieve the goals of Rural and Regional Development. In line with Malaysia's commitment towards the United Nations, the Ministry is in charge of rural development and the agencies such as KEMAS, JAKOA, INFRA, MARA, RISDA, FELCRA, KEDA, KEJORA, KETENGAH, and KESEDAR. Under the Training and Career development programme, the ministry provides financial assistance and management to enable the target groups to follow courses of skills training and basic skills programmes (Malaysian Skills Certificate: SKM 1 and SKM II). The ministry also offers other programmes such as Child Care Programme and Education Excellence Programme targeted at hardcore poor citizens who have registered with a database of e-Kasih or under <i>Skim Pembangunan Kesejahteraan Rakyat</i> (SPKR). Courses conducted include the following areas:</p> <ul style="list-style-type: none"> •Agriculture (livestock, aquaculture, floriculture nursery, etc.) •Services (motor car repair, computer repair, etc.) •Manufacturing (culinary, food processing, handicrafts, etc.) <p>Source: http://www.rurallink.gov.my/home</p>

NO	STAKEHOLDERS	EXPLANATION
6.	Department of National Unity and Integration	<p>The Department of National Unity and Integration was established in 1961 with the purpose of finding ways to counter problems of the diverse nature related to specific communities, castes, regions and languages.</p> <p>The department has several programmes and among them is the Child Care Programme. Under the programme, two types of Child Care Centres were promoted:</p> <ul style="list-style-type: none"> • Unity Child Care Centre (<i>Tabika Perpaduan</i>). It was first introduced in 1976 under the Community Relations Plan. In their pilot programme, 25 classes in urban and suburban areas especially in areas with the Neighbourhood Watch project. <i>Tabika Perpaduan</i> was implemented to provide early education for children aged 4-6 years to enable them to understand the values of solidarity, social life and preparation for later schooling. • National GEM Program (Taska Permata Perpaduan) is another programme of care and early education for children in the field of special care and early education for children under the age of 4 years. This programme not aimed at providing early childhood care but also to instil appreciation of the values of solidarity, social life and also in preparation for the further schooling.

NO	STAKEHOLDERS	EXPLANATION
7.	Social Welfare Department, Ministry of Women, Family and Community Development	<p>The Ministry of Women, Family and Community Development, is a government ministry that is responsible in determining the policies and direction to achieve the goals of gender equality, family development and a caring society in line with Malaysia's commitment towards the United Nations' Convention on the Elimination of All Forms of Discrimination Against Women and the Beijing Declaration. The following departments and agencies are under the purview of the KPWK:</p> <ul style="list-style-type: none"> Department for Women's Development In 1975, the Government set up the National Advisory Council on the Integration of Women in Development (NACIWID) as the machinery to ensure the involvement of women in development. Social Welfare Department The Social Welfare Department (SWD) has evolved in fulfilling its role in national development and functions of this department have expanded to cover prevention and rehabilitation services in social issues as well as community development. National Population and Family Development Board The National Population and Family Development Board (NPFDB) was established to improve the reproductive health status of women and men and encourage family planning Social Institute of Malaysia The Social Institute of Malaysia was set up to promote professional and semi-professional training in the field of training and research as well as social education to

NO	STAKEHOLDERS	EXPLANATION
		all social workers from various levels and groups from within and outside the country including non-governmental organisations.
8.	<i>Lembaga Pembangunan Industri Pembinaan Malaysia</i> (CIDB Malaysia)	<p><i>Lembaga Pembangunan Industri Pembinaan Malaysia</i> (CIDB Malaysia), under the Public Works Department, is an agency entrusted by the Government to develop Malaysian construction industry specifically to enhance the skills of the industry's human resource. Its overall objective is to develop the capacity and capability of the construction industry through increased quality and productivity, with emphasis on professionalism, innovation and knowledge, in order to improve the quality of life.</p> <p>To ensure competency in all personnel in the construction industry, be it manual workers, technical workers, supervisors, contractors and other construction workforce, training is essential to ensure the efficiency of their respective trades. Thus, CIDB has identified areas of training most critical to the success of the industry, to develop skills to equip trainees to become reliable construction workers.</p> <p>Source: https://www.cidb.gov.my</p>

NO	STAKEHOLDERS	EXPLANATION
9.	Malaysia Airports Training Centre (MATC)	<p>Due to the demands of today's aviation industry which are forever increasingly challenging, there is a need for competent and knowledgeable airport staff to meet the global challenges. MATC , the consultancy arm of Malaysia Airports Holdings Berhad, provides training programmes in the following key airport operations:</p> <ul style="list-style-type: none"> • Airport Operation Training • Airport Technical Services Training • Airport Fire and Rescue (AFRS) Training • Aviation Security (AVSEC) Training • Ground Handling Services Training <p>Malaysia Airports Training Centre (MATC) is located in Penang and KLIA. Both training centres are certified by :</p> <ul style="list-style-type: none"> ▪ International Civil Aviation Organization (ICAO) ▪ Airport Council International (ACI) ▪ Department of Civil Aviation ▪ ISO 9001:2000 Certification <p>Source: http://www.klia.com.my/</p>
10.	Ministry Youth and Sports	<p>Initially the Department of Culture has been established under the Ministry of Youth and Sports and was later transferred to the Ministry of Culture, Youth and Sports up to 1987. When the Department of Culture was transferred to the Ministry of Culture, Arts and Tourism, Youth and Sports has returned to its original flagship under the Ministry of Youth and Sports.</p>

NO	STAKEHOLDERS	EXPLANATION
		<p>The Ministry of Youth and Sports (KBS) has been mandated to implement Government policies, particularly in the development of Youth and Sports. Under the ministry, the training programmes fall under the jurisdiction of <i>Institut Kemahiran Belia Negara</i> (IKBN) formerly known as <i>Pusat Latihan Belia</i> that was introduced by the Ministry of Youth and Sports in 1964. The initial goal was to address the problem of unemployment by offering training programmes to school drop-outs. In the early 1990s, the training programme was extended to human resource development, the training of youth in the field of technical and vocational skills in view to produce skilled manpower for the country's industrial sector.</p> <p>As of 2015, the Ministry of Youth and Sports has 8 <i>Institut Kemahiran Tinggi Belia Negara</i> (IKTBN) and 13 <i>Institut Kemahiran Belia Negara</i> (IKBN) throughout the country to provide more training opportunities for youth skills in various technical and vocational fields in accordance with the needs of skilled manpower. The courses offered in various fields were aimed at increasing the skill level capability of producing more skilled workforce. Besides offering various skill programmes conducted in an integrated training concept (Integrated Approach) IKBN training components includes also develop youths' Leadership and Public Administration skills, Religious and Spirituality values, Entrepreneurship and Sports and Recreation abilities.</p>

NO	STAKEHOLDERS	EXPLANATION
		<p>IKTBN/IKBN offers Malaysian Skills Certificate (SKM) issued by the Department of Skills Development, Ministry of Human Resources and according to the level of student achievement. It also offers diploma level certification in various technology disciplines, such as automotive, marine, electronic, electrical, hospitality, civil, personnel, textile, mechanical, oil & gas and sports.</p> <p>Source: www.kbs.gov.my/</p>
11.	Malaysian Administrative Modernisation and Management Planning (MAMPU) (Prime Minister's Department)	<p>Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) is one of the few central agencies in Malaysia, responsible for 'modernising and reforming' the public sector in the areas of administrative reforms. MAMPU is placed under the Prime Minister's Department. Essentially, MAMPU was established in 1977 as an agency that is given the tasks to reform and modernise public administration in the public sector (Jeong, 2007). MAMPU was also given the responsibilities to manage 1MTC besides other core businesses.</p> <p>Among the main objectives and functions of MAMPU are:</p> <ul style="list-style-type: none"> • To conduct research in public administration. • To conduct research in the area of human resources. • To formulate policy for the modernisation of the public sector. • To report to the cabinet and/or parliament. <p>Other related objective and function of MAMPU in relation to skills development is to introduce an effective system in human resources planning and development, so as to correctly predict the current and future demands and needs of labor (human resources) for economic development.</p>

NO	STAKEHOLDERS	EXPLANATION
12.	Majlis Amanah Rakyat Malaysia (MARA) (Rural and National Development Ministry)	<p>MARA was formed in 1966 and it originally began as the Rural Industrial Development Authority (RIDA). The programme was to provide economic assistance and support to Malay farmers and rural population. MARA reports to the Minister of Entrepreneurial and Cooperative Development and has state-level and international offices overseas.</p> <p>Among the roles MARA play is giving loans to Bumiputra entrepreneurs and construct infrastructure, such as shop lots or factories, which are rented to Bumiputra entrepreneurs at a subsidised rate. MARA also operates several junior colleges or boarding schools, and Universiti Kuala Lumpur. Previously, Universiti Teknologi MARA was operated by MARA; it has become its own entity under the Ministry of Higher Education. The junior colleges, referred to as Maktab Rendah Sains MARA (MARA Junior Science Colleges, often abbreviated as MRSM), are operated by the Education & Training (Secondary) Department of MARA, whose stated mission is to "produce Bumiputra students of potential in science and technology".</p> <p>In addition to MRSMs and the UniKL, vocational and professional colleges are operated by MARA, such as Pusat GIAT MARA and Kolej Kemahiran MARA, Kolej Kemahiran Tinggi MARA, German-Malaysian Institute, Kolej MARA and Kolej Professional MARA.</p>

b. List of Key players

No.	Organisation / Institution / Colleges / Training Centres
1	Centre for Instructor and Advanced Skill Training, Department of Skill Development (CIAST)
2	Jabatan Perikanan (Fisheries Department)
3	Jabatan Pengairan Dan Saliran (JPS)
4	Jabatan Keselamatan dan Kesihatan Pekerjaan (DOSH)
5	Jabatan Bomba Dan Penyelamat Malaysia (BOMBA)
6	Institute For Rural Advancement (INFRA)
7	Akademi Penerbangan Malaysia (MAVA)
8	Akademi Laut Malaysia (ALAM)
9	Marine Transport Training Institute Malaysia (MATRAIN) Jabatan Laut Malaysia
10	Akademi Kastam Diraja Malaysia (AKMAL)
11	SIRIM Training Services Sdn Bhd
12	TNB Integrated Learning Solution Sdn. Bhd (ILSAS)
13	Institut Latihan Jabatan Tenaga Manusia (ILJTM)
14	Pusat Latihan GIATMARA, Majlis Amanah Rakyat
15	Community Colleges Kementerian Pelajaran Malaysia
16	Polytechnics Jabatan Pendidikan Politeknik
17	Intitut Pentadbiran Awam Negara (INTAN)
18	Akademi Seni Budaya Dan Warisan Kebangsaan (ASWARA)
19	Fakulti Pendidikan Teknikal dan Vokasional
20	Institut Pendidikan Guru Malaysia Kampus Tun Hussein Onn
21	Universiti Pendidikan Sultan Idris (UPSI)
22	Akademi Majlis Sukan Negara Kompleks Sukan Negara
23	Institut Latihan Islam Malaysia (ILIM)
24	CIDB HOLDINGS (CIDBH)
25	Bahagian Pendidikan Teknik dan Vokasional
26	National Institute of Occupational Safety & Health (NIOSH)
27	Institut Kemahiran Belia Negara / Institut Kemahiran Tinggi Belia Negara

2.5 Current Analysis of Education and Training Industry

Due to the Government of Malaysia (GoM) commitment to education, the education sector in Malaysia has evolved significantly since the early years of independence. Early development of the education system in Malaya started as far as during the British rule with the formation of the Barnes and Fenn-Wu Reports. Eventually in 1952 the Education Ordinance was introduced which later form as the basis of the acts and regulations in the education sector to be more of a systematic education system. Malaysia thus far, has a long history before its goal to Education For All (EFA) goals. EFA framework is relevant in providing equal access to basic education including to a Universal Primary Education (UPE) without discrimination (Source: Malaysia, Education for All 2015 National Review).

Since Education has been given significant priority in the national development plan in Malaysia with the aim of producing individuals who are intellectually sound as well as being physically and spiritually devoted and committed to their faith accessibility to all levels of education were easily available where a great majority of students now at the secondary education. It was reported that the enrolment rate in upper secondary education (excluding upper and lower form 6) has increased from 45 percent in the 1980s to close to 82 percent in 2015. This indicates an increasing number of students are now pursuing postsecondary and tertiary education. In terms of pre-school education there are over 80 percent of the cohort now attends pre-school education.

As a consequence of the nation's high educational achievement, youth literacy has risen from 88 percent in 1980 to near universal literacy of 99 percent today. Adult literacy has also shown an increased even more dramatically, from less than 70 percent to over 92 percent in 2015. Further, the proportion of the adult population (aged 15+) with no schooling has declined, from 60 percent in 1950 to less than 10 percent in 2010, while the proportion (aged 15+) that has completed secondary education has risen from around 7 percent in 1950 to just about 75 percent over the same time period. In 2010, 15percent of the population had also completed tertiary education as compared to only a few percent in 1950.Despite the gains mentioned above there are still remaining challenges that need to be confronted in order to

attain all the EFA goals by 2015 and national development goals by 2020 (Source: Malaysia, Education for All 2015 National Review).

Consequently there are 20 public universities and 47 private universities and private university colleges in Malaysia (see Table 2.3 below) offering various programs from engineering, economic to business studies. Out of the 20 public universities, 5 universities were identified as the research universities namely: UM, USM, UKM, UPM and UTM. The universities offer program that are focus towards research, having quality lecturers and the undergraduate student ratio to postgraduate ratio of 50:50. 4 other universities are known as comprehensive university are UiTM, UIA, UMS and UNIMAS. They have a higher undergraduate student ratio to postgraduate ratio of 70:50. The other 11 universities are known as focus universities where the center of attention is on a discipline example UUM focus on management, USIM on Islamic management and UPSI on education.

To cater for the need of undergraduate program, the government had also setup polytechnics that provide semi-skilled program. There are more than 34 polytechnics in Malaysia and are located in most of the state. There are 3 premier polytechnics in Malaysia that offer a robust curriculum development, quality assurance program, the development of competent instructors, student quality, resources and facilities are complete and continuous innovation efforts offering programs in engineering, shipping and tourism and hospitality. They are Politeknik Ungku Omar, Ipoh, Perak, Politeknik Sultan Salahuddin Abdul Aziz Shah, Shah Alam, Selangor, and Politeknik Ibrahim Sultan, Pasir Gudang, Johor. Polytechnics have a special role to address ecosystem change national higher education that requires not only highly knowledgeable human capital but also on high-level skills. Since the country needs to increase the percentage of highly skilled workforce from 23% to 37% by 2015, hence, the Technical Education and Vocational Training (TEVT) was introduced into the education system. There are more than 27 other polytechnics colleges offering conventional and Metro programs such as in games art, mobile electronic and beauty consultants.

Along with the goal of creating an environment Lifelong Learning (LLL), community colleges play a major role in human capital development of local communities by providing the

knowledge and skills and to inculcate positive values and ethics through education and training. There are 100 colleges namely community colleges and MARA Skilled colleges offering more than 33 certificate courses, 7 diploma and more than 449 short courses (source: www.mara.gov.my).

To meet the need for demand in the education sector the private universities play an important role in providing nationals and also international students with a long range of courses. In order for the country to produce quality human capital for ensuring sustainable development of the country with falls under the arm of private higher education institutions (IPTS). This is reflected by the two (2) core outlined in the National Higher Education Strategic Plan (PSPTN) was focused directly on the role of empowerment of institute of higher education and the management of access and equity. There are more than 24 private universities in Malaysia, namely Universiti Tun Abdul Razak, University Kuala Lumpur, Taylors University and University Sunway. Besides University college also have an important role in providing undergraduate programs. There are more than 23 university colleges in Malaysia. There are more than 500 colleges in Malaysia offering courses in sciences, social sciences, health sciences, education and others.

With regards to training centres under 1MTC (Malaysia Training centre), the government under the initiative of the National Blue Ocean Strategy which aim at in depicting strategic solutions to strengthen human capital development program through focusing on high impact training by sharing public facilities through a partnership of public training institutions throughout the country. By 2015, there are more than 346 training centres that were registered under this initiative. Besides that are more than 2,373 approved training centres registered with department of skills development offering various program in enhancing both soft and hard skills (Source: Malaysia, Education for All 2015 National Review).

Table 2.9(m): Number of Institution, Enrolment, Teaching Staff, 2014

Level	No. of Institutions	Enrolment	Teaching Staff (Male)	Teaching Staff (Female)
Pre-school	5943	194,225	996	7590
Primary	7,751	2,698,883	72,701	167,684
Secondary	2,366	2,234,621	55,457	125,012
Total	10,117	4,922,504	128,158	292,696
Public Polytechnics (Certificate & Diploma levels)	34	89,292	2,796	3,634
Private Universities, University Colleges & Colleges	24 private universities 23 university colleges 500 other colleges	202,714 40,651 177,501	n.a.	n.a.
Branch campuses of foreign universities	5	8,107	n.a.	n.a.
Public Universities	20	560,359	34,338	

Source: Statistics from Ministry Education Malaysia, 2014

2.6 Education and Training Services Industry Challenges

The challenges that Malaysia especially for the tertiary educations that is on-going and still has to tackle (according to the Malaysia Education for All, 2015 National Review) include:

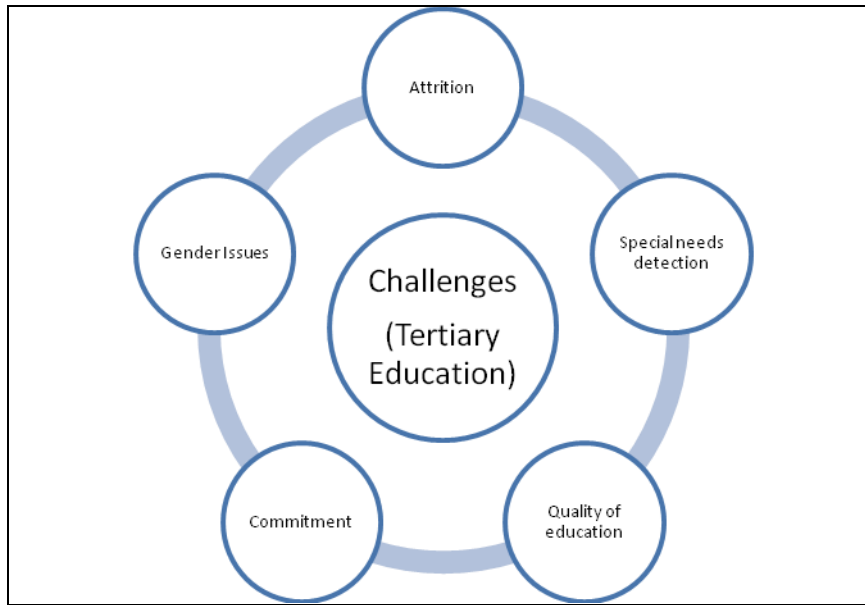


Figure 2.4: Challenges in Tertiary Education

- i. To reach the remaining few percentages of children who, for different reasons, never enrol or drop out before completing basic education. They may be poor, immigrants, or belonging to the indigenous population.
- ii. The need to establish some kind of procedures to detect early children with special educational needs and giving the same opportunity to succeed as other children.
- iii. To improve the quality of education. The unfavourable outcomes on international achievement tests such as TIMSS and PISA and not enough attention to the development of Higher Order Thinking Skills (HOTS). Thus, MoE is now focusing on increasing HOTS into the primary and secondary education curriculum and assessment.
- iv. 22 percent of the total federal budget and 4 percent of GDP, were spend to increase the quality of education thus indicating a strong commitment of the government on the education in Malaysia.
 - a. The provision of equitable access to quality education is still a concern since the achievement gaps between rural and urban areas, and socio economic

backgrounds and also on genders. Girls seem to perform much better than boys. (Source: Malaysia, Education for All 2015 National Review)

Some of the challenges facing the skill training sectors are:

- i. To be a “developed high-income nation” under the Malaysia’s transformation program, the one criteria necessary is that the country is required to have highly skilled workforce composition of at least 33%. Thus far, we have only achieved 28 percent. In total the government is targeting highly skilled labour of 1.5 million for the different industries ranging from tourism, finance, manufacturing, retailing and agriculture (Education, Blueprint). It is hope that we are able to achieve at least 90 percent of the required labor force to be met by 2016. With the global recession and poloitical instability, this target may be a challenge.
- ii. To reduce the percentage of low-skilled and semi-skilled workers from 76% in 2009 to 50% by 2020. This is through providing post-Sijil Peperiksaan Malaysia (SPM) students or school-leavers opportunities to pursue vocational education. The Government has shown support by allocating funds through Skills Development Fund in order to spur quality training through private accredited centres. The Programmes will be accredited by the Ministry of Human Resources’ Department of Skills Development (*Jabatan Pembangunan Kemahiran* or JPK).
- iii. The Department of Skill Development had set a target of 27,500 apprentices to be trained during the period of 2011 to 2015, with the participation of 967 companies. This target number is expected to double with the participation of Kolej Vokasional KPM in SLDN program.
- iv. The immediate need of 800,000 highly skilled employees especially with the rapid development of Bandar Iskandar, Johore (Kosmo, 2013).
- v. Challenge to get employers to increase the starting pay of graduates by 10% more than the existing entry pay.

2.7 Industry Associations

The industry associations' role is mostly to support the realisation of education sector goals, in particular for the purpose of EFA (Education for All). It consists of several associations that affirm the obligations of the Government and for all citizens claim their rights to education. The most important and overarching associations are as follows:

NO	MAJOR INDUSTRY ASSOCIATIONS	EXPLANATION
1	Association of Early Childhood Educators, Malaysia, (2005).	The aim of MAPECE is enable children attain development to their full potential by promoting quality early child care and education through advocating for proper education, training and professionalism of childcare providers and preschool teachers. MAPECE aimed at upgrading the professionalism of early childhood educators, advocate for quality early childhood education and care, advise parents and community on quality childhood education, act as a catalyst and coordinating body, encourage and support research related to the development of early childhood education, and raise funds by way of donation from the public, sponsorship, grant, endowment and any other lawful methods. Source: http://mapece.org/
2	Malaysian Association of Private Colleges & Universities (MAPCU). (1977)	MAPCU aimed at grouping of Private Colleges and Universities. It comprises of major and well-established private higher education institutions, all of which are duly approved and licensed by the Ministry of Higher Education. Members offer post secondary and / or tertiary level courses independently and / or in collaboration with established local and foreign institutions of higher learning. Generally, MAPCU promote and co-ordinate the development of Malaysia's private higher education industry. Source: www.mapcu.com.my/

NO	MAJOR INDUSTRY ASSOCIATIONS	EXPLANATION
3	Malaysian Association of Training Providers (2013)	<p>Aimed to be instrumental in raising the standards of Training Providers in Malaysia through organizing seminars and exhibitions which emphasize on new and state of the art training practices, devise Code of Ethics and appropriate payment grades for Training Providers and Trainers as guidelines, be the voice for training providers in order to prevent manipulation and exploitation, device a model for fair distribution of government businesses to credible and responsible training providers and to operate a Complaints and Mediation Bureau, which would attend to conflicts or misinterpretations that may arise among training providers. They also create a platform to render think tank services for exchange of ideas and expertise.</p> <p>Source: www.trainingprovider.org/</p>
4	Malaysian Association of Kindergartens (1973)	<p>Persatuan Tadika Malaysia (Malaysian Association of Kindergartens) or PTM is the pioneer organization involved in pre-school education in Malaysia. Since 1973, they have made vast contributions towards the continual training and professional development of pre-school teachers in Malaysia. PTM also provides professional advice to kindergarten operators on a wide range of issues, from setting up to day-to-day operations. Through this support they ensured that all kindergarten provides facilities with conducive learning environment. They also place great emphasis on training to improve the quality of pre-school teachers, strives to look into the physical, cognitive, emotional, moral and social development of pre-school children by working closely with the Ministry of Education on The National Pre-School Curriculum and also engage child experts and provides services such as talks on child related issues to help enhance their parenting skills and also disseminate literature and any other information regarding pre-school education to parents and the public.</p> <p>Source: http://www.schoolmalaysia.com/resources/association</p>

NO	MAJOR INDUSTRY ASSOCIATIONS	EXPLANATION
5.	Learning and Development Association (MyLeaD)	<p>Learning and Development Association provides platform for its members to network, share knowledge and research findings, seek opportunities, collaborate, and promote fellowship. The association also provides opportunities for its members to enhance their education level, training / human resource development practices; to exchange ideas and experiences; and to discuss issues of common interest amongst members and their respective organizations. The association undertake research and development activities focusing on Learning and Development and leveraging on technology (solution-based) and promote and advance effective education and training of persons employed or intending to be employed in Industry</p> <p>Source: http://mylead.org.my/</p>
6.	Malaysia Preschool Teacher Association (MPTA)	<p>(MPTA) was founded to offer professional training programs in Early Childhood Education (ECE) in Malaysia. Since 2010, the Ministry of Education (MOE) has encouraged ECE training courses have allocated about M 200,000 for development of preschool teachers in Malaysia.</p> <p>They have hold seminars in the ECE and work closely with counterparts from Singapore, <i>Taiwan, Australia and Hong Kong</i> and other countries that have more experience in the ECE</p> <p>Source: http://www.preschoolteacher.org.my/</p>

2.8 Major Regulatory Policies, Acts, procedure and standards related to Education and Training Services Industry

The Malaysia National Development Framework recognises the centrality of strengthening its human capital base as a prerequisite for Malaysia's transformation to a value-added economy driven by productivity growth and innovation. In fact, for planning purposes, the five-year Malaysia Plan has become the main instrument for the non-discrimination of education policies and securing of sufficient funding to the education sector. Thus, the educational sector plans are progressively aligned with the National Development Framework, while the strategies and interventions employed to address education sector policies and plans are further articulated in the education sector policy documents.

a. Related Policies and Act

NO	POLICIES/ACT	EXPLANATION
1.	Education Act 1996 for Pre school	<p>In the Section 21, 22& 23 stipulated that:</p> <p>Section 21. The Minister may, subject to the provisions of this Act, establish and maintain kindergartens. Education National Preschool Curriculum should be used by all kindergarten</p> <p>Section 22. (1) The Minister shall prescribe a curriculum, known as the National Preschool Curriculum shall be used by all kindergartens in the Education System Nationality.</p> <p>(2) The National Preschool Curriculum prescribed under subsection (1) shall specify the knowledge, skills and the expected value obtained by students at the end the period of pre-school education respectively.</p> <p>(3) Any kindergarten who intends to carry out any curriculum in addition to the Pre-school Curriculum National shall, before carrying out extra-curricular such written approval of the Registrar General about the meaning of it in the prescribed manner.</p> <p>Section 23 it was stipulated that:</p> <p>(2) The Minister shall prescribe a curriculum, known as National pre-school Curriculum to be used by all</p>

NO	POLICIES/ACT	EXPLANATION
		<p>kindergartens in the system National education.</p> <p>(2) The National Preschool Curriculum prescribed under subsection (1) shall state that the knowledge, skills and the expected value to be acquired by pupils at the end of each pre-school education</p> <p>(3) Notwithstanding subsection 17(1), languages other than the national language may be used as a medium of instruction in Kindergartens, but where a kindergarten uses a language other than the national language, the national language shall be taught as a compulsory subject.</p> <p>Source: www.moed.bm/Documents/education%20act%201996.pdf</p>
2.	National Skills Development Act 2006 (NASDA)	<p>NASDA, the acronym for National Skills Development Act 2006 was enacted on 29th June 2006 and was designated as Act 652. This Act was implemented and enforced on 1st September 2006.</p> <p>National Skills Development 2006 was formulated with the objective of improving the implementation of the Malaysian Skills Certification Programme. The act under the preview of the Department of Skills Development (DSD), it introduced the following guidelines:</p> <ul style="list-style-type: none"> • Director General Circular Number 1 Year 2006; and • Implementation of Fees and Payment Charges <p>Source: http://www.agc.gov.my/</p>
3	Education Act 1996 (Education Act) and the Education (Special Education) Regulations, 1997	<p>The act regulates the guiding principles in the planning of special education programs for the nation's children with special needs.</p> <p>Section 40 of the Education Act:</p> <p>(a) Requires the Minister for Education to provide special education in special schools or designated primary and secondary schools.</p> <p>(b) The Special Education Regulations specify the children with disabilities who are eligible for special education.</p> <p>Source: www.necicmalaysia.org/</p>
4	Child Act of 2001 (Act 611);	<p>The Act preamble four core principles namely: (1) non-discrimination, (2) best interest of the child, (3) the right to life, survival and development, and (4) respect for the views of the child, as the basis for the provisions of the Child Act.</p> <p>Source: www.unicef.org/malaysia/Child-Act-2001.</p>

NO	POLICIES/ACT	EXPLANATION
5	The National Policy on Disabled Child (Article 23 of CRC)	The policy recognises that a disabled child has the right to special care, education and training to help him or her enjoy a full and decent life. Source: www.jkm.gov.my
6	The National Policy on Indigenous Child (Article 30 of CRC)	The policy stipulates that children belonging to the minority group or the indigenous children have the right to enjoy his or her own culture, to profess and practise his or her own religion and language. Source: https://www.crin.org/
7	Education Act 1996	Historically, the Razak Report caused some disagreement between the Malays and other different races, thus later when Rahman Talib Report were put forward to the Parliament, it was accepted and later translated to as the Education Act 1961. Education Act 1996 is a repealed of Education Act 1961. According to Clause 152 of the Malaysian Constitution has positioned the Malay Language as the National Language to ensure unity of its population. The National Education Philosophy therefore had made Malay Language as a basis of the National Education Act formulation. It covers all school categories which is government, government assisted and public schools. Under the act the aim of the Education system in Malaysia was formulated based on the objective found in the National Ideology, National Education Policy and New Economic Policy (NEP) Among the objectives of the Education System in Malaysia are: (i) Production of quality education; (ii) Production of educated and skilled students; (iii) Production of a unified community; (iv) Social community development; (v) Production of quality workforce; (vi) Economic production, especially in rural areas; (vii) Formation of responsible and committed citizens in a democratic country; (viii) Restructuring of socio-economic structure of the population as stated in the New Economic Policy (NEP); and (ix) Eradication of poverty.

NO	POLICIES/ACT	EXPLANATION
8	Private Higher Education Institute Act (Act 555) 1996	<p>The Private Higher Education Institute Act was set up to guide, coordinate, control and manages private higher institution in the aspect of its establishment, registration, management and supervisory control. It was also act as control of quality provided by Private Higher Education Institutes. All Private Education Institutes are required to observe all National Curriculum as well as prepare students for examinations as determined. Apart from that, Private Higher Education Institutes must be able to provide quality higher education environment for its students in line with the need for workforce and the National Education Philosophy.</p> <p>Source: http://www.agc.gov.my/</p>
9	University and University College Act (Act 30) 1971	<p>An Act to set up allocation for the establishment, management and administration of Universities as well as Public University Colleges and other related matters.</p> <p>Source: http://www.agc.gov.my/</p>
10	National Council of Higher Education Act (Act 546) 1996	<p>Act 545 was established under the National Council of Higher Education and manages the functional aspects related to higher education. Amongst the functions of the National Council of Higher Education are:</p> <ul style="list-style-type: none"> (a) The National Council of Higher Education has the authority to plan, form and determine the National policy and strategies for the development of higher education; (b) The National Council of Higher Education has the right to coordinate the development of higher education; (c) The National Council of Higher Education's role is to improve and simplify systematic growth for Higher Educational Institutes in the country; (d) The National Council of Higher Education is responsible in determining policies and deciding the criteria for financial allocation for Higher Educational Institutes; (e) The National Council of Higher Education has the right to determine the policy related to students' entry to Higher Educational Institutes; (f) The National Council of Higher Education will make decisions in determining policies and deciding the guidelines on matters related to the pay structure as well as staff administration system at universities and university colleges established under the University and University College Act 1971;

NO	POLICIES/ACT	EXPLANATION
		<p>(g) The National Council of Higher Education will make decisions in determining the policy and guidelines on pay loan structure;</p> <p>(h) The National Council of Higher Education has the authority to determine policy and decide on guidelines on study discipline and courses conducted by Higher Educational Institutes;</p> <p>(i) The National Council of Higher Education is also involved in determining policy and deciding the guidelines in the development of any study courses or training programmes by Higher Educational Institutes among or with, either together, in a joint venture or any other, with any Universities or Higher Educational Institutes or Educational Institutes or other organizations in or outside Malaysia;</p> <p>(j) The National Council of Higher Education is involved in determining policy and deciding the guidelines on the involvement of University in business activities based on the authority given under the University and University College Act 1971; and</p> <p>(k) The National Council of Higher Education will take any action deemed necessary to enable it to conduct its functions and authority effectively.</p> <p>Source: www.agc.gov.my/</p>
11	National Higher Education Fund Agency Act (Act 566) 1997	<p>Act 566 was established to provide the National Higher Education Fund (Tabung Pendidikan Tinggi Nasional) and the National Higher Education Fund Agency (Perbadanan Tabung PendidikanTinggi Nasional) for students that need financial assistance. Amongst the functions of the National Higher Education Fund Agency or PTPTN are:</p> <p>(a) Establishing as well as giving education loan and financial aid apart from education loans to students, and setting up administration services, supervision and collection of loan payments;</p> <p>(b) Responsible for collecting deposits as well as forming and preparing a saving scheme for the purpose of banking for higher education; and</p> <p>(c) Has the authority to implement any other function given to them by any written law</p>

c. Regulatory Bodies/ Certification

NO.	REGULATORY BODIES /CERTIFICATION	EXPLANATION
1	Ministry of Education	<p>The mission of MOE is to develop and put in place a higher education environment that encourages the growth of premier knowledge centres and individuals who are competent, innovated with high moral values to meet national and international needs.</p> <p>The Ministry of Education pledges to remain steadfast in its determination and commitment to ensure that:</p> <ol style="list-style-type: none"> 1. Notification of admission offers to public educational institutions will be made as follows: <ol style="list-style-type: none"> i. For post-Primary School Achievement Test (UPSR) students applying to: <ul style="list-style-type: none"> • Fully residential schools (SBP) – within 27 working days upon announcement of the examination results ; • National religious secondary schools (SMKA) – within 30 working days days upon announcement of the examination results ; • Malaysian arts schools (SSeM) – within 45 working days upon announcement of the examination results ii. For post-Lower Secondary Assessment (PMR) students applying to vocational colleges (KV)/ technical secondary schools (SMT)/ fully residential schools (SBP)/ national religious secondary schools (SMKA) – within 30 working days upon announcement of the examination results; iii. For post-Malaysian Certificate of Education (SPM) students applying to matriculation colleges – within 30 working days upon announcement of the examination results; and

NO.	REGULATORY BODIES /CERTIFICATION	EXPLANATION
		<p>iv. For post-Malaysian Certificate of Education (SPM) students applying to Form Six – within 30 working days upon announcement of the examination results.</p> <p>2. Status of applications for re-sits student transfers will be issued within 15 working days of receipt of completed applications forms.</p> <p>3. All students will receive textbooks under the Textbook Loan Scheme (SPBT) on the first day of school.</p> <p>4. Status of applications for teacher placement and transfer shall be issued no later than 15 working days prior to the first day of reporting for work.</p> <p>5. Recommendations for substantive promotion and promotion based on excellent service record of education officers shall be processed for submission to the Education Service Promotion Board within 60 working days upon receipt of the completed application documents.</p> <p>6. Issuance of offer letters for scholarships or loans to in-service officers and undergraduates shall be within seven (7) working days of notification of approval from the relevant approving body.</p> <p>7. Status of application for the establishment of a private or international school which meets the terms and conditions stipulated, will be issued within seven (7) working days of approval by the Registrar-General.</p>
2	Ministry of Human Resources (MOHR) Department of Skills Development	The roles of Department of Skills Development or Jabatan Pembangunan Kemahiran are to: 1. Formulate <ul style="list-style-type: none"> • Training standards (NOSS, NCS) • Skills training system (NDTS, RPA, AC) • Certification system (SKM, DKM, DLKM) 2. Promote

NO.	REGULATORY BODIES /CERTIFICATION	EXPLANATION
		<ul style="list-style-type: none"> • Skills training • To change negative perception (Dialogue, campaign, carnival, media) <p>3. Coordinate</p> <ul style="list-style-type: none"> • Training materials development • Instructors and experts development and registration • Skills training accreditation, assessment and certification (NASDA, KAPPK)
3	Malaysian Quality Assurance Agency (MQA)	<p>Malaysian Quality Assurance Agency (MQA) was approved by the Government was established on 1 November 2007 with the coming in force of the Malaysian Qualifications Agency Act 2007. MQA is responsible for quality assurance of higher education for both the public and the private sectors.</p> <p>As a quality assurance body, the functions of MQA are:</p> <ol style="list-style-type: none"> 1. To implement MQF as a reference point for Malaysian qualifications; 2. To develop standards and credits and all other relevant instruments as national references for the conferment of awards with the cooperation of stakeholders; 3. To quality assure higher education institutions and programmes; 4. To accredit courses that fulfil the set criteria and standards; 5. To facilitate the recognition and articulation of qualifications; and 6. To maintain the Malaysian Qualifications Register (MQR)

2.9 Analysis of General Industry Demand and Supply

In 2014 Malaysia Gross Domestic Product (GDP) recorded a robust growth at 6.3% as compared to 4.4% during the same period in 2013. Growth was supported by continued domestic demand, especially the recovery of the world economy and the private sector. Manufacturing and services sectors stayed the main contributors to growth. Therefore, Malaysia current account balance continued to record a big surplus. This is owing to strong export performance in line with the improvement in external demand. Malaysian economy is projected to grow between 5-6% until 2020 as expected by various international agencies such as International Monetary Fund (IMF), Economist and etc.

As our nation is moving towards a developed nation, the public domain, education and training sector represents of a significant value, especially in the development of human capital to be K-workers. An international survey suggests that for universities to be in the world class ranking, they have to make significant contributions to knowledge through not only research but also high quality curricula to all level of the education sector.

In analysing the supply and demand of the education and training industry the following considerations were taken to address the gap:

2.9.1 JOB OPPORTUNITIES:

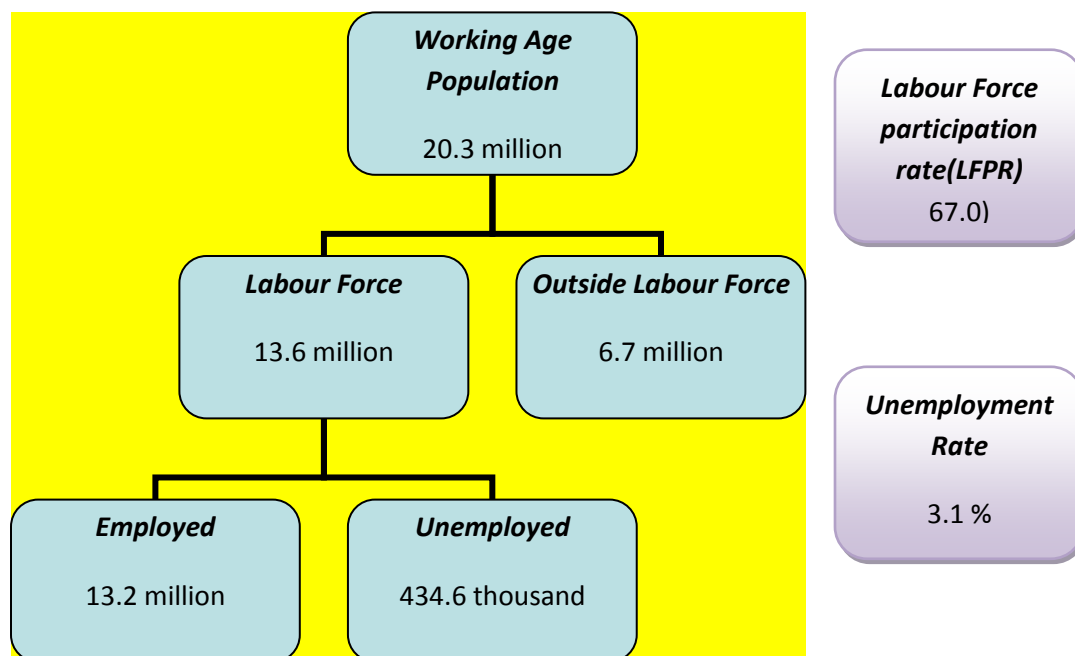
New Job opportunities in this industry will depends on several factors such as structure of Malaysia's labour force , forecasted Malaysia's gross domestic product (GDP) growth, forecasted Malaysia's population incomes, significant of labour force in the marketplace and human capital development initiatives as follows.

- i. Structure of Malaysia's Labour Force 2013: Table 2.9(a) shows the Malaysia's labour force structure consists of 20.3 million working age population. Whereby, 13.6 million come from inside (local) labour force while 6.7 million come from external

(other countries) labour force. Consequently, the labour force participation rate thus, stand at 67.0% while unemployment rate stand at 3.1%.

In the 10th Malaysia Plan, Malaysia had made a substantial investment in education. The government had increased 40% of the budget for education in comparison to 21.8% under the previous plan. But the result does not truly reflect the investment spent as shown in the unemployment rate. By 2020 it is expected that vocational/certificate job holders will reach up to 1.8 million, provided that all the major players in the industry play their roles accordingly as indicated in Table 2.9 (b). Table 2.9 (c) shows the Workforce by Qualifications 2011-2013. There are only 36,613 of the workforce in education who possess doctoral degree, 76,841 with master degree, and 39,721 with bachelor degree, 5,418 with diploma and 2,556 with other qualifications. . In general, only 6.7 % of the labour force was being employed in the education industry. However, there is still shortage of job holders with doctoral degree. It was targeted that by the year 2020, the Malaysian universities will produce about 100,000 doctoral degree graduates. It is also expected that the future demand of number of qualifications in doctoral and other level of qualifications should reached up to 4.2 million (Source: *Institute of Labour Market Information & Analysis*).

Table 2.2: Structure of Malaysia's Labour Force 2013

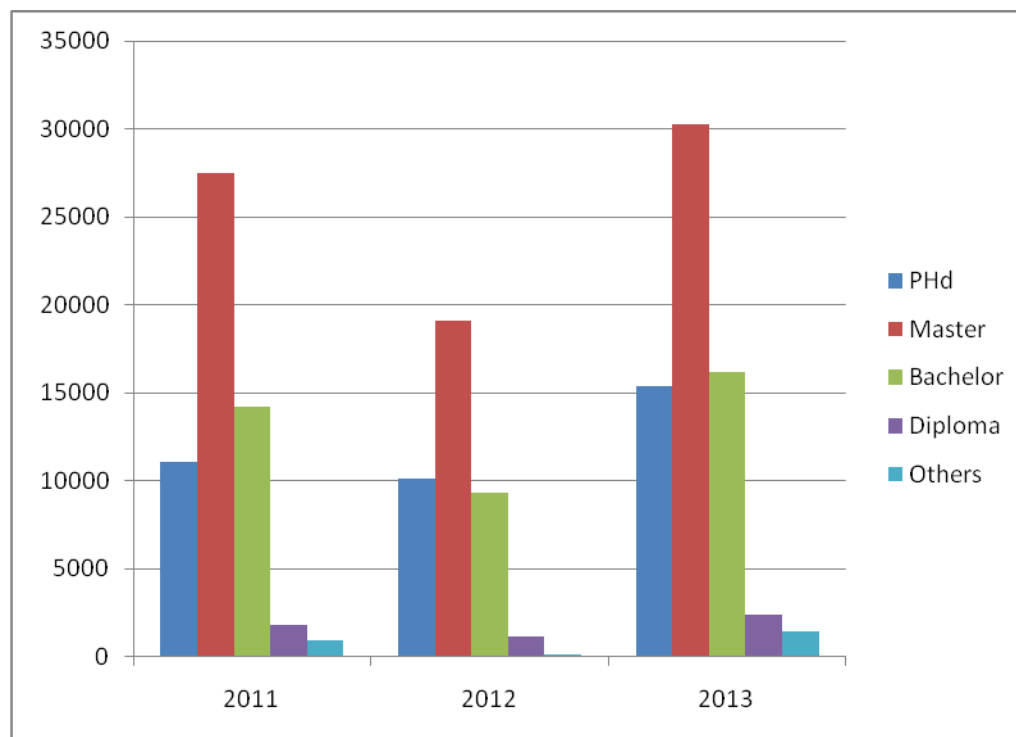


(Source: Institute of Labour Market Information & Analysis)

Table 2.3: Number of Qualifications and Percentage of Job Needed in 2020

	Number of Qualifications Needed in 2020 for New Jobs	Percentage of Total Additional Jobs
Unskilled	700,000	22%
Vocational/Certificate	1,800,000	24%*
Diploma	700,000	22%*
Degree	700,000	22%
Master/Professional	200,000	7%
Doctoral	100,000	3%
Total	4,200,000	100%

*Note: 46% (Vocational/Certificate: 24% + Diploma: 22%) of jobs created require vocational or diploma qualifications (Source: Institute of Labour Market Information & Analysis).

Table 2.4: Higher Education Workforce by Qualifications 2011-2013

Year	PhD	Master	Bachelor	Diploma	Others	Total
2011	11081	27500	14252	1848	957	54,681
2012	10133	19088	9310	1139	156	39,826
2013	15399	30253	16159	2431	1443	65,685
Aggregate	36613	76841	39721	5418	2556	160,192

Source: <https://emisportal.moe.gov.my>

- ii. Forecasted Malaysia's Gross Domestic Product (GDP) Growth: As the economy grows the challenge will be producing knowledgeable human capital especially in the education and training services. Table 2.9(d) shows that Malaysian forecasted its economy to increase between 5-6% for the period of 2013-2020. The economy is also expected to shift to services-and-industry driven economy (Table 2.9(f)) and forecasted to produce about 536,000 jobs in the education sector by year 2020 as indicated in Table 2.9(e). This presentation indicates that Malaysia should continue

to strive harder to educate the society and providing world class education otherwise we will lose out to our neighbouring countries.

Table 2.5: Forecasted Malaysia's Gross Domestic Product (GDP) Growth (2013-2015)

GDP Growth Predict by various organisations	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)
World Economic Organisation (WEO)	4.7	5.2	5.0	5.2	5.2	5.2
IHS	4.7	5.8	5.5	5.2	5.1	4.7	4.5	4.4
Economic Intelligence Unit (EIU)	4.7	6.0	5.4	5.3	5.6	5.9	5.5	5.1
Global Economic Prospect (GEP)	4.5	5.4	4.6	4.9

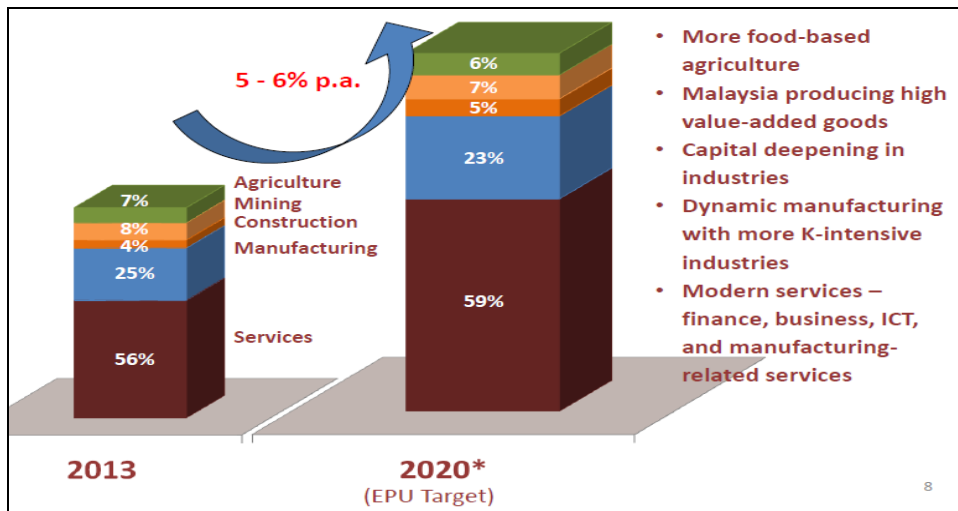
(Source: Institute of Labour Market Information & Analysis)

Table 2.6: New Job Creation from 12 NKEAs in 2020 (Demand-Side)

NEW JOB CREATION FROM 12 NKEAS IN 2020 (DEMAND-SIDE)	
<u>12 NKEAs</u>	<u>New Jobs Created (2020)</u>
Oil, Gas & Energy	52,000
Palm Oil	42,000
Financial Services	275,000
Wholesale & Retail	595,000
Tourism	497,000
Business Services	246,000
E&E	157,000
CCI	43,000
Healthcare	181,000
<i>Education</i>	<i>536,000*</i>
Agriculture	75,000
Greater KL/KV	553,000
Total	3,252,000 jobs

(Source: Institute of Labour Market Information & Analysis 2015)

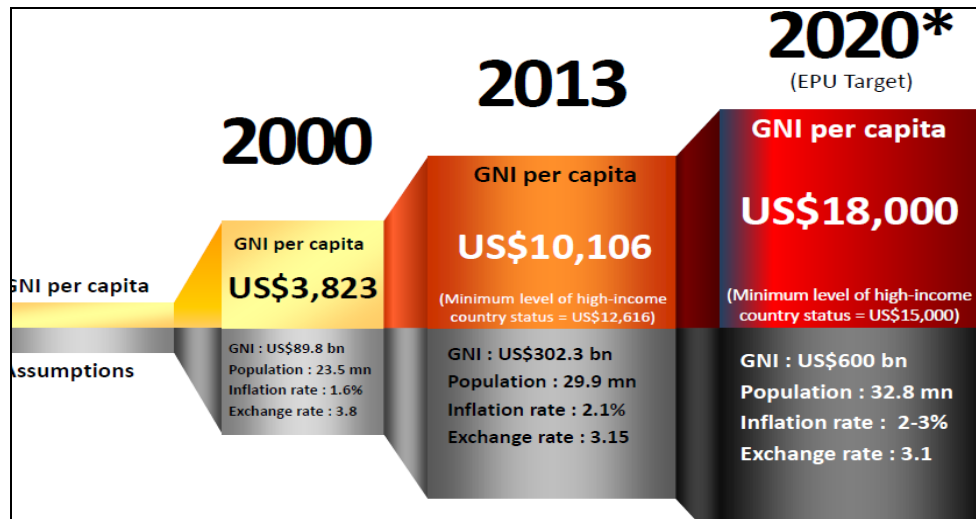
Table 2.7: Services-and Industry-driven Economy



(Source: Institute of Labour Market Information & Analysis)

- iii. Forecasted Malaysia's Population Incomes: Table 2.9(g) shows the expected increase in Malaysia population incomes per capita from USD\$3,823 for Financial Year (FY) 2000, USD\$10,106 for FY 2013 and expected to increase significantly to USD\$18,000 by FY 2020. As the population growing and the economy moving to more service and industry driven economy, the demand for knowledgeable workers with elements of innovation increase significantly. According to Talent Corporation (2012), to recruit the right talent calls for highly skilled workforce. However, recruiting the right talent can be costly and time consuming.

Table 2.8: Forecasted Malaysia's Population Incomes by 2020



(Source: Institute of Labour Market Information & Analysis)

- iv. Significant of labour force in the marketplace: Currently, education industry employed more than 50% of the labour market force which indicates its importance. Table 2.9(h) shows the employment distribution by sectors for FY 2012 and FY 2013. Table 2.9(i) shows the employment distribution by occupation (category) for FY 2012 and FY 2013 and it is found only 1,284 were employed as professionals in 2013 as compared to 1246 in 2012, an increase of 38 in numbers. Table 2.9(j) indicates the number of teachers and lecturers in public sectors from FY 2010-2013. There is still indication that labour market supply is still very competitive in Malaysia and it takes 2-3 times longer to fill in professional position as compared to other ASEAN countries. According to Talent Corporation (2012), it takes approximately it takes an average of six weeks to fill a professional position in Malaysia.
- v. Human capital development initiatives: Table 2.9(q) depicts the process of Labour Market Transformation for high income economy under 10th Malaysia Plan. This specifies the stress of transforming Malaysia from a middle income nation to a high income nation lies in the human capital development. To achieve a globally competitive and innovation-led economy requires a systematic and

comprehensive approach especially in attracting, nurturing, and retaining top talent. The Government have undertaken a complete reform across the entire life-cycle of human capital development, from upgrading early childhood education right through to up skilling the existing adult workforce. The initiatives are:

- a. Developing and enhancing the quality of teachers will be the focus towards driving improvements in student outcomes where they are accountable for student performance. To ensure Malaysia develops the necessary human capital to meet industry requirements, skills training will be given a special emphasis which drive productivity improvements and enable moving up the value chain. Tertiary education will be significantly upgraded via greater institutional autonomy and performance management, with the ultimate focus towards enhancing graduate employability and job mobility. Technical education and vocational training will be mainstreamed.
- b. Resources will be utilised and directed toward developing and retaining the very best world-class talent. Talent Corporation has been mandated to source and deliver top talent from overseas and within the country, that are most critical for the key economic sectors. At the same time, substantial efforts will be made available to ensure fair access to opportunities for improving skills and supporting those that need help the most. Skills training initiatives will be focused on the bottom 40% of households, the school improvement programme and LINUS initiative will aim to close the achievement gap for disadvantaged students and low performing schools to ensure every student in Malaysia can succeed. Lifelong learning has also a role to play in improving the skill and knowledge of existing workforce. The awareness of this sector of the education is depicted in Open University Malaysia had the highest enrolment among the private university.

Table 2.9: Employment by Major Sectors

NO	SECTORS	#EMPLOYED ('000)	
		2012	2013
1.	Agriculture, Forestry & Fishing	1601.7	1682.1
2.	Mining & Quarrying	80.6	87.1
3.	Manufacturing	2,227.9	2,214.8
4.	Electricity, Gas, Steam & Air Conditioning Supply	62.1.7	61.0
5.	Water Supply, Sewerage, Waste Management & Remediation Activities	80.4	82.9
6.	Construction	1,163.7	1,233.1
7.	Services	7,506.7	7,838.0
	Total	12,723.2	13,210.0

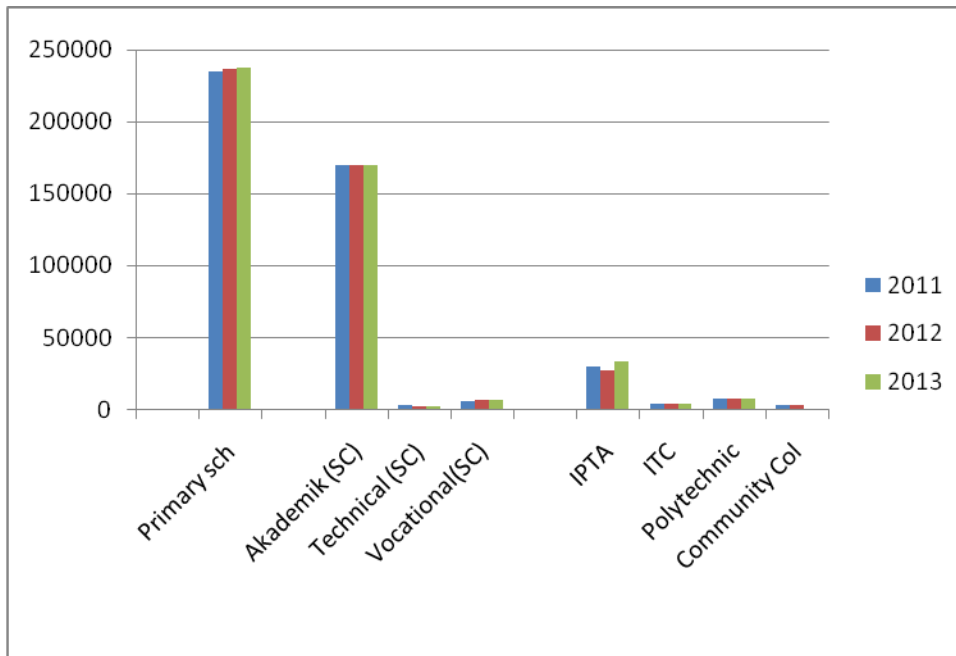
(Source: Department of Statistic Malaysia)

Table 2.9(a): Employment by Occupation

NO	CATEGORY	#EMPLOYED ('000)	
		2012	2013
1.	Managers	686.4	695.5
2.	Professionals	1,284.4	1,284.0
3.	Technicians & Associate Professionals	1,284.3	1,288.4
4.	Clerical Support Workers	1,170.0	1,189.5
5.	Service & Sales Workers	2,625.6	2,866.1
6.	Skilled Agriculture, Forestry & Fishery Workers	1,175.3	1,162.9
7.	Craft & Related Trades Workers	1,414.2	1,452.7
8.	Plant & Machine-Operators & Assemblers	1,548.1	1,607.7
9.	Elementary Occupations	1,573.1	1,663.3
	TOTAL	12,723.2	13,210.0

(Source: Institute of Labour Market Information & Analysis)

Table 2.9(b): Number of Teachers and Lecturers in Public sectors



Tertiary Education	2011	2012	2013
Primary School	234654	236334	237498
Secondary School			
Academic (SC)	169430	169590	169579
Technical (SC)	2826	1581	1593
Vocational(SC)	5132	6291	6234
IPTA	29198	26769	33137
ITC	3703	3225	3607
Polytechnic	7147	7306	7246
Community College	2597	2751	Na

Source: http://www.mohe.gov.my/web_statistik/

Table 2.9(c) Economic Transformation Programme

ILMIA: Institute of Labour Market Information & Analysis		The Labour Market Transformation For High Economy Under 10 th MP	
GOVERNMENT TRANSFORMATION PROGRAMME	Making the labour market more flexible	Attracting and retaining talent	Upgrading the skills of existing workforce
	<p>Unskilled foreign labour policy. # impose progressive sectoral and multi-tier levies based on ratio of foreign worker to local worker and skill level of foreign worker to incentivize companies to upgrade their workforce.</p> <p>Revising legal framework to provide flexibility in hiring and firing # review labour legislation by 2011 to ensure more efficient settlement of labour disputes # Provide flexible working arrangement to encourage labour participation of women, retirees & etc # Introduce the Relief Fund for loss of employment to provide financial assistance to workers upon retrenchment</p>	<p>Better incentives to attract skilled foreign talent. # reduce floor price of residential units from RM500,000 to RM250,000 for foreign talent # duration of entry for expatriate post with income level of RM8.000 and above per month will not be capped based on the current requirement</p> <p>Creating a pipeline for future talent #retains foreign students studying in local universities, especially those in science, technology and innovation. #enforce stricter standards to ensure that students studying overseas on government scholarships return to serve Malaysia upon completion of their studies #retain top students in local universities</p>	<p>Encourage cost sharing for training. # extend the coverage of the Human Development Fund (HRDF) from 44 to 77 subsections #create multiple channels for SME's to upgrade employee skills, eg SME corp, HRDF # introduce programme to encourage industry to co sponsor employee to obtain industrial Phd.</p> <p>Leveraging the industry to enhance the skill of the workforce # support the industry run and accredited courses, especially those related to NKEAs # Adopt buying places approach #coaching and mentoring of graduates e.g Graduate Employability Management Scheme</p>

(Source: Institute of Labour Market Information & Analysis)

Thus, new job opportunities look very positive especially in the instructional design area in the seamless learning environment. There would be a demand for jobs such as instructional designers, multimedia programmers, graphic designers, editors, project coordinators and audio and visual experts. Other areas which are equally important would be experts in arts and music, sports technicians, quality management, leadership, curriculum development, vocational trainers and other trainers in various specialised areas.

2.9.2 Supply of Skilled Labour

The supply of well educated and highly skilled talents for the education and training industry is not of much concern as shown in Table 2.9(k). The table indicates the distribution of graduates of university students from public universities by field of study and level of education from 2010-2020. As compared to other developed country we are still relatively low (Talent Corporation, 2012). This supply of labour as indicated in Table 2.9(m) by the total graduates FY 2013 saw an increase of 2.6% which is important to Malaysia as we are moving towards a knowledgeable based economy. Total enrolment was almost double that have graduated in the same year as shown in Table 2.9(l).

The skills provided by the education sector indicated in Table 2.9(n) on the profiling of diploma graduates by field of study may be of on-going concern. Table 2.9(o) below indicates that employers have distinct wage premiums offered for workers with ICT proficiency and presentation skills competencies. Almost half of the Malaysian companies cited the lack of the said skills. The specific skills in deficit across all firms are English language and ICT, particularly for technicians, clerical, and service workers. Therefore, the way forward would be to not only for IHL must include the said competencies in their curriculums but also to increase the supply of qualified educators and trainers.

Table 2.9(d): Graduates of University Students from Public Universities by Field of Study and Level of Education in 2010-2020

FIELD OF STUDIES	2010	2011	2012	2013	2020
SOCIAL SCIENCE, BUSINESS & LAW	36995	37029	40714	49656	60312
Economic	2068	1886	1962	2131	2369
Others Social Science	6504	5606	5663	6051	6493
Accounting	5376	5425	6629	9392	12744
Business & Management	20871	21951	23934	28503	33849
Law	2176	2161	2526	3579	4856
SCIENCES , MATHEMATIC & COMPUTER	14904	14695	15754	18808	24006
Sciences & Mathematic	10002	10373	10622	11399	12519
Information Technology & Communication	4902	4322	5132	7469	11488
LITERATURE & HUMANITIES	9642	9971	10378	11256	12597
Language & Linguistic	2836	2638	2907	3206	3580
Religious Studies	1950	2308	2381	2594	2935
History & Philosophy	1545	1618	1482	1397	1358
Art, Design & Music	3311	3407	3608	4058	4623
GRAND TOTAL	108,331	104,291	113,239	133,617	165,259

(Source: Institute of Labour Market Information & Analysis)

Table 2.9(e): Total Enrolment According to IPT Malaysia

IPT	2011	% Inc	2012	% Inc	2013	% Inc
IPTA	508,256	8.9	521,793	2.6	560,359	6.9
IPTS	428,973	26.3	454,616	5.6	484,963	6.3
Polytechnic	89,292	1.7	92,148	3.1	89,503	3
Community Col	6,319	188	22,380	71.8	21,458	4.2
KTAR/KUTAR	23,632	0.6	23,652	0.1	**	0
Total	1,056,472		1,114,589		1,156,283	
% Increase		7.4		5.2		3

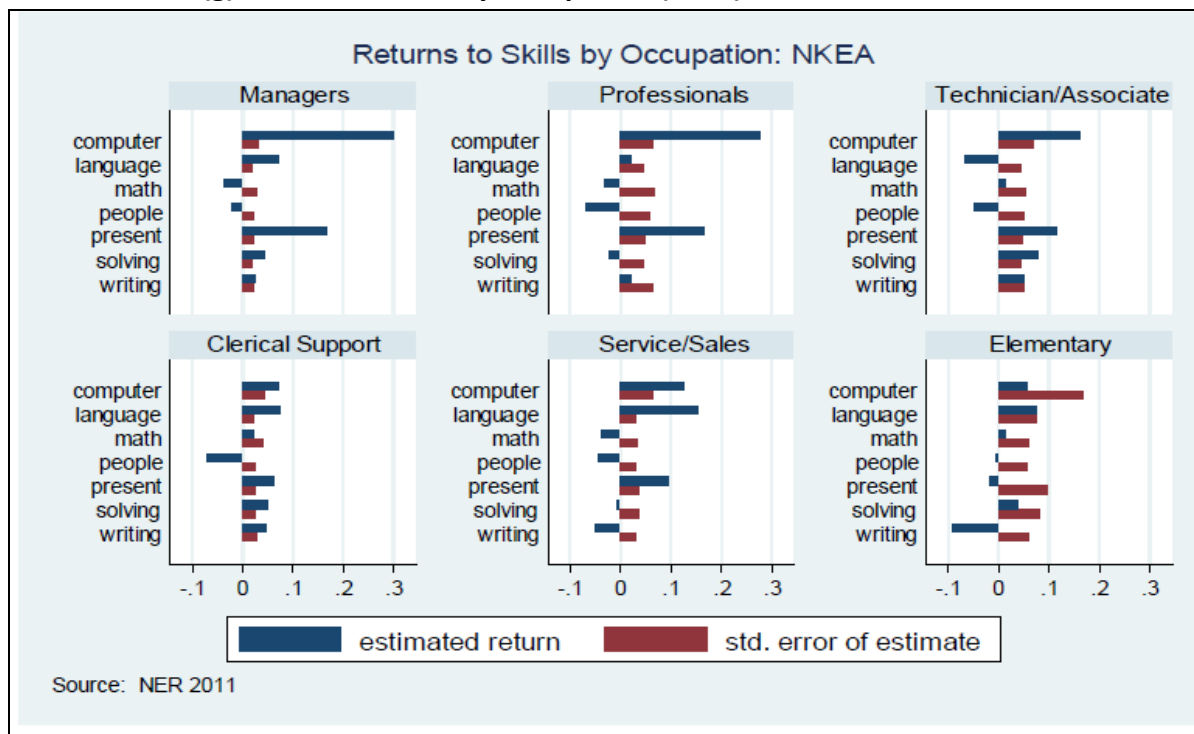
Source: http://www.mohe.gov.my/web_statistik/

Table 2.9(f): Total Graduate from the Various IPT Malaysia (2011-2013)

IPT	2011	% Inc	2012	% Inc	2013	% Inc
IPTA	104,291	3.9	113,239	7.9	126,27	10
IPTS	54,397	48.2	107,288	19.3	94,528	13.5
Polytechnic	33,310	2.4	27,286	22.1	2,5853	5.5
Community Col	6,624	12.6	23,470	71.8	27,485	14.6
KTAR/KUTAR	9,276	12.2	9,645	0	0	0
Total	207,898		280,928		273,893	
% Increase		15.1		26		2.6

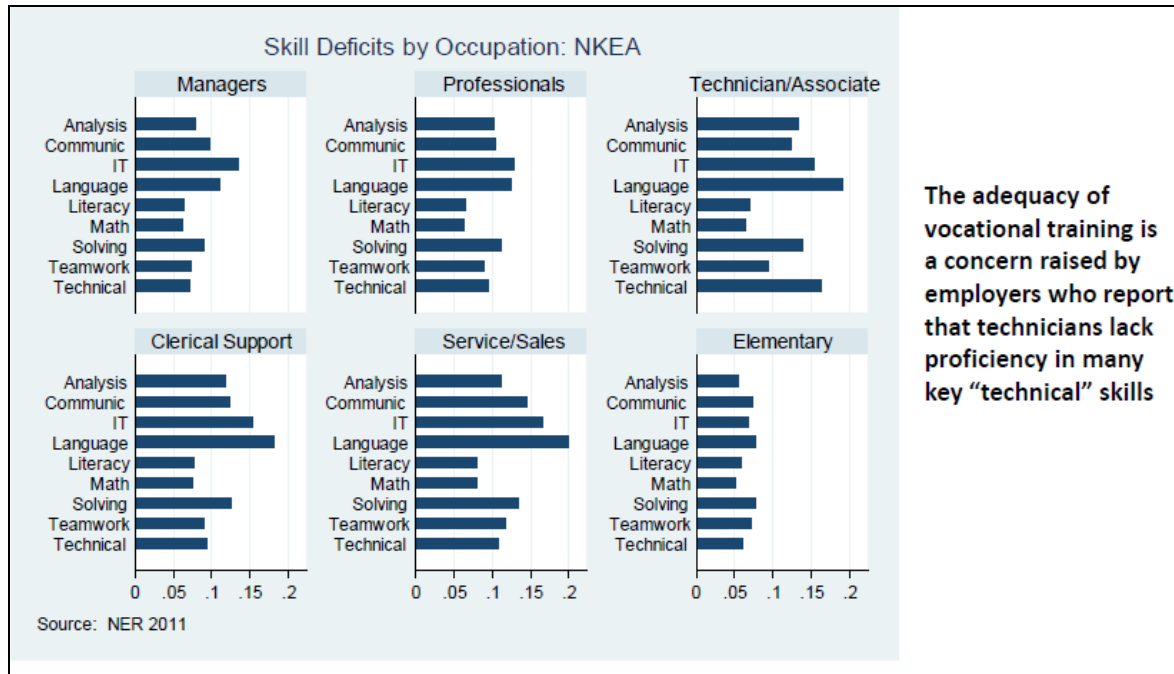
Source: http://www.mohe.gov.my/web_statistik/

Table 2.9(g): Return to Skills by Occupation (2011)



(Source: Institute of Labour Market Information & Analysis)

Table 2.9(h): Skill Deficits by Occupation (2011)



(Source: Institute of Labour Market Information & Analysis)

2.9.3 Current and Future Trends in Education and Training Services Industry

- Globalisation:** Globalisation seems to create pressure on Malaysian education system to adapt to a “world model” as well as not ignoring the national and local cultures. On the other hand, Malaysia is challenged to address some crucial issue in its quest to become a regional hub for educational excellence providing world-class university education. The higher education institutions have also come under greater public scrutiny since no Malaysian institute of higher education secured a position in the Top 100 in the recent Times Higher Education (THES) World University Rankings 2015. In order for Malaysia to be the educational hub in this region, academic excellence and service has to be met. Potential students would seek top world university rankings universities as a place of study which they presume would be translated into their job employability in the future.

(<https://www.timeshighereducation.co.uk/world-university-rankings/2015/>).

- Labour Mobility:* Due to the changing world landscape and the borderless world, improvements in communication especially in internet accessibility and travel, shortage of talents especially with professional qualifications of the critical disciplines such as petroleum, electrical and software engineering, actuarial science and accountancy, companies are increasingly seeking the required talent externally. In order for education and training industry to render its importance not only as a catalyst in providing the K worker for future economic growth but as a global player it needs to address the challenges in the ever increasing accessibility, fortification of service delivery and providing excellent quality of education besides having excellent communications technology (ICT) programmes in the curriculum and communication skills especially with a good command of English. It was reported that by 2020 Malaysia need to achieve 50% of its labor force in the highly-skilled workers category. Though these was translated in the Economic Transformation Programme (ETP), under the Skills Malaysia agenda and recognition of the Malaysian Skills Certificate (SKM) in 13 public service schemes, nationwide campaign on the recognition would be helpful besides acceptance of the public sector on the development of NOSS in certain occupation.
- Changing nature of the workforce:* The education industry must adjust to a multicultural environment, demographic changes, immigration, and outsourcing. More trades will be outsourced to more experienced players. However the most the most significant concern would be the loss of skills resulting from the retirement of many baby boomers especially in the public services. The impact on increased medical costs due to an aging workforce, and many employees' needs to care for elderly relatives topped the list of issues that some skilled workforce especially women talent would be lost. Other issues include developing multilingual training materials and providing work-life benefits for dual-career couples. If these issues are not taken care of, more talent will be lost in the industry especially when this talent is much needed in

supporting the economic growth of the nation. Thus, it is foreseen that the trend in future that more jobs in education and training services would be flexible in nature.

- *Competition:* Higher education services have gone beyond Malaysia national territory especially with the advancement of information technology. It has becoming global, market-oriented and private industry players are prevailing in the Asia Pacific region. Malaysia are facing stiff competition from countries not only in the Asia Pacific region but also from countries like Australia and Singapore who have their international academic offices and collaborating with partner institutions in the country. Top leading educational and training organizations in Malaysia have to be efficient, capable of developing new products and services rapidly and also in marketing them fast. In other words, they need to be flexible and effective in their way of doing business together with having equally a diversified and equally flexible responsive workforce. Thus, having the government regulates the minimum wage pay for business practices would be beneficial. Subsequently, Asia will be expected to dominate the global demand for international higher education for the next two decades with the rising Asian populated countries such as India, China, Indonesia and Malaysia.
- *Social trends:* Social trend does not remain static all the time. In the past education and training subscribers who are otherwise strangers now meet and share product information in chat rooms and blogs. Companies must continually adjust product and marketing strategies to be sensitive to changing social trends, for example when there is a demand that technical workforce require certain skills such as communication and job related skills, training providers should quickly look back at their curriculum and take the necessary action. All the stakeholders of the industry should also be sensitive to the global environmental concerns that are the “Green” practices are quickly becoming expected rather than optional.

- *World politics:* Not even globalization's strongest advocates could predict how world politics would change in recent years. The major is the financial crises that have shocked the global markets, dramatic rise in the power and influence of China, India and Russia and the dramatic shake-ups in government across the Arab world. The international threats of terrorism and civil wars around the world had cause some uncertainty and opportunities. It is expected that the future trend would a major drop in students' intake but an influx of foreign workers to a more stable countries like Malaysia.

2.9.4 Technological Advancement

Technology is continually changing jobs and organizations. Besides, Technology are becoming faster, cheaper, and there are emergent of more mobile computers, handheld devices and growth of social networking sites. The very idea of an office becoming an antiquated may be a reality and the concept in the near future would be on a seamless mode learning, training and workplace. Thus, it is expected that there will be new players where learning is accessible to not only to young learners but also to adult learners. Life Long learning will be a reality. With the creation of the hardware and software like the tablets, mobile Apps , Moodle, MOOC and others, learning is not only at the convenience of learners but also affordable. Some learning platforms at the websites are even offering free learning courses.

The technological advancement had also promoted blended pedagogical approach when time is an essence for most learners let it be fresh graduates or adult learners. As a result of this technological advancement, new jobs will be created in instructional designers, multimedia programmers, graphic designers, editors and project coordinator. Learning materials will be developed and are accessible through platforms such as online and multimedia content such as in DVD-based multimedia courseware, iLectures, iTutorials, learning objects, iRadio learning segments, audio books as well as digital modules in PDF or HTML formats. iRadio is

a webcasting service that can be innovative in their delivery such as in broadcasting that are infotainment in nature that are not only based on printed modules and accompanied by occasional live interviews with subject matter experts. iRadio will also be useful for visually impaired learners through audio learning materials. Learners in future can also be automatically informed latest content and information by through Web 2.0 applications like social networking tools, e.g. Facebook and Twitter.

2.10: INTERNATIONAL BENCHMARKING

Benchmark is a standard, or a set of standards, used as a point of reference for evaluating performance or level of quality. Benchmarks may be drawn from an industry's own experience, from the experience of other similar industries, or from legal requirements such as education and training acts and policies.

Meanwhile, benchmarking is a measurement of the quality of an industry's policies, products, programmes, strategies, etc., and their comparison with standards measurements, or similar measurements of its peers. The objectives of benchmarking are:

- To determine what and where improvements are needed
- To analyse how other similar industries achieve their high performance levels
- To use this information to improve own performance.

a. Singapore's Education and Training System

As we are all aware, Singapore has been at or near the top of international league tables that measure children's ability in reading, mathematics and science. Therefore, we may want to know: what do Singaporean teachers do in classroom's that is so

special? What are the particular strengths of Singapore's instructional system that helps it perform so well? What are its limits and constraints?

In addition, is Singapore's education model the best for countries seeking to prepare their students to face the complex demands of 21st century knowledge economies and institutional environments more generally? Is Singapore's teaching system transferable to other countries? Or is its success so dependent on very specific institutional and cultural factors unique to Singapore that it is folly to imagine that it might be reproduced elsewhere?

Singapore's educational system before the Asian financial crisis of the late 1990s

In general, classroom instruction in Singapore is highly-scripted and uniform across all levels and subjects. As such, teaching in Singapore primarily focuses on coverage of the curriculum, the transmission of factual and procedural knowledge, and preparing students for end-of-semester and national high stakes examinations. Therefore, teachers rely heavily on textbooks, worksheets, worked examples and lots of drill and practice. They also strongly emphasize mastery of specific procedures and the ability to represent problems clearly, especially in mathematics. Classroom talk is teacher-dominated and generally avoids extended discussion.

Interestingly, Singaporean teachers only make limited use of checking a student's prior knowledge or communicating learning goals and achievement standards. They only focus on whether or not students know the right answer, rather than on their level of understanding. And clearly it is highly-effective, helping to generate outstanding results in international assessments such as Trends in International Mathematics and Science Study (TIMSS) and the OECD's Programme for International Student Assessment (PISA).

Singapore's educational system after the Asian financial crisis

The Asian financial crisis of the late 1990s forced Singapore Ministry of Education policy makers to critically review their educational system that they developed, and ever since

they have been acutely aware that the pedagogical model that had propelled Singapore to the top of international league table is not appropriately designed to prepare young people for the complex demands of globalisation and 21st knowledge economies.

By 2004-5, Singapore's government had more or less introduced a new kind of pedagogical framework and called it "Teach Less, Learn More." This framework urged teachers to focus on the "quality" of learning and the incorporation of technology into classrooms and not just the "quantity" of learning and exam preparation. However, one of the central challenges confronting the Ministry of Education in Singapore is to reconcile good and responsible teaching. But the ministry is clearly determined to bed-down a pedagogy capable of meeting the demands of 21st century institutional environments, particularly developing student capacity to engage in complex knowledge work within and across subject domains.

Knowledge building pedagogies recognise the value of established knowledge, but also insist that students need to be able to *do* knowledge work as well as learning *about* established knowledge. Above all, this means students should acquire the ability to recognise, generate, represent, communicate, deliberate, interrogate, validate and apply knowledge claims in light of established norms in key subject domains. In the long run, this will do far more for individual and national well-being, including supporting development of a vibrant and successful knowledge economy, than a regressive quest for top billing in international assessments or indulging in witless "culture wars" against modernity and emergent, not to mention long-established, liberal democratic values.

Source: **Why is Singapore's school system so successful, and is it a model for the West?**
February 12, 2014 1.49am AEDT. Retrieved on 21.08.2015 from:
<http://theconversation.com/why-is-singapores-school-system-so-successful-and-is-it-a-model-for-the-west-22917>

b. United States of America Education and Training Service

Though there are differences within the education system of the United States due the diverse jurisdictions falling in either regional or local level, nevertheless the general summary of education in the United States falls within the following level namely: pre-primary education, primary education, secondary education, and higher education.

With regard to benchmarking, in the United States of America, follows the International benchmarking standard that was an important measuring tool that hopes to prepare their students for employment in the global marketplace. The international standards set the coalition of standards, instruction, professional development and assessment. It falls under the jurisdiction of National Governors Association, the Council of Chief State School Officers, and Achieve, Inc. It provides a roadmap for benchmarking their K-12 education systems. To achieve this outcome, United States of America had comes out with a Blueprint that serves as an action guide, recommending essential policy components for the states, districts and schools in United States of America to innovate and design existing policies to achieve world-class performance. To realise a workable world renowned standard, United States of America had outline the following to help policymakers and education leaders in namely:

- (i) Outline aspects of education in order to achieve a world class system in education;
- (ii) Proposed a policy that covers four critical areas: (a) international standards, (b) quality instruction, (c) professional development, and (d) assessment;
- (iii) Having a systems accessible to all students regardless of socioeconomic status, and
- (iv) Addressing concerns facing education leaders and policymakers in implementation of the benchmark blueprint.

Thus it was required that in order for education leaders to be committed to raise the standards, enhancing the teaching quality, and improve low-performing schools the International benchmarking that United States of America profess, together with the international Benchmarking Advisory Group had laid down the following guidelines to be followed that is translated to action plans for the state leaders to follow:

Action 1: Upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive.

Action 2: Leverage states 'collective influence to ensure that textbooks, digital media, curricula, and assessments are aligned to internationally benchmarked standards and draw on lessons from high-performing nations and states.

Action 3: Revise state policies for recruiting, preparing, developing, and supporting teachers and school leaders to reflect the human capital practices of top-performing nations and states around the world.

Action 4: Hold schools and systems accountable through monitoring, interventions, and support to ensure consistently high performance, drawing upon international best practices.

Action 5: Measure state-level education performance globally by examining student achievement and attainment in an international context to ensure that, over time, students are receiving the education they need to compete in the 21st century economy.

(Source: Retrieved on 21.08.2015 from <http://www.ncee.org/wp-content/uploads/2010/11/ECS-InternationalBenchmarking.pdf>)

c. Canada Education System

Canada is a federation of 10 provinces and three territories. Under the Canadian Constitution, provincial governments have exclusive responsibility for all levels of education. There is no ministry or department of education at the federal level. Canada's three territories — Yukon, Northwest Territories, and Nunavut — do not have the same constitutional status as the provinces and are subject, in many areas, to more direct control by the federal government. With respect to education, however, the federal government has delegated this responsibility to the territorial governments, which, in turn, cooperate with the provinces to deliver postsecondary programs.

Measured against international standards Canada's education systems are among the best in the world. Some important shifts are already taking place. Changes in schooling reflect a growing emphasis on *how* students learn, rather than only on *what* they learn. Young people need to learn to live together successfully in a diverse and connected world. The old commitment to equal educational *opportunity* is finally being replaced by a promise of optimal *benefits* for all young people. There may be legitimate differences in benefits for individual students, as a result of individual interests or abilities for example, but schooling must ensure that all students are able to make the most of their potential: in today's world, all young people need the competencies once reserved for the few.

Students tell educators that they do not want learning made easy; they want it to mean something. They want to feel something, to be moved by what they learn; they want to connect deeply with things that matter to the world and matter to them; and they want the chance to make a difference. If teaching and learning are reciprocal processes, we need to think about how the education system supports effective teaching for all students. Canada has a firm foundation to build on and a growing commitment to the dual educational goals of equity and excellence. Innovations at all levels of the system are opening up new possibilities and contributing knowledge about what works best.

(Source: Education Canada – cea-ace.ca Retrieved on 21.08.2015 from <http://www.cea-ace.ca/transforming-education/what-others-are-saying-about-transformation>)

Summary

Referring to the Singapore, the U.S.A, Canada, and Malaysia education and training services in general, we can conclude that all of them have one common objective, which is to prepare their students to face the complex demands of 21st century knowledge economies and institutional environments, and ensuring that all students are able to make the most of their potential. In today's world, all young people need the competencies once reserved for the few. To achieve this outcome, Singapore, the U.S.A, Canada, and Malaysia have come out with their own education and training blueprint that serves as an action guide, recommending essential policy components for the states, districts and schools to innovate and design existing policies to achieve world-class performance.

2.11 CONCLUSION

The development of education and training services is fundamentally driven by economics and globalisations pressures, political pressures, technological changes, and socio-demographic developments. In addition, the education sector in Malaysia provides support for lifelong learning stretching from early childhood care and education to tertiary and postgraduate education. Furthermore, the Malaysian Gross Domestic Product (GDP) in 2014 registered a strong growth at 6.3% as compared to 4.4% during the same period in 2013. Growth was supported by sustained domestic demand, the recovery of the world economy and private sector, thus increasing the sustainability of the industry at large.

3. METHODOLOGY

3.1 INTRODUCTION

This chapter describes the methodology of the overall Occupational Analysis process that was conducted throughout the Education and Training Services Industry Occupational Analysis.

3.2 RESEARCH DESIGN

The research design that consists of the research method, data analysis methods and output required is as shown in the table below:

Table 3.1: Research Design

Objective	Research Method	Data Analysis	Output
Objective 1: To identify the Occupational Structure and Occupational Area Structure of the Education and Training Services	Qualitative: <ul style="list-style-type: none">• Literature review• Focus Groups that consist of members representing different areas in the industry	<ul style="list-style-type: none">• Thematic analysis• Mapping of industry job areas• Descriptive analysis	<ul style="list-style-type: none">• Scope of the Industry and its sub-sectors;• Occupational groups of the sub-sector;• Job title;• Critical job title; and• Competency Levels (Level 1 – 8).
Objective 2: To conduct a supply and demand analysis of the Education and Training services workforce	Qualitative: <ul style="list-style-type: none">• Literature review• Demand side data was secondary data from the Department of Statistics (DOS) and was referenced against the occupational groups in the Malaysian Standard Industry	<ul style="list-style-type: none">• Transcript - based analysis	<ul style="list-style-type: none">• Supply Analysis• Demand Analysis

Objective	Research Method	Data Analysis	Output
	Classification (MSIC 2008) <ul style="list-style-type: none"> Supply side data was obtained from MOE and various education and training centres in Malaysia 		

Research initially consists of analysing available information on the Education and Training Services Industry, followed by direct contact with those in the industry to obtain a general idea of the industry sub-sectors. A supply and demand analysis is then conducted to identify current and projected supply and demand on the Education and Training Services Industry. Qualitative and quantitative analysis were selected as the methods of analysing data obtained throughout this study.

3.3 RESEARCH METHODOLOGY

This section elaborates on the different research instruments used throughout the project and participating respondents. The instruments and methods utilised were focus group discussions, mapping and statistical analysis. Below are elaborations of each activity conducted with respondents

3.3.1 Qualitative data

(i) Literature/document review

A literature/document review on the Education and Training Services Industry was carried out to get some insight of this industry in the context of the Malaysian scenario. The scope covered under this search includes definitions, the current analysis of the industry sub-sectors/areas and international examples of industry segmentation of its sub-sectors.

(ii) Focus Groups with industry members

The literature/document review findings were used as a guide to identify the scope of study and analysis. Experts from the Education and Training Services Industry were identified for further communication and contact. The lists of experts are included in the list of development panel members and List of Development Panel Members. The Focus Groups sessions were attended by development panel members who discussed the different sub-sectors and areas. Facts obtained during the literature/document review were also discussed and presented to the development panel members. The presence of the key persons or experts ensured that the development of the Occupational Analysis is current and relevant. The Education and Training Services Industry was analysed using the above methodology to identify the following:

- (a) Scope of the Industry and its sub-sectors ;
- (b) Main areas;
- (c) Occupational groups of the sub-sector;
- (d) Job title;
- (e) Critical job title; and
- (f) Competency levels (Level 1 – 8)

The focus group workshop session is described as follows:

Table 3.2 Focus Group session

Date	Location	Activity	Respondents	Organisation	Instrument/ Method Used
2-3 May 2015	IBIS Hotel, Kuala Lumpur	Occupational Structure Development Workshop	10	10	Focus Group Discussion

13-14 June 2015	IBIS Hotel, Kuala Lumpur	Occupational Area Structure Development Workshop	10	10	Focus Group Discussion
11-12 July 2015	IBIS Hotel, Kuala Lumpur	Occupational Description Development Workshop	10	10	Focus Group Discussion
15-16 Aug 2015	IBIS Hotel, Kuala Lumpur	Occupational Description Development Workshop	10	10	Focus Group Discussion

3.3.2 Quantitative

In order to gather the critical jobs in the education and training sector, a telephone survey was carried out. In the questionnaire a list of some critical jobs that was identified during the focus group.

The target participants of the critical job survey were from public and private higher education and training providers. The respondents of the survey had to be well versed with the industry and are in the management positions of which they are either held leadership positions or were in the Human Resources Department. The number of respondents was 30 which are sufficient for quantitative study.

3.3.3 Secondary Research

Secondary data research was based on information gathered from existed sources. To ensure validity and accuracy of the findings, information retrieved was from refereed sources and were cited throughout the report. The sources taken were from periodicals, government publications and statistical abstract.

Table 3.3 Sources of Quantitative Data

No	Type of Secondary Data	Data Sources
1	Demand data	<ul style="list-style-type: none">• Department of Statistics, Jabatan Pendidikan Tinggi• Malaysia Educational statistic: Quick Fact 2014, Institute of Labour• Institute for Labour Market Information and Analysis (ILMIA)• Talent Corporation
2	Supply data	<ul style="list-style-type: none">• Department of Statistics, Jabatan Pendidikan Tinggi• Malaysia Educational statistic: Quick Fact 2014, Institute of Labour• Institute for Labour Market Information and Analysis (ILMIA)• Talent Corporation

3.4 DATA ANALYSIS

In order to come up with the outcome for the first objective of this study (Objective 1: Occupational Structure and Occupational Area Structure), second objective (Objective 2: Supply and Demand Analysis) the data was analysed through mapping, synthesis of discussion group findings and comparison of benchmarking samples.

The Occupational Structure was analysed and defined based on the following processes:

- (a) Identification of industry scope and boundaries with other relevant industries
- (b) The thematic approach was applied throughout the process of analysing the Occupational Structure of the industry.

The identification the industry scope is important so that when identifying the relevant sub-sectors and areas under the industry, it will define the segmentation of the particular industry to other relevant industries. This will eliminate the possibility of duplication between common areas. The rule of thumb is to avoid taking into account the organization chart as this will include many other industries such as marketing, administration, human resources and public relations. These areas are common across various industries and have a different set of skill sets. Grouping based on similar skill sets in terms of technical abilities is a determining factor.

(c) Identification of sub-sector/area/sub-area

The coverage of a sub-sector should be able to accommodate a number of areas and sub-areas where applicable. Sub-sectors are identified as being components of an industry and can be clustered in terms of classification, segmentation or process driven.

(d) Identification of job titles

In order to identify job titles, it is important to obtain consensus from expert panel members that the job title is common between organizations either small or medium enterprise (SME) and is easily accepted by practitioners in the industry.

(e) Identification of Levelling

Levelling of a job title is done based on the level of competency required to be deemed competent at a specific designation. The level descriptors in Annex 1 is used as a reference when determining the different levels relevant to a specific job title.

(f) Occupational Area Analysis

The Occupational Structure can be further analysed to produce its Occupational Area Structure (OAS) through Occupational Area Analysis (OAA). The occupational area analysis is a process of analysing the job scope of a particular area. This will help to ensure that the job titles are described not only based on common use in the industry but also by their job scope. These OAS will be taken into consideration to be developed into NOSS sub-areas. Therefore the process of merging and shrinking must be done with keeping in mind of the mechanisms of training and certification based on the NOSS.

Ultimately, we are able to produce multi-skilling and multi-tasking workers required by the industry in line with the high income economy policy. Nevertheless, in certain cases, due to the requirement of industry or regulations, merging is not necessarily required.

The data analysis techniques applied for the supply and demand analysis were through secondary data analysis taken from various sources namely from Department of Statistics, Jabatan Pendidikan Tinggi, Malaysia Educational statistic: Quick Fact 2014, Institute of Labour and *Institute for* Labour Market Information and Analysis (ILMIA). The findings of the study is reported in section 2.9 by the analyzing the general industry supply and demand on the basis as follows:

- i) Job Opportunities
- ii) New Job creation
- iii) Current and Future trend
- iv) Technological advancement

Critical job refers to new jobs requirement and also to current jobs that have been identified that are needed by the industry for the next 1-5 years. In order to gather the critical jobs in the education and training sector, a telephone survey was carried out. In the questionnaire a list of some critical jobs that was identified during the focus group. The useable samples for this study consists of 30 respondents from public and private higher institute and training providers in Malaysia. Table 3.4 below presents the percentage of critical job importance. All the items were measured on a three (3) interval scale. They were rated on the jobs that are critical for the industry on a 3-point Likert-type scale, ranging from 1 = Critical, 2 = Moderately Critical and 3 = Highly Critical. The findings indicate that highly critical jobs have been identified are quality assurance executive, quality assurance assistant manager, vocational training manager and standard and curriculum development facilitator. Moderate critical jobs have been identified are R&D assistant researcher, R&D researcher and vocational training executive while no jobs has been identified as critical.

Consequently, new jobs in the education and training industry has been identified (see table 4.5) using focus group, where list of panel members from the Development Panel members will determine the critical jobs requirement by the industry . It was found that there are more than 18 highly critical jobs that have been identified namely in academic teaching in various disciplines and academic management in curriculum development.

Table 3.4 Descriptive Statistic on Critical Jobs Importance (Percentage)

	Critical (%)	Moderate Critical (%)	High Critical (%)
Quality Assurance Executive	10	13	77
Quality Assurance Assistant Manager	17	10	73
R&D Assistant Researcher	13	53	33
R&D Researcher	10	70	20
Vocational Training Executive	13	57	30
Vocational Training Manager	10	27	63
Standard And Curriculum Development Facilitator	20	27	53

3.5 LIMITATIONS

i. Education and Training services (ETS) occupational classifications broader than Occupational Structures sub-sectors.

The standard occupational groups defined in ETS are broader than the sub-sectors as highlighted in the Education and Training services Industry Occupational Structures. This is taken into account in the interpretation of the findings.

ii. Difficulty in obtaining data for the critical jobs

Due to certain technical issues in obtaining primary data for the critical jobs, the research team has manage to survey on a small sample of respondents. However it is sufficient to be generalised.

3.6 CONCLUSION

This chapter describe the overall methodology, research instruments used and data analysis techniques applied in the study. Through both qualitative and quantitative research design, about 25 critical jobs were found. The jobs were both new and existing jobs. Limitations were discussed in terms of the broad term of the industry and also the sampling frame.

4. FINDING AND DISCUSSION

4.1 INTRODUCTION

The identified sectors for the Education & Training Services Industry are obtained through literature research through secondary data and discussions with industry experts during the development workshop sessions and interviews. Based on the discussions held during development workshops and approval sessions, the development and approval panel members had identified that the main sectors under the Education & Training Services Industry in Malaysia are segregated into 2 sub-sectors which are:

- i) Education Services; and
- ii) Training Services;

4.2 EDUCATION & TRAINING SERVICES INDUSTRY OCCUPATIONAL STRUCTURE (OS)

The Occupational Structures for these sectors are included in this section, firstly the sectors and relevant areas are shown, then following them will be the Occupational Structures that show the common job titles in the industry and are presented under each relevant Sub-Sector and area.

Following each Occupational Structure framework is an Occupational Area Structure that depicts the common job scope for each of the areas as defined in their respective occupational structures. In the Occupational Area Analysis, job titles under the same area may be combined if the job scope is similar. This is to show the common responsibilities of the personnel regardless of job title, as job titles may vary between different institutions and organizations. Table 4.1 to Table 4.10 are the Occupational Structure for each respective sub-sector.

Table 4.1: Overview of Occupational Structure for Education & Training Services Industry.

SECTOR	EDUCATION & TRAINING SERVICES INDUSTRY									
SUB-SECTOR	EDUCATION SERVICES							TRAINING SERVICES		
JOB AREA	PRIMARY & SECONDARY EDUCATION				HIGHER EDUCATION			PROFESSIONAL DEVELOPMENT TRAINING SERVICES	SKILLS TRAINING SERVICES	STANDARD AND CURRICULUM DEVELOPMENT
SUB JOB AREA	Administration	Academic Teaching	Leadership	Education Specialist	Management Services	Academic Management	Student Affairs	Operation Management	Operation Management	
	Financial Administration	General Education Subject	Student Affairs	Curriculum Development	Human Resources	Curriculum Development	Industrial Relations	Training Assessment	Training Assessment	
	Administration Operation	Islamic Education	Administration	Instructional Technology Development	Administration	Faculty/School/Department	International Affairs		Resource Centre	
		Technical Vocational Education	Co-Curriculum	Assessment Development	Marketing & Corporate Communication	Quality Assurance (QA)	Student Welfare			
		Sports Education		Organization Counselling Psychology	Finance	Research & Development (R&D)				
		Special Needs Education		School Counselling and Guidance		Library				
				Arts Coaching						
				Special Needs Education						
				Sports Coaching						

Table 4.2: Occupational Structure for Sub Sector Education Service

SECTOR	EDUCATION AND TRAINING INDUSTRY				
SUB-SECTOR	EDUCATION SERVICES				
JOB AREA	PRIMARY & SECONDARY EDUCATION				
	Administration				
	Financial Administration	Administration Operation			
Level 8	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level
Level 6	No Level	No Level	No Level	No Level	No Level
Level 5	No Level	No Level	No Level	No Level	No Level
Level 4	Chief Financial Administrative Assistant	Chief Clerk			
Level 3	Financial Administrative Assistant	Student Hostel Management Assistant	Hostel Supervisor	Educational Lab Assistant	Administrative Assistant (Operational and Clerical)
Level 2	No Level	No Level	No Level	No Level	General Administration Assistant
Level 1	No Level	No Level	No Level	No Level	No Level

Table 4.3: Occupational Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY								
SUB-SECTOR	EDUCATION SERVICES								
JOB AREA	PRIMARY & SECONDARY EDUCATION								
	Leadership				Academic Teaching				
	Administration	Student Affairs	Co-Curriculum		General Education	Islamic Education	Technical Vocational Education	Sports Education	Special Needs Education
Level 8	No Level	No Level	No Level		No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level		No Level	No Level	No Level	No Level	No Level
Level 6	Headmaster / Principal				* General Education Master Teacher	* Islamic Education Master Teacher	* Technical Vocational Master Teacher	* Sports Education Master Teacher	* Special Needs Education Master Teacher
Level 5	Academic Senior Teacher	Administration Senior Assistant Teacher	Student Affairs Senior Assistant Teacher	Co-Curriculum Senior Assistant Teacher	* General Education Senior Teacher	* Islamic Education Senior Teacher	* Technical Vocational Education Senior Teacher	* Sports Education Senior Teacher	* Special Needs Education Senior Teacher
Level 4	No Level	No Level	No Level	No Level	* General Education Teacher	* Islamic Education Teacher	* Technical Vocational Education Teacher	* Sports Education Teacher	* Special Needs Education Teacher
Level 3	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.4: Occupational Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION & TRAINING SERVICES					
SUB-SECTOR	EDUCATION SERVICES					
JOB AREA	PRIMARY & SECONDARY EDUCATION					
	Education Specialist					
	Curriculum Development	Assessment Development	INSTRUCTIONAL TECHNOLOGY			
			Educational Television	Educational Radio	Interactive Multimedia	Virtual Learning Environment
Level 8	* Curriculum Development Strategy Specialist	*Assessment Theories Development Specialist	*Educational Television Production Directing Specialist	*Creative Designing Specialist	*Instructional Multimedia Quality Assurance Specialist	*Seamless Education Development Specialist
Level 7	*Curriculum Development Quality Assurance Specialist	*Assessment System Development Specialist	*Educational Television Creative Publications Production Directing Specialist	*Educational Radio Shows Integrating Specialist	*Creative Instructional Interactive Multimedia Specialist	*Virtual Learning Environment Researcher Specialist
Level 6	*Curriculum Analysis Specialist	*Assessment Instrument Development Specialist	*Production Material Designing Specialist	*Educational Radio Art Shows Directing Specialist	*Instructional Interactive Multimedia Development Specialist	*Virtual Learning Academic Specialist
Level 5	*Curriculum Implementation Specialist	*Assessment Item Development Specialist	*Educational Television Script Plan Designing Specialist	*Educational Radio Shows Directing Specialist	*Instructional Interactive Multimedia Design Specialist	*Virtual Learning Classroom Specialist
Level 4	No Level	No Level	No Level	No Level	No Level	No Level
Level 3	No Level	No Level	No Level	No Level	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.5: Occupational Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION & TRAINING SERVICES								
SUB-SECTOR	EDUCATION SERVICES								
JOB AREA	PRIMARY & SECONDARY EDUCATION								
	EDUCATION SPECIALIST								
	Organization Counselling Psychology	School Counselling and Guidance	Arts Coaching				Special Needs Education	Sports Coaching	
			Dance Arts	Coaching Visual Arts	Coaching Arts Theatre	Music Arts	Audiology (Education)	Sports Technical	Sports Coaching
Level 8	*Family Counselling Psychology Specialist	*School Career Counselling Development Specialist	*Arts Specialist Teacher	*Curatorial Visual Arts Specialist	*Theatre Production Specialist	*Music Impresario Specialist	*Audiology Strategic Specialist	No Level	No Level
Level 7	*Family Counselling Psychology Specialist	*Personality and Environment Counselling Fittings Specialist	*Arts Specialist Teacher	*Design Visual Arts Specialist	*Theatre Performing Stenography Development Specialist	*Music Composition Specialist	*Rehabilitation Audiology Development Specialist	No Level	No Level
Level 6	*Family Counselling Psychology Senior Counsellor	*Environmental Counselling Development Specialist	*Arts Specialist Teacher	*Visual Arts Communication Specialist	*Theatre Improvisation Specialist	*Music Arrangement Development Specialist	*Audiology Integration Specialist	No Level	No Level
Level 5	*Family Counselling Psychology Counsellor	*Personality Counselling Development Specialist	*Dance Arts Teacher	*Fine Arts Specialist	*Theatre Acting Development Specialist	*Music Skills Development Specialist	*Audiology (Education) Development Specialist	*Sports Specialist Coach	*Sports Specialist Coach
Level 4	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 3	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.6: Occupational Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY					
SUB-SECTOR	EDUCATION SERVICES					
JOB AREA	HIGHER EDUCATION					
	Management Services					
	Human Resources (HR)	Administration	Marketing & Corporate Communication		Finance	
		Operation Administration	Marketing	Corporate Communication	Finance	Account
Level 8	No Level	No Level	No Level	No Level	No Level	No Level
Level 7	Chief Executive Officer (CEO)					
Level 6	Chief Operating Officer (COO)		Chief Marketing Officer (CMO)		Chief Financial Officer (CFO)	
Level 5	Human Resource Manager	Operation Administration Manager	Marketing Manager	Corporate Communication Manager	Financial Manager	Accountant
Level 4	Human Resource Executive	Operation Administration Executive	Marketing Executive	Corporate Communication Executive	Financial Executive	Accounting Executive
Level 3	Human Resource Administrative Assistant	Operational Administrative Assistant	Marketing Administrative Assistant	Corporate Communication Administrative Assistant	Finance Administrative Assistant	Accounting Clerk
Level 2	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.7: Occupational Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY					
SUB-SECTOR	EDUCATION SERVICES					
JOB AREA	HIGHER EDUCATION					
	Academic Management					
	Curriculum Development	Faculty/School/Department		Quality Assurance (QA)	Research & Development (R&D)	Library
		Teaching Faculty	Management			
Level 8	No Level	No Level	No Level	No Level	No Level	No Level
Level 7	* Curriculum Development Specialist	Professor	Dean	No Level	R&D Specialist	No Level
Level 6	* Curriculum Development Designer	Associate Professor	Deputy Dean	Quality Assurance (QA) Manager	Head Of R&D	No Level
Level 5	* Curriculum Coordinator	Senior Lecturer	Head Of Department	*QA Assistant Manager	* R&D Researcher	Chief Librarian
Level 4	Lecturer		Program Coordinator	* QA Executive	* R&D Assistant Researcher	Librarian
Level 3	No Level	No Level	No Level	No Level	No Level	Assistant Librarian
Level 2	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.8: Occupational Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY				
SUB-SECTOR	EDUCATION SERVICES				
JOB AREA	HIGHER EDUCATION				
	Student Affairs				
	Industrial Relations	International Affairs	Student Welfare		
			Welfare	Recreation & Culture	Counselling
Level 8	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level
Level 6	No Level	No Level	No Level	No Level	No Level
Level 5	Industrial Relation Manager	International Affairs Manager	Student Welfare Manager	Student welfare Manager	* Counsellor
Level 4	Industrial Relation Executive	International Affairs Executive	Student Welfare Executive	Student welfare Executive	* Counselling Executive
Level 3	Admin Assistant	Admin Assistant	Admin Assistant	Admin Assistant	No Level
Level 2	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level

Table 4.9: Occupational Structure for Sub Sector Training Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY				
SUB-SECTOR	TRAINING SERVICES				
JOB AREA	PROFESSIONAL DEVELOPMENT TRAINING SERVICES				
	Operation Management				Training & Assessment
	Administration	Finance	Business Development	Sales & Marketing	
Level 8	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level
Level 6	General Manager				No Level
Level 5	Administration Manager	Finance Manager	Business Development Manager	Sales & Marketing Manager	Professional Development Training Manager
Level 4	Administration Executive	Finance Executive	Business Development Executive	Sales & Marketing Executive	Trainer
Level 3	Administration Clerk	Finance Clerk	Clerk	Sales Representative	No Level
Level 2	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level

Table 4.10: Occupational Structure for Sub Sector Training Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY						
SUB-SECTOR	TRAINING SERVICES						
JOB AREA	SKILLS TRAINING SERVICES						STANDARD AND CURRICULUM DEVELOPMENT
	Operation Management					Training & Assessment	
	Administration	Finance	Business Development	Sales & Marketing	Resource centre		
Level 8	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 6	General Manager				No Level	No Level	No Level
Level 5	Administration Manager	Finance Manager	Business Development Manager	Sales & Marketing Manager	Resource Centre Manager	* Vocational Training Manager	No Level
Level 4	Administration Executive	Finance Executive	Business Development Executive	Sales & Marketing Executive	Resource Centre Executive	* Vocational Training Executive	* Standard And Curriculum Development Facilitator
Level 3	Administration Clerk	Finance Clerk	Clerk	Sales Representative	Resource Centre Assistant	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level

4.3 Occupational Description

As part of the occupational analysis, the occupational definitions for each job title identified are produced. The Occupational Definition is listed out by industry expert through brainstorming and literature study.

From the proposed Occupational Structure, there are a 73 job titles that don't have job description. The reason being is that all the job title is a new Job Title and is based on accreditation initiative under Ministry of Education. The job description for the related area will be analysed during occupational standard development session. Below are the list of Job Titles that don't have Job Description:-

No.	Job Area	Job Title	Level
1.	Academic Teaching	General Education Senior Teacher	5
2.	Academic Teaching	General Education Master Teacher	6
3.	Academic Teaching	Islamic Education Senior Teacher	5
4.	Academic Teaching	Islamic Education Master Teacher	6
5.	Academic Teaching	Technical Vocational Education Senior Teacher	5
6.	Academic Teaching	Technical Vocational Master Teacher	6
7.	Academic Teaching	Sports Education Senior Teacher	5
8.	Academic Teaching	Sports Education Master Teacher	6
9.	Academic Teaching	Special Needs Education Senior Teacher	5
10.	Academic Teaching	Special Needs Education Master Teacher	6
11.	Education Specialist	Curriculum Implementation Specialist	5
12.	Education Specialist	Curriculum Analysis Specialist	6
13.	Education Specialist	Curriculum Development Quality Assurance Specialist	7
14.	Education Specialist	Curriculum Development Strategy Specialist	8
24.	Education Specialist	Assessment Item Development Specialist	6
25.	Education Specialist	Assessment Instrument Development Specialist	5
26.	Education Specialist	Assessment System Development Specialist	6
27.	Education Specialist	Assessment Theories Development Specialist	7
28.	Education Specialist	Educational Television Script Plan Designing Specialist	8
29.	Education Specialist	Production Material Designing Specialist	6
30.	Education Specialist	Educational Television Creative Publications	5

No.	Job Area	Job Title	Level
		Production Directing Specialist	
31	Education Specialist	Educational Television Production Directing Specialist	6
32	Education Specialist	Educational Radio Shows Directing Specialist	7
33	Education Specialist	Educational Radio Art Shows Directing Specialist	8
34	Education Specialist	Educational Radio Shows Integrating Specialist	6
35	Education Specialist	Creative Designing Specialist	5
36	Education Specialist	Instructional Interactive Multimedia Design Specialist	6
37	Education Specialist	Instructional Interactive Multimedia Development Specialist	7
38	Education Specialist	Creative Instructional Interactive Multimedia Specialist	8
39	Education Specialist	Instructional Multimedia Quality Assurance Specialist	6
40	Education Specialist	Virtual Learning Classroom Specialist	5
41	Education Specialist	Virtual Learning Academic Specialist	6
42	Education Specialist	Virtual Learning Environment Researcher Specialist	7
43	Education Specialist	Seamless Education Development Specialist	8
44	Education Specialist	Family Counselling Psychology Counsellor	6
45	Education Specialist	Family Counselling Psychology Senior Counsellor	5
46	Education Specialist	Family Counselling Psychology Specialist	6
47	Education Specialist	Family Counselling Psychology Specialist	7
48	Education Specialist	School Career Counselling Development Specialist	8
49	Education Specialist	Personality and Environment Counselling Fittings Specialist	6
50	Education Specialist	Environmental Counselling Development Specialist	5
51	Education Specialist	Personality Counselling Development Specialist	6
52	Education Specialist	Arts Specialist Teacher	7
53	Education Specialist	Arts Specialist Teacher	8
54	Education Specialist	Arts Specialist Teacher	6
55	Education Specialist	Dance Arts Teacher	5
56	Education Specialist	Curatorial Visual Arts Specialist	6
57	Education Specialist	Design Visual Arts Specialist	7
58	Education Specialist	Visual Arts Communication Specialist	8
59	Education Specialist	Fine Arts Specialist	6
60	Education Specialist	Theatre Production Specialist	5

No.	Job Area	Job Title	Level
61	Education Specialist	Theatre Performing Stenography Development Specialist	6
62	Education Specialist	Theatre Improvisation Specialist	7
63	Education Specialist	Theatre Acting Development Specialist	8
64	Education Specialist	Music Impresario Specialist	6
65	Education Specialist	Music Composition Specialist	5
66	Education Specialist	Music Arrangement Development Specialist	6
67	Education Specialist	Music Skills Development Specialist	7
68	Education Specialist	Audiology Strategic Specialist	8
69	Education Specialist	Rehabilitation Audiology Development Specialist	6
70	Education Specialist	Audiology Integration Specialist	5
71	Education Specialist	Audiology (Education) Development Specialist	6
72	Education Specialist	Sports Technical Specialist Coach	7
73	Education Specialist	Sports Coaching Specialist Coach	8

OCCUPATIONAL DESCRIPTION

SUBSECTOR: EDUCATION SERVICES

JOB AREA: PRIMARY & SECONDARY EDUCATION



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - FINANCIAL ADMINISTRATION

LEVEL 3

FINANCIAL ADMINISTRATIVE ASSISTANT

A Financial Administrative Assistant is responsible for carrying out tasks at the level of a full-time financial support group related to financial activities in school. He or she is required to ensure all records are properly maintained and all processes regarding financial matters comply with financial procedures and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage Budgetary Control
 - a. Prepare and update the annual budget
 - b. Handle and control provisions
 - c. Maintain records and prepare expense reports
2. Manage General Financial Affairs
 - a. Handle, keep, and check all kinds of bias
 - b. Handle records and follow-ups in relation to other advance varieties, computer loans and car loans
 - c. Handle the distribution of cash and cheques
 - d. Retrieve and account for official or overpaid expenses
 - e. Maintain financial documents/financial control forms
 - f. Handle and control registration of received cheques

3. Manage Receipts
 - a. Handle billing of all types of public money receipts
 - b. Accept all kinds of public money and issue official receipts
 - c. Collect and submit receipts of public money as well as copies of documents / receipts report to members responsible
 - d. Keep a cash book analysis
 - e. Provide bank-in slip, collection statement and submit receipts to the bank
 - f. Prepare and submit monthly cash reports
4. Manage Procurement
 - a. Handle the procurement of supplies, work and services
5. Manage Emoluments Fees
 - a. Handle the affairs of salary payment, allowances, wages, and EPF and members' miscellaneous salary deductions
 - b. Provide certificate of final salary
 - c. Process and distribute cash, cheques and payroll reports to the parties concerned
 - d. Process payroll adjustment forms and vouchers
6. Manage Payment Affairs
 - a. Handle all types of payments other than payment of members' emoluments
 - b. Prepare and process the creation of bulk payment account form
 - c. Check bills i.e. telecommunication providers and utility bills
 - d. Handle list of bills including the cancellation of the recorded cheques
 - e. Handle and organize cheques in terms of the cancellation, replacement, opening and holding crossed cheques
 - f. Help manage credit providers
 - g. Update and distribute foreign currency exchange rate schedule
7. Manage Account
 - a. Maintain and update vote / trust / revenue / deposit account
 - b. Maintain and update subsidiary accounts including adaptive control account

- c. Maintain registration of financial documents
 - d. Prepare and distribute financial and accounting reports
 - e. Verify and monitor the verification of vote / trust / results / deposits accounts
 - f. Help with the preparation of Public Account reports including the reports of General Accountant of Malaysia
 - g. Manage cancelled cheques
8. Manage Investment and Loan Business
- a. Assist in managing investments or loans at home and abroad



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - FINANCIAL ADMINISTRATION

LEVEL 4

CHIEF FINANCIAL ADMINISTRATIVE ASSISTANT

Chief Financial Administration Assistant is designated to manage at the level of a full-time finance support groups regarding matters of budgetary control, general finance, receipts, government procurement, emolument, payment, accounting and investment loans in order to ensure effective, efficient and accurate financial and administrative operations in school. The Chief Financial Administrative Assistant must comply with the financial administration act, generally accepted accounting principles and municipal financial by-laws, policies and procedures, and occupational safety and health practices and procedures.

In particular the person will:

1. Manage Budgetary Control
 - a. Monitor the preparation and update of the annual budget
 - b. Manage and control provisions
 - c. Ensures proper record maintenance
 - d. Maintain records and prepare expense reports
2. Manage General Financial Affairs
 - a. Manage, maintain, and monitor all kinds of bias
 - b. Manage records and follow-ups in relation to other advance varieties, computer loans and car loans
 - c. Manage security safes or vaults

- d. Manage and monitor bank accounts
 - e. Manage and control the distribution of cash and cheques
 - f. Manage and verify account for official or overpaid expenses
 - g. Manage finance documents / control forms
 - h. Manage registration of received cheques
3. Manage Receipts
- a. Manage billing of all types of public money receipts
 - b. Manage all kinds of public money and issue government official receipts
 - c. Verify receipts of public money as well as copies of documents / receipts report to members responsible
 - d. Verify cash book analysis
 - e. Manage bank-in slips, collection statement and submit receipts to the bank
 - f. Verify and validate monthly cash reports
4. Manage Procurement
- a. Manage procurement of supplies, work and services
5. Manage Emoluments Fees
- a. Manage the affairs of pay, allowances, wages, and EPF and members miscellaneous deductions
 - b. Manage and verify certificate of final salary
 - c. Receive, verify and distribute cash, cheques and payroll report to the parties concerned
 - d. Receive and verify payroll adjustment forms and vouchers
6. Manage Payment Affairs
- a. Manage all types of payments other than payment of members' emoluments
 - b. Monitor the preparation of the creation of bulk payment account form
 - c. Supervise checking of bills
 - d. Manage bills including the cancellation of the recorded cheques
 - e. Manage and organize cheques in terms of the cancellation, replacement, opening and holding crossed cheques
 - f. Manage credit providers
 - g. Monitor the process of updating and distributing foreign currency exchange rate schedule

7. Manage Accounts
 - a. Monitor account vote / trust / results / deposits
 - b. Maintain and monitor updating of accounts of subsidiaries including adaptive control account
 - c. Maintain registration of financial documents
 - d. Manage the distribution of financial and accounting reports
 - e. Verify and monitor the verification of vote / trust / results / deposits accounts
 - f. Manage and monitor the preparation of Public Accounts reports including the reports of General Accountant of Malaysia
 - g. Manage cancelled cheques
8. Manage Investment and Loan Business
 - a. Manage investments or loans at home and abroad



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - ADMINISTRATION OPERATION

LEVEL 3

STUDENT HOSTEL MANAGEMENT ASSISTANT

JOB DESCRIPTION

A Student Hostel Management Assistant is responsible to handle students' safety and health as well as hostel operations in accordance with hostel rules and regulations, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Monitor cleanliness of dorm rooms and surrounding areas
2. Monitor the cleaning work to be carried out as stipulated in the contract
3. Handle collection of hostel boarding fees
4. Prepare hostel annual budget, cash book and consolidated annual accounts for hostel audit report
5. Maintain office files and inventory management
6. Handle students' dormitory registration
7. Monitor hostel's safe and clean environment
8. Prepare requisition related to hostel equipment:
 - i) Total adequate equipment
 - ii) Equipment usability/functionality
9. Report faulty wiring/electrical equipment for further action
10. Supervise security guards in carrying out their tasks
11. Report on equipment and building maintenance requirements to superior
12. Handle hostel safety and security matters
13. Adhere to Occupational Safety and Health procedures



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - ADMINISTRATION OPERATION

LEVEL 3

HOSTEL SUPERVISOR

A Hostel Supervisor is responsible for managing the dormitory, hostel financial management, food supply, healthcare and welfare of students, hostel administration and record management, hostel security and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage dormitory cleanliness
2. Manage all documents pertaining to students' hostel registration
3. Prepare hostel annual budget allocation
4. Prepare dormitory equipment budget
5. Verify cashbook preparation
6. Verify the preparation of annual statement of accounts for audit report purposes
7. Manage food and beverage supply by external contractors
8. Maintains students' health, welfare and discipline records
9. Manage hostel asset, equipment and inventory records
10. Manage daily staff scheduling and staff appraisal
11. Manage student safety, security and discipline
12. Adhere to Occupational Safety and Health procedures



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - ADMINISTRATION OPERATION

LEVEL 3

LAB ASSISTANT

A Lab Assistant is responsible for providing technical support, ensuring equipment functionality and usability. He / she must ensure the right materials are available for particular lessons and adhere to occupational safety and health practices and procedures.

Key Responsibilities

In particular the person will:

1. Record and update information on government laboratory assets
2. Carry out labelling of cabinets, appliances, apparatus and chemicals
3. Keep devices and laboratory equipment stored properly
4. Store organic and inorganic chemicals properly
5. Handle and store substances and chemicals according to school policies and procedures
6. Handle and store teaching aids (ABM) carefully and efficiently
7. Provide hands-on wire connector for circuit connection to meet practical needs
8. Cut and shape glass vessels to meet practical needs
9. Provide, store and dispose of fresh specimens to fulfill practical requirements
10. Maintain, repair and record/report any laboratory furniture damage
11. Maintain, repair and record/report any laboratory water pipe damage
12. Maintain laboratory gas pipes
13. Inspect and replace minor damage to equipment
14. Collect instruments and apparatus for cleaning
15. Maintain laboratory refineries
16. Adhere to Occupational Safety and Health procedures



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - ADMINISTRATION OPERATION

LEVEL 2

GENERAL ADMINISTRATION ASSISTANT

A General Administration Assistant is responsible for ensuring the efficient day-to-day operation of the office, support the work of management and other staff, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out office housekeeping activities
2. Assist in typing official documents and perform work related to administrative affairs
3. Record and update staff personal files
4. Operate the filing procedure such as identifying types / categories of files
5. Record file entry and exit
6. Manage file closing
7. Administer administrative forms, letters and reports
8. Provide counter services
9. Adhere to Occupational Safety and Health procedures



PRIMARY & SECONDARY EDUCATION

ADMINISTRATION - ADMINISTRATION OPERATION

LEVEL 3

ADMINISTRATIVE ASSISTANT (OPERATIONAL AND CLERICAL)

An Administrative Assistant (Operational And Clerical) is responsible for carrying out clerical and operational duties at the implementation group levels that include clerical and operations general administrative tasks, personnel management, reception and processing services, data and information, handling communication equipment to help school operations according to occupational safety and health practices and procedures.

In particular the person will:

1. Perform clerical duties:
 - (a) Carry out office administrative tasks
 - (b) Handle the personnel service management system
 - (c) Handle secretarial activities
 - (d) Type and provide official documents as directed
 - (e) Oversee record activities
 - (f) Oversee financial activities
 - (g) Oversee filing activities
2. Perform operational duties:
 - (a) Maintain and enforce school /office security
 - (b) Maintain and enforce school /office hygiene
 - (c) Maintain school /office utility
 - (d) Maintain counter reception and processing services
 - (f) Manage data and information
 - (g) Administer implementation of school/ office working culture and protocol
 - (h) Control the operation of communication equipment / communication transmission



EDUCATION SERVICES

PRIMARY AND SECONDARY EDUCATION

LEVEL 4

CHIEF CLERK

Chief Clerks are designated to oversee and direct the administrative services of a school. They assign responsibilities to administrative assistants and ensure the schools are equipped with the supplies and services needed.

In particular the person will:

1. Supervise filing management system and correspondences of the organization.
2. Supervise and monitor drivers and vehicle maintenance tasks.
3. Supervise and monitor support staff duties.
4. Manage office equipment maintenance.
5. Ensure counter management system functionality and efficiency.
6. Provide and manage staffing budget.
7. Gather information for budget expenditure preparation.
8. Evaluate annual support staff appraisal report
9. Supervise subordinates' performance according to Standard Operating Procedure
10. Adhere to Occupational Safety and Health procedures



PRIMARY & SECONDARY EDUCATION

LEADERSHIP - ADMINISTRATION

LEVEL 5

ACADEMIC SENIOR ASSISTANT TEACHER

Academic Senior Assistant Teacher is responsible for assisting Headmaster/Principal to plan, organize and implement programs of excellence dedicated to the subjects in school and encourage subject teachers to repair or build competence, attitude, leadership, knowledge, skills, and personality in curriculum management.

In particular the person will:

1. Obtain and check current syllabus and teaching plans are adjusted according to the requirements of that particular year / class
2. Choose and suggest textbooks to school administrator to be used by students
3. Prepare learning corners and materials and their usage
4. Establish a question bank
5. Analyze student results and provide suggestion for areas of improvement
6. Carry out teaching staff development initiative
7. Determine minimum number and types of exercises
8. Cooperate with academic associations to improve student learning achievement in the subject
9. Prepare expenditure budget for curriculum implementation
10. Design special programs for students with 3M issues
11. Manage official files of the committee
12. Conduct committee meetings with teaching staff
13. Supervise subordinates' performance according to Standard Operating Procedure
14. Adhere to Occupational Safety and Health procedures



PRIMARY & SECONDARY EDUCATION

LEADERSHIP - ADMINISTRATION

LEVEL 5

ADMINISTRATIVE SENIOR ASSISTANT TEACHER

An Administrative Senior Assistant Teacher is responsible for assisting the Headmaster/Headmistress/Principal in matters concerning the curriculum, administration, public relations and security. He / she helps in performing the Headmaster/Principal's duties during his / her absence, supervising and evaluating the teaching process as well as assisting the Headmaster/Headmistress/Principal in all aspects of planning and management of the school, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage school administration according to MOE's professional circular, general orders and regulations to ensure education management and school administration effectiveness.
 - a. Handle cost-effective, efficient and effective financial affairs of the school according to rules and procedures pertaining to financial and recent developments.
 - b. Manage assets according to established procedures to ensure proper asset management.
 - c. Manage proper management of school organization according to MOE's professional circular, teacher's ethics, the National Education Association and the rules of education to ensure proper management of school organization and self-development implemented effectively.
 - d. Manage data information for teachers, support staff and students established by professional circulars to ensure accurate and current data school.
 - e. Manage the school calendar according to education regulations [term, day and school holidays] 1998.
 - f. Carry out Performance Appraisal Report based on rules and regulations to ensure transparent, fair, confidential and professional assessment.

- g. Plan and oversee the management of the test and assessment to ensure the effectiveness and validity according to prescribed standards.
 - h. Mobilize all resources to support the implementation of the curriculum program based on MOE's professional circular to ensure quality education available to all students.
 - i. Observe classroom teaching and learning process according to the established procedures to improve the quality of teaching and learning.
 - j. Lead in designing counseling and rehabilitation program as well as supervising and monitoring the implementation in accordance with established procedures.
 - k. Develop teaching timetable and schedule of substitute teachers and managing its implementation in accordance with the rules and MOE's professional circular to ensure the smooth implementation of the teaching and learning process.
2. Manage teaching and learning process according to national school curriculum to ensure effective management of teaching and learning in accordance with MOE's Professional Circulars.
- a. Create conducive classroom environment and safety in accordance with the management procedure of classes to ensure effective students learning.
 - b. Plan and implement classroom teaching and learning according to national school curriculum to ensure learning outcomes achieved.
 - c. Provide test specification table in accordance with the principles of testing and assessment.



PRIMARY & SECONDARY EDUCATION

LEADERSHIP - STUDENT AFFAIR

LEVEL 5

SENIOR ASSISTANT TEACHER OF STUDENT AFFAIRS

A Senior Assistant Teacher for Student Affairs is responsible for assisting the Headmaster/Principal in achieving the National Education Policy and ensuring student welfare, discipline and the application of values, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage student discipline in accordance with the instructions, regulations and circulars:
 - a. Manage issues that arise in connection to Textbook Loan Scheme in accordance with MOE's professional circulars
 - b. Manage and monitor safety, health and hygiene (3K), happiness and harmony in school by MOE's professional circulars to ensure the effective implementation of the Integrated School Health Program
 - c. Manage and monitor safety, health, cleanliness and harmony in school (3K) by MOE's professional circulars to ensure the effective implementation of the 3K program
 - d. Plan, oversee and monitor the management of scholarships and other assistance in accordance with MOE's professional circulars to ensure effective management of pupils' welfare
 - e. Plan, supervise, monitor and evaluate the management of the canteen according to MOE's professional circulars on cafeteria management

- f. Manage and monitor the Guidance and Counseling service by the MOE to ensure Circular Professional Guidance and Counseling services are rendered effectively
 - g. Manage effective implementation of the hostel management in accordance with MOE's professional circulars
 - h. Manage and monitor all actions taken for drug-free students in accordance with MOE's professional circulars and Dangerous Drugs Act 1952
 - i. Manage, monitor and take action to ensure student registration and orientation (secondary school) / new student transition program (primary school) run smoothly and effectively in accordance with MOE's professional circulars
 - j. Design and implement integration programs between the relevant ministries according to related Circulars
 - k. Handle cost-effective, efficient and effective financial affairs of the school according to rules and procedures pertaining to financial and recent developments
 - l. Manage assets to ensure proper asset management according to procedures
 - m. Supervise and monitor management and implementation of crime prevention clubs in accordance with relevant ministry circulars to avoid students' engagement in criminal wrongdoings
2. Manage teaching and learning process according to national school curriculum to ensure effective management of teaching and learning in accordance with MOE's Professional Circulars
- a. Create conducive classroom environment and safety in accordance with the management procedure of classes to ensure effective student learning
 - b. Plan and implement classroom teaching and learning according to national school curriculum to ensure learning outcomes are achieved
 - c. Provide test specification table in accordance with the principles of testing and assessment
 - d. Build and execute test items and assessment to ensure testing and assessment can be conducted as planned



PRIMARY & SECONDARY EDUCATION

LEADERSHIP - CO-CURRICULUM

LEVEL 5

SENIOR ASSISTANT TEACHER OF CO-CURRICULUM

A Senior Assistant Co-Curriculum is responsible for assisting the Headmaster/Principal in achieving the goals of the National Education and promoting the involvement and participation of students in co-curricular activities, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage all school's extra-curricular activities according to MOE's Professional Circulars to promote the involvement and participation of students in co-curricular activities:
 - a. Supervise extra-curricular activities according to MOE's Professional Circulars to achieve its objectives
 - b. Assess the implementation of extra-curricular activities to improve its effectiveness in accordance with directives and regulations
 - c. Plan, implement and oversee the effective management of school cooperative in accordance with regulations, by-laws of the cooperative and MOE's Professional Circulars
 - d. Plan and implement curriculum management in accordance with MOE's professional circulars to ensure effective implementation curriculum
 - e. Handle cost-effective, efficient and effective financial affairs of the school according to rules and procedures pertaining to financial and recent developments
 - f. Manage school's assets according to established procedures to ensure proper asset management

2. Manage teaching and learning process according to national school curriculum to ensure effective management of teaching and learning in accordance with MOE's professional circulars.
 - a. Create conducive classroom environment and safety in accordance with the management procedure of classes to ensure effective students learning
 - b. Plan and implement classroom teaching and learning according to national school curriculum to ensure learning outcomes are achieved
 - c. Provide test specification table accordance with the principles of testing and assessment
 - d. Build and execute test items and assessment to ensure testing and assessment can be conducted as planned



PRIMARY & SECONDARY EDUCATION

LEADERSHIP

LEVEL 6

SCHOOL HEADMASTER / PRINCIPAL

A Headmaster/Principal is responsible for managing the curriculum, co-curricular and student affairs in accordance with Ministry of Education policy and initiative. He / She is also required to demonstrate mastery of the knowledge of the subjects he / she teaches according to the syllabus assessment to ensure effective management of teaching and learning, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage and lead school / organization by moving all resources to achieve the goals.
2. Carry out overall management of school curriculum, co-curricular and student affairs .
3. Manage the whole curriculum and measure the latest developments in education to support the implementation of effective teaching and learning.
4. Lead and manage co-curricular activities to support and enhance teaching and learning process based on national education policy and regulations as well as the latest developments.
5. Establish a management system of effective student affairs in accordance with the national education policy, law and regulation as well as the latest developments.
6. Handle cost-effective, efficient and effective school financial management system.
7. Carry out the acquisition and management of to ensure the implementation of procurement and asset management in compliance with established procedures.

8. Create a system of administration and office services efficiently towards achieving a robust service delivery system.
9. Manage efficient and effective environmental and physical facilities of schools.
10. Create and manage efficient, effective and continuous human resource development.
11. Establish good relationships with parents / guardians, outsiders and local communities and try to engage them in partnerships.
12. Manage teaching and learning process according to national school curriculum to ensure effective management of teaching and learning in accordance with MOE's professional circulars.



EDUCATION SERVICES

PRIMARY AND SECONDARY EDUCATION

GENERAL EDUCATION

LEVEL 4

GENERAL EDUCATION TEACHER

General Education Teacher is responsible for planning, preparing and presenting lessons and carrying out assessment to determine students' academic performance achievement, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, prepare and present lessons according to determined general education curriculum
2. Prepare, assign and review student homework
3. Carry out student monthly test and examination according determined schedule
4. Carry out student academic performance evaluation
5. Determine student weaknesses and carry out remedial classes / counseling
6. Participate in Subjects Committee activities
7. Provide feedback to parents on student's academic progress
8. Prepare teaching and learning reports for any issues and for further action.
9. Prepare and maintain teaching and learning aids/materials
10. Organize and participate in school events, outings and activities
11. Prepare and update subject information corners in classes
12. Assist Academic Senior Assistant Teacher with the Question Bank
13. Adhere to Occupational Safety and Health procedures



EDUCATION SERVICES

PRIMARY AND SECONDARY EDUCATION

ISLAMIC EDUCATION

LEVEL 4

ISLAMIC EDUCATION TEACHER

Islamic Education Teacher is responsible for planning, preparing and presenting lessons and carrying out assessment to determine students' Islamic education performance achievement, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, prepare and present lessons according to determined Islamic education curriculum
2. Prepare, assign and review student homework
3. Carry out student monthly test and examination according determined schedule
4. Carry out student academic performance evaluation
5. Determine student weaknesses and carry out remedial classes / counseling
6. Participate in Subjects Committee activities
7. Provide feedback to parents on student's Islamic education progress
8. Prepare teaching and learning reports for any issues and for further action
9. Prepare and maintain teaching and learning aids/materials
10. Organize and participate in school events, outings and activities
11. Prepare and update subject information corners in classes
12. Assist Head of Academic Senior Assistant Teacher with the Question Bank
13. Adhere to Occupational Safety and Health procedures



EDUCATION SERVICES

PRIMARY AND SECONDARY EDUCATION

TECHNICAL VOCATIONAL EDUCATION

LEVEL 4

TECHNICAL VOCATIONAL EDUCATION TEACHER

Technical Vocational Education Teacher is responsible for planning, preparing and presenting lessons and carrying out assessment to determine students' technical vocational education performance achievement, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, prepare and present lessons according to determined technical vocational education curriculum
2. Prepare, assign and review student homework
3. Carry out student monthly test and examination according determined schedule
4. Carry out student academic performance evaluation.
5. Carry out student remedial classes / counseling for problem with issues
6. Participate in Subjects Committee activities
7. Provide feedback to parents on student's technical vocational education progress
8. Prepare teaching and learning reports for any issues and for further action
9. Prepare and maintain teaching and learning aids/materials
10. Organize and participate in school events, outings and activities
11. Prepare and update subject information corners in classes
12. Assist Academic Senior Assistant Teacher with the Question Bank



EDUCATION SERVICES

PRIMARY AND SECONDARY EDUCATION

SPORTS EDUCATION

LEVEL 4

SPORTS EDUCATION TEACHER

Sports Education Teacher is responsible for planning, preparing and presenting lessons and carrying out assessment to determine students' sports education performance achievement, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, prepare and present lessons according to determined sports education curriculum
2. Carry out sports training
3. Coordinate student training for sports competition
4. Carry out student monthly test and examination according determined schedule
5. Carry out student academic performance evaluation
6. Determine student weaknesses and carry out remedial classes / counseling
7. Participate in Subjects Committee activities
8. Provide feedback to parents on student's sports education progress
9. Prepare teaching and learning reports for any issues and for further action
10. Prepare and maintain teaching and learning aids/materials
11. Organize and participate in school events, outings and activities
12. Prepare and update subject information corners in classes
13. Assist Academic Senior Assistant Teacher with the Question Bank



EDUCATION SERVICES

PRIMARY AND SECONDARY EDUCATION

SPECIAL NEEDS EDUCATION

LEVEL 4

SPECIAL NEEDS EDUCATION TEACHER

Special Needs Education Teacher is designated to carry out the teaching of the curriculum and observe and record the progress of his / her class. A Special Needs Education Teacher must keep up-to-date with developments in the subject area, new resources, methods and national objectives, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Teach all areas of special needs education curriculum
2. Organize the classroom and learning resources and create displays to encourage a positive learning environment
3. Update Individual Teaching Plan file (*Rancangan Pengajaran Individu - RPI*)
4. Prepare and update students' personal file
5. Handle special needs student welfare, safety and discipline
6. Handle new registration of special education students
7. Coordinate special needs students who will continue their studies in secondary stream or vocational stream
8. Manage textbooks for special education students
9. Identify potential special needs students eligible for public examinations
10. Plan, prepare and present lessons according to determined special needs education curriculum
11. Carry out assessment and record special needs students' development
12. Provide feedback to parents on special needs student's progress

OCCUPATIONAL DESCRIPTION
SUBSECTOR: EDUCATION SERVICES
JOB AREA: HIGHER EDUCATION



HIGHER EDUCATION

MANAGEMENT SERVICES - HUMAN RESOURCES

LEVEL 3

ADMINISTRATIVE ASSISTANT

An Administrative Assistant is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



MANAGEMENT SERVICES

HUMAN RESOURCES

LEVEL 4

HUMAN RESOURCE EXECUTIVE

A Human Resource Executive is designated to assist the HR Manager in performing the basic functions of the HR department, handling areas such as personnel management, social welfare, maintenance of HR records and adhere to occupational safety and health practices and procedures.

In particular this person will:

1. Perform resume and application review
2. Perform recruitment interviews
3. Perform outsourcing recruitment through agencies
4. Administer staff benefits and compensation record
5. Carry out new and existing employee training and orientation
6. Administer termination documentation for termination of staff
7. Handle staff statutory obligations such as EPF, SOCSO, taxes, gratuity, bonus etc.
8. Administer staff salary, bonus, increment, salary slip, and etc.
9. Handle contract staff
10. Coordinate staff letters/documents/certificates etc.
11. Monitor staff attendance and punctuality
12. Manage employee information system or database
13. Coordinate staff appraisal report
14. Manage staff grievances or queries



MANAGEMENT SERVICES

HUMAN RESOURCES

LEVEL 5

HUMAN RESOURCE MANAGER

Human Resource Manager develops policies, directs and coordinates human resources activities such as employment, compensation, labor relations, benefits, training, employee services, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce wage and salary reports
2. Produce company policy regarding equal employment opportunities, compensation, and employee benefits
3. Manage human resource information system
4. Manage HR records as required by the human resource laws and regulations
5. Perform corporate presentations on human resources policies and practices
6. Perform recruitment, interviews, tests, and selects employees
7. Manage staff records on benefits and compensation
8. Plan and manage management training and development program
9. Manage employee issues such as grievances, discipline and welfare
10. Produce performance review program, salary administration program and benefits programs
11. Plan and produce human resource budget
12. Produce reports and recommends procedures to reduce absenteeism and turnover
13. Handle human resource hearings and investigations



MANAGEMENT SERVICES

OPERATION ADMINISTRATION

LEVEL 3

OPERATION ADMINISTRATIVE ASSISTANT

An Operation Administrative Assistant is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



MANAGEMENT SERVICES

OPERATION ADMINISTRATION

LEVEL 4

OPERATION ADMINISTRATION EXECUTIVE

An Operation Administration Executive is designated to assist the Operation Administration Manager to perform specialized functions such as data entry, accounts payable, payroll, grant report entry, organizational and program budgets, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Coordinate operation support and business functions such as data entry, account payable etc.
2. Manage operation financial management, planning, systems and control
3. Produce individual program budgets such as training and orientation budgets
4. Perform invoicing to funding sources, including calculation of completed units of service
5. Perform payroll management, including tabulation of accrued employee benefits
6. Manage disbursement of checks for agency expenses
7. Handle operation fiscal documents
8. Perform managerial duties in accordance with organizational Standard Operating Procedure



MANAGEMENT SERVICES

OPERATION ADMINISTRATION

LEVEL 5

OPERATION ADMINISTRATION MANAGER

An Operation Administration Manager is designated to assist the Chief Operating Officer and responsible for managing and performing the organization operation, preparing budgets and providing leadership for the organization's operational functions. He / She is also required to contribute to the development and implementation of organizational strategies and adhere to safety and health policies and practices.

In particular the person will:

1. Manage the operation systems, processes, reporting, information flow, business process and etc.
2. Manage the operation financial and budgetary activities
3. Manage the business product line and services
4. Coordinate the collaboration with other executives, staff and board members
5. Manage approved operations contracts and agreements
6. Produce departmental or organizational goals, policies and procedures
7. Perform the appointment of department heads and managers
8. Perform the analysis of financial statements, sales reports and other performance indicators
9. Carry out student registration
10. Carry out examination administration activities
11. Verify production of student certificate
12. Coordinate the university convocation ceremony
13. Perform managerial duties in accordance with organizational Standard Operating Procedure.



MANAGEMENT SERVICES

HUMAN RESOURCES

LEVEL 6

CHIEF OPERATING OFFICER (COO)

The Chief Operating Officer (COO) is responsible for leading and managing a comprehensive array of services and programs. He / She will be responsible for all activities pertaining to operation management of the organization including planning, budget verifying, standard operating procedure and ensuring operation compliance including safety and health practices and procedures.

In particular the person will:

1. Perform a continuous quality improvement process such as system/process improvement
2. Manage operation activities such as customer services, cost management, staff complaints etc.
3. Prepare and produce operation budget such as cash flow statement, financing requirements etc.
4. Prepare and produce operation strategic goals and objectives such as source of revenue and sales.
5. Carry out good communication skills
6. Coordinate team work project
7. Plan and manage staff training and development programs
8. Perform annual performance appraisals, salary adjustments and staff welfare
9. Produce system policies, internal controls, accounting standards, and procedures
10. Carry out the annual budget process (preparation) for operation department
11. Perform managerial duties in accordance with organizational Standard Operating Procedure
12. Plan, coordinate, and execute the annual budget process for operation department
13. Carry out managerial duties in accordance with organizational Standard Operating Procedure



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - MARKETING

LEVEL 3

MARKETING ADMINISTRATIVE ASSISTANT

A Marketing Administrative Assistant for Marketing & Corporate Communications is designated to assist the Marketing Executive to perform administrative and office support activities related to marketing and communication, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare schedules for tradeshow and events, email campaigns, public relations and communications, in-house label printing, advertisements, promotions, direct mail, and other marketing initiatives
2. Handle social media sites and corporate websites
3. Carry out digital assets of marketing collateral, product images, and corporate identity
4. Perform writing, proofreading, and distribution of news releases and other communications
5. Produce reports on the impact of social media on overall marketing efforts
6. Handle inventory such as promotional items
7. Carry out the production of photography and video for marketing
8. Conduct market research, customer case studies, references, and testimonials
9. Monitor competitor websites, news releases, and relevant communication



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - MARKETING

MARKETING

LEVEL 4

MARKETING EXECUTIVE

A Marketing Executive is designated to assist the Marketing Manager in performing marketing campaigns to promote a product, service or idea. It is a varied role that includes planning, advertising, public relations, event organisation, product development, distribution, sponsorship and research.

In particular the person will:

1. Carry out marketing activities with customers, colleagues, suppliers and partner organizations
2. Perform the analysis of advertising opportunities and placing adverts in the press
3. Prepare and distribute marketing materials such as leaflets, posters, flyers, newsletters, e-newsletters and DVDs
4. Manage the customers, supplier, distributor database
5. Manage contribution and sponsorship for organization
6. Conduct market research, focus group study and brainstorming.
7. Produce marketing plans and marketing operational budgets
8. Produce weekly, monthly and yearly marketing campaigns report
9. Perform administrative functions according to organization Standard Operating Procedure



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - MARKETING

LEVEL 5

MARKETING MANAGER

A Marketing Manager is designated to assist the Chief Marketing Officer in planning, directing and coordinating the sales, marketing and development activities within a government agency, corporate business, or organization.

In particular the person will:

1. Carry out sales and marketing activities or programmes
2. Manage customer services and after-sales services and maintaining sound customer relations
3. Produce sales and marketing policies on sales methods, customer service standards, special incentives and special campaigns
4. Produce sales and marketing policies on merchandising methods and distribution method/agents
5. Manage and control marketing expenditure and ensuring efficient use of resources
6. Manage and monitor customer service, invoicing, payments and administration costs, planning and directing daily operations
7. Produce and implement training and development plan for marketing and corporate communication staff
8. Perform managerial duties according to organization Standard Operating Procedure



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - CORPORATE COMMUNICATION

LEVEL 3

CORPORAT COMMUNICATION ADMINISTRATIVE ASSISTANT

A Corporate Communication Administrative Assistant is designated to perform administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance
6. Maintain company's client (individual and corporate) database



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - CORPORATE COMMUNICATION

LEVEL 4

CORPORATE COMMUNICATION EXECUTIVE

Corporate Communication Executive is designated to assist the Corporate Communication Manager on a variety of tasks such as providing supervision and direction to staff and often works in conjunction with marketing department activities, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce online advertising, marketing email, and social media promotions
2. Manage the web site and content development
3. Carry out press releases, bylined articles, white papers, media relations content, case studies, social media content, corporate videos and marketing collateral
4. Prepare marketing and corporate communication budget and cost control
5. Manage the company clients (individual and corporate) database
6. Handle print and electronic marketing and promotional materials
7. Produce marketing campaigns such as sales and promotions
8. Perform public relations initiatives on company products and services
9. Produce communications strategy for key media contacts and customer references
10. Conduct research on media coverage and industry trends
11. Perform administrative functions according to Organization Standard Operating Procedure



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - CORPORATE COMMUNICATION

LEVEL 5

CORPORATE COMMUNICATION MANAGER

Corporate Communication Manager is designated to assist the Chief Marketing Officer in coordinating the communications output within a company. He or she also creates and delivers emails, direct mail, brochures, newsletters, and other publications according organisation Standard Operating Procedure, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage the print and online advertising and email marketing
2. Manage web site and content development
3. Produce marketing and corporate communication budget and cost tracking
4. Manage marketing and promotional materials, both print and electronic including manage, design, and launch marketing campaigns
5. Manage the marketing and corporate communication site design and operation
6. Carry out event budget and expenses
7. Manage public relations initiatives to promote products and services
8. Carry out marketing communications campaigns and strategies for key media contacts and customer references
9. Produce and manage press releases, media relations contents, case studies, corporate newsletter content, etc.
10. Conduct market research on media coverage, industry trends and media outreach
11. Carry out managerial duties according to Organisation Standard Operating Procedure



MANAGEMENT SERVICES

MARKETING & CORPORATE COMMUNICATION - CORPORATE COMMUNICATION

LEVEL 6

CHIEF MARKETING OFFICER

Chief Marketing Officer is responsible for overseeing marketing initiatives within an organization including sales management, product development, distribution channel management, marketing communications, including advertising and promotions, pricing, market research, customer service and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage sales growth and marketing strategies
2. Manage revenue generation
3. Carry out risk mitigation
4. Prepare overall marketing strategy
5. Produce programs with quantifiable objectives to measure results
6. Manage marketing and corporate communication budget and expenses
7. Modify and redirect business intelligence strategies
8. Monitor and direct the efforts of the marketing team
9. Develop market segmentation and product competitiveness analysis
10. Produce product roadmap such as product life cycle



MANAGEMENT SERVICES

FINANCE

LEVEL 3

FINANCE ADMINISTRATIVE ASSISTANT

A Finance Administrative Assistant is responsible for providing administrative and support for any matters related to finance and accounts including document preparation, filing and customer service. He or she must adhere to organization financial policies and procedures at all times when handling various financial or account documentation, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform processing of financial/business forms
2. Maintain financial and business records and documents
3. Provide information to faculty, students, staff and the public on fiscal policies and procedures
4. Prepare financial or administrative reports and documents for supplies and equipment requisition approvals
5. Provide information for staff payroll preparation
6. Carry out maintenance of physical and electronic filing system



MANAGEMENT SERVICES

FINANCE

LEVEL 4

FINANCE EXECUTIVE

A Finance Executive performs finance operation activities and works under the supervision of the Finance Manager by providing baseline data for financial related decisions, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform routine internal financial operation activities
2. Prepare organizational and departmental budgets and expenditure reports
3. Consolidate bank statements and accounts payables
4. Carry out credit control and debtor ledger maintenance
5. Prepare monthly management account schedules
6. Perform scheduled ledger account reconciliations



MANAGEMENT SERVICES

FINANCE

LEVEL 5

FINANCE MANAGER

A Finance Manager plans, directs and coordinates financial operations and participates in formulating the financial policies within a government agency, corporate business, or organization, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, direct, control and coordinate internal financial operations
2. Assess organization financial situation
3. Approve departmental budgets
4. Manage financial operations
5. Control departmental expenditure
6. Represent department in financial matters with internal or external parties
7. Coordinate department staff requirements, selection training and performance appraisal with human resource department



MANAGEMENT SERVICES

FINANCE - ACCOUNT

LEVEL 3

ACCOUNTING CLERK

An Accounting Clerk handles payments by customers, balances accounts and contacts customers on delinquent accounts. An Accounting Clerk also handles accounts payable preparation, cheque mailing, communication with vendors, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Maintain accounting records
2. Perform filing of office documents
3. Reconcile bank statements
4. Maintain customer databases
5. Perform verification of financial reports
6. Prepare documentation on depreciable asset value for verification



MANAGEMENT SERVICES

FINANCE - ACCOUNT

LEVEL 4

ACCOUNTING EXECUTIVE

Accounting Executive's primary functions are to prepare accounting records, prepare invoices, collect payment from customers and keep accounts of individuals and establishments to ensure accuracy and compliance with established accounting standards and procedures. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare financial reports and statements for the management
2. Reconcile vendor balances
3. Prepare invoices
4. Collect payments from customers
5. Perform bookkeeping and general ledger functions
6. Manage and control organization and departmental budgets



MANAGEMENT SERVICES

FINANCE - ACCOUNT

LEVEL 5

ACCOUNTANT

Accountants plan, organize and administer accounting systems for individuals and establishments by examining and analyzing the accounting and financial records to ensure accuracy and compliance with established accounting standards and procedures. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan and implement budgetary accounting controls
2. Prepare organisation's financial statements for presentation to management, shareholders and statutory or other bodies
3. Prepare tax returns
4. Carry out and manage project costing and risk analysis
5. Manage cost control
6. Conduct audit reports
7. Perform the role of liquidation agent in matters relating to bankruptcy and taxation



EDUCATION SERVICES

HIGHER EDUCATION

LEVEL 6

CHIEF FINANCIAL OFFICER

Chief Financial Officer is responsible for advising the management on all matters pertaining to the management and operation of accounting, accounts receivable, accounts payable, budget management and control, bursar, student aid disbursement, budget preparation and risk management. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Develop business policies and operating procedures
2. Develop accounting and reporting techniques
3. Manage day-to-day business operations
4. Maintain the financial well-being of the organization by providing management budget, exercising executive control over university budgets, and safeguarding all financial assets of the university
5. Prepare internal budget to project future revenue and establish policies for expenditures
6. Manage compliance according to professional accounting standards, rules and regulations
7. Manage procurement and payment for goods and services
8. Negotiate goods or service contracts
9. Carry out the compliance of governing regulations and addressing risk management issues
10. Collaborate with president's office on student aid bursary disbursement



TRAINING SERVICES

HIGHER EDUCATION

LEVEL 7

CHIEF EXECUTIVE OFFICER

Chief Executive Officer is responsible for giving vision, direction and leadership to the formulation and achievement of the institution's philosophy, objectives and strategies. He/She is also required to ensure that the institution is providing high standard of education and training services in accordance with its establishment objectives. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage overall institution business planning, financial security and effective resource management proposal
2. Lead management team in business strategic planning
3. Develop procedures and policies
4. Evaluate business reports and strategic implementation
5. Formulate marketing strategies and campaigns for institution
6. Plan and monitor staff training and development requirements
7. Authorize student aid bursary disbursement
8. Lead and manage university convocation main committee



ACADEMIC MANAGEMENT

CURRICULUM DEVELOPMENT

LEVEL 4

LECTURER

A Lecturer is designated to carry out lecturing and assessment, assist the Curriculum Coordinator in coordination with relevant parties (such as students, faculty members etc.) and assist in the development and implementation of university program structure and procedures. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Design and modify curricula and prepare courses of study in accordance with requirements
2. Conduct lectures, tutorials, seminars and laboratory sessions
3. Carry out discussions that stimulate independent thought among students
4. Perform supervision, where appropriate, on experiments and practical work undertaken by students
5. Carry out administering, evaluating and marking of assignments and examination papers
6. Provide direction and supervision on final year project papers for diploma and undergraduate students
7. Perform research and development of concepts, theories and operational methods for application in the industry and other fields
8. Produce scholarly books, papers or articles
9. Plan student extra-curricular activities



ACADEMIC MANAGEMENT

CURRICULUM DEVELOPMENT

LEVEL 5

CURRICULUM COORDINATOR

A Curriculum Coordinator is designated to assist the Curriculum Development Designer in handling the coordination in curriculum development, collaborating with relevant parties and developing and implementing university program structures and procedures. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform collaboration with the Curriculum Development Designer to develop and improve university programs structures
2. Cooperate with the faculty members to implement curriculum and academic support activities
3. Carry out individual academic support services as needed
4. Handle incoming students in making a smooth transition to their curriculum
5. Produce confidential curriculum documents and serve on committees as assigned
6. Manage the creation and collection of data for program and accreditation reports
7. Produce accreditation reports and documents
8. Manage implementation processes and procedures to support exponential growth at the university



ACADEMIC MANAGEMENT

CURRICULUM DEVELOPMENT

LEVEL 6

CURRICULUM DEVELOPMENT DESIGNER

A Curriculum Development Designer is designated to assist the Curriculum Development Specialist in designing, developing and implementing university program structures and procedures. He/She is to also assist with department/faculty activities with the relevant parties (such as MQA etc.) as required and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform collaboration with the assessment department to develop programs to support the academic development of the university
2. Develop and maintain curricular support for the programs
3. Collaborate with the faculty course coordinator and faculty members
4. Manage the implementation and supervise academic curriculum support activities such as training
5. Produce weekly, monthly, and yearly reports related to services provided to faculty and students
6. Carry out individual academic support services
7. Perform work collaboration with faculty and course coordinator in developing interventions for students experiencing difficulty with course work
8. Prepare confidential documents and serve on committees as assigned
9. Conduct data analysis and make recommendations to the curriculum development specialist and deans
10. Perform data collection for program and accreditation reports
11. Produce accreditation reports as required by related parties
12. Handle faculty development sessions related to the curriculum



ACADEMIC MANAGEMENT

CURRICULUM DEVELOPMENT

LEVEL 7

CURRICULUM DEVELOPMENT SPECIALIST

A Curriculum Development Specialist is designated to perform the planning, development, establishment, and implementation of university programs and curriculum, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce and handle the university/department curriculum and student development programs
2. Collaborate with the assessment department to support the academic development of the university
3. Produce activities (such as training) related to curriculum development for course coordinator and faculty
4. Produce reports related to services provided to faculty and students
5. Collaborate with faculty and course coordinator in developing interventions and programs for students experiencing difficulty with course work
6. Produce confidential documents related to university curriculum
7. Prepare and review curriculum documents and make recommendations to the deans
8. Produce accreditation reports for the dean and any related departments as required



ACADEMIC MANAGEMENT

TEACHING FACULTY

LEVEL 5

SENIOR LECTURER

A Senior Lecturer is designated to contribute to the scholarly and intellectual life of the faculty by conducting high quality research and by teaching undergraduate, postgraduate and research students as appropriate and as instructed. He/She is also required to participate in the faculty and wider department activities, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out graduate and undergraduate teaching
2. Conduct research, which enhances the school's high reputation, as a research-led institution. Publication of articles in refereed journals is expected
3. Perform examination duties, i.e. the production of exam questions/papers, exam marking and moderation
4. Perform as academic advisor and supervisor to students, such as Master and PhD students, as appropriate
5. Produce high quality standard of teaching and, if necessary, seek further training, guidance and skills development to ensure that standards are maintained and improved
6. Handle, as appropriate, any research grants secured, including the recruitment and management of any research assistants. To be responsible for the timely delivery of associated research reports
7. Produce and disseminate knowledge and enhance the reputation of the university by establishing contacts with the wider academic community, participating in seminars, delivering conference

presentations, organizing conferences/events where appropriate, engaging with events of interest to alumni and the wider public

8. Monitor the progress of students in their studies and report to the Registrar if necessary and counsel students who are not meeting the required standards (i.e., CPA/CGPA)
9. Design and modify curricula and prepare courses of study in accordance with requirements



ACADEMIC MANAGEMENT

TEACHING FACULTY

LEVEL 6

ASSOCIATE PROFESSOR

An Associate Professor is designated to contribute to the scholarly and intellectual life of the faculty by conducting high quality research and by teaching undergraduate, postgraduate and research students as appropriate and as instructed. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out graduate and undergraduate teaching
2. Conduct research, which enhances the school's high reputation, as a research-led institution. Publication of articles in refereed journals is expected
3. Perform examination duties, i.e. the production of exam questions/papers, exam marking and moderation
4. Perform as academic advisor and supervisor to students, such as Master and PhD students as appropriate
5. Produce high quality standard of teaching and, if necessary, seek further training, guidance and skills development to ensure that standards are maintained and improved
6. Manage as appropriate any research grants secured, including the recruitment and management of any research assistants. To be responsible for the timely delivery of associated research reports
7. Produce and disseminate knowledge and enhance the reputation of the university by establishing contacts with the wider academic community, participating in seminars, delivering conference presentations, organizing conferences/events where appropriate, engaging with events of interest to alumni and the wider public

8. Design and develop the overall curricula
9. Produce a quality assurance framework within the university's overall framework, including the validation of the courses
10. Perform university-wide planning and strategic development, and departmental-level strategic planning



ACADEMIC MANAGEMENT

TEACHING FACULTY

LEVEL 7

PROFESSOR

A Professor is designated to contribute to the scholarly and intellectual life of the faculty by conducting high quality research and by teaching undergraduate, postgraduate and research students as appropriate and as instructed. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform graduate and undergraduate teaching
2. Conduct research, which enhances the school's high reputation, as a research-led institution. Publication of articles in refereed journals is expected
3. Carry out examination duties, i.e. the production of exam questions/papers, exam marking and moderation
4. Perform as student's academic advisor and supervisor
5. Carry out a high quality standard of teaching and, if necessary, seek further training, guidance and skills development to ensure that standards are maintained and improved
6. Manage as appropriate any research grants secured, including the recruitment and management of any research assistants. To be responsible for the timely delivery of associated research reports
7. Produce and disseminate knowledge and enhance the reputation of the university by establishing contacts with the wider academic community, participating in seminars, delivering conference presentations, organizing conferences/events where appropriate, engaging with events of interest to alumni and the wider public

8. Design and develop the overall curricula
9. Produce a quality assurance framework within the university's overall framework, including the validation of the courses
10. Perform university-wide planning and strategic development, and departmental-level strategic planning



ACADEMIC MANAGEMENT

FACULTY/SCHOOL/DEPARTMENT - MANAGEMENT

LEVEL 4

PROGRAM COORDINATOR

A Program Coordinator is designated to assist the Head of Department in performing administrative duties related to program development, reviewing, updating, and implementing the university program structures/procedures. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce a list of courses to be offered in each semester
2. Perform as students advisor on courses to be taken in each semester
3. Produce reports on student performance each semester
4. Cooperate with the head of department in student selection process
5. Manage and update the student handbook
6. Produce program information for faculty and students, such as timetables and teaching hours
7. Manage the student management system, such as updating student information and courses to offered
8. Carry out accreditation process, such as site visits and internal audit
9. Produce training and development programs for teaching and non-teaching members
10. Cooperate with other coordinators, institutes and organizations to share information and to gain knowledge that would help improve the program



ACADEMIC MANAGEMENT

FACULTY/SCHOOL/DEPARTMENT - MANAGEMENT

LEVEL 5

HEAD OF DEPARTMENT

A Head of Department is designated to lead the department's administration and operation including departmental planning and expenditure control. He/She is also required to assist the Deputy Dean in strategic positioning and pursuing strategic goals as derived from the university's vision and strategic framework and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce department positioning strategy in-line with the university's strategic framework
2. Manage department research, teaching and community interaction
3. Perform promotion activities to promote the department nationally and internationally
4. Monitor the implementation of changes to the academic programs to ensure meaningful academic outcomes, quality, effectiveness and financial viability
5. Carry out program accreditation process
6. Manage program external assessment or external audit
7. Produce accepted performance standards of all staff within the department
8. Recommend staff for promotion to the decision-making body concerned
9. Produce proposals for the annual fixing of tuition and material fees for the various academic programs



ACADEMIC MANAGEMENT

FACULTY/SCHOOL/DEPARTMENT - MANAGEMENT

LEVEL 6

DEPUTY DEAN

A Deputy Dean is designated to execute and monitor the implementation of the school's and university's strategies including new program development, program planning, validation and review of their effectiveness. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage the faculty positioning strategy in-line with the university's strategic framework
2. Manage faculty research, teaching and community interaction
3. Carry out promotion activities to promote the faculty nationally and internationally
4. Manage and implement changes to the faculty academic programs to ensure meaningful academic outcomes, quality, effectiveness and financial viability
5. Manage faculty programs' accreditation process
6. Manage faculty programs' external assessment or external audit
7. Produce faculty's accepted performance standards
8. Recommend staff for promotion to the decision-making body concerned
9. Produce proposals for the annual fixing of tuition and material fees for the various academic programs



ACADEMIC MANAGEMENT

FACULTY/SCHOOL/DEPARTMENT - MANAGEMENT

LEVEL 7

DEAN

A Dean is responsible for the academic curriculum of the institution, providing leadership to the faculty and managing the processes through which teaching is conducted and administered. He/She ensures that the curriculum appropriately reflects the mission of the campus and that it is as current as possible in terms of disciplines, technology, delivery, and oversees the hiring and training of educational faculty and staff, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Cooperate with the university's top management such as updating faculty activities and performance
2. Manage authority over all staff in the faculty in terms of policy laid down by the university senate and council
3. Manage the faculty position with regard to research, teaching and community interaction
4. Manage and control the annual budget and formulate proposals for the annual fixing of tuition and material fees for the various academic programs
5. Produce the faculty's strategic plan in-line with the university's strategic plan
6. Manage the faculty's financial performance or target
7. Promote the faculty nationally and internationally
8. Produce accepted performance standards of all staff within the faculty
9. Produce a rolling staff plan
10. Recommend the filling of posts and the promotion of staff to the decision-making body concerned.



ACADEMIC MANAGEMENT

QUALITY ASSURANCE (QA)

LEVEL 4

QUALITY ASSURANCE EXECUTIVE

A Quality Assurance Executive is designated to carry out the implementation of quality assurance procedures. He/She is also required to collect data and prepare reports on the implementation of quality assurance procedures, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out the rolling-out of quality review schedule
2. Perform quality review process
3. Produce the information and support for appropriate corporate oversight of the quality review process
4. Conduct qualitative and quantitative data-gathering linked to quality assurance
5. Carry out qualitative and quantitative data analysis pertaining to quality assurance
6. Liaise with quality and qualifications authorities and attend policy briefing sessions on quality assurance in the higher education system



ACADEMIC MANAGEMENT

QUALITY ASSURANCE (QA)

LEVEL 5

QUALITY ASSURANCE ASSISTANT MANAGER

Quality assurance assistant managers work with other staff within organizations to determine and implement procedures and quality standards, and to monitor these against determined targets. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out overall quality review process
2. Manage the progression of quality assurance reports
3. Produce the information for appropriate corporate oversight of the quality review process
4. Carry out qualitative and quantitative data-gathering linked to quality assurance
5. Conduct the qualitative and quantitative data analysis pertaining to quality assurance and report the findings as required
6. Produce the Quality Office budget and manage expenditure
7. Liaise with Quality and Qualifications authorities and attend policy briefing sessions on quality assurance in the higher education system



ACADEMIC MANAGEMENT

QUALITY ASSURANCE (QA)

LEVEL 6

QUALITY ASSURANCE MANAGER (QA)

A Quality Assurance Manager is designated to manage and perform the development of Quality Assurance policies and procedures in the organization including operational responsibility for coordinating and facilitating the quality review process and contribute to the enhancement of a quality culture. He/She is also required to liaise with a diverse range of students and staff, as well as high-level administrative and organizational skills, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage the rolling-out of the quality review schedule
2. Carry out the quality review process
3. Manage the progression of quality assurance reports and related recommendations towards the appropriate academic and resource oversight bodies within the university
4. Produce the information and support for appropriate corporate oversight of the quality review process
5. Conduct qualitative and quantitative data-gathering linked to quality assurance
6. Perform the qualitative and quantitative data analysis pertaining to quality assurance and report the findings for academic and resource oversight bodies, as well as student bodies within the university
7. Prepare the Quality Office budget and manage expenditure
8. Establish a good relationship with Quality and Qualifications authorities as required and attend policy briefing sessions on quality assurance in the higher education system

9.



ACADEMIC MANAGEMENT

RESEARCH & DEVELOPMENT (R&D)

LEVEL 4

R & D ASSISTANT RESEARCHER

An R&D Assistant Researcher is designated to assist with general tasks required in most courses of inquiry. This may include conducting a search for scholarly literature relevant to the research project, data collecting and field project testing. He/She is also required to assist in carrying out clerical and record-keeping tasks, including safety and health practices and procedures for the overall project and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out data collection and prepare a summarized report
2. Set up, operate and maintain various scientific apparatus
3. Performs various clerical and editorial duties including writing, reviewing and editing various materials for publication
4. Perform supervisory and training duties involving lower level employees; attend and participate in meetings, conferences, and training groups.
5. Compile, process and analyze data; record research procedures and results; file and maintain records; code data for input for electronic data processing; input and retrieve data using computers.



ACADEMIC MANAGEMENT

RESEARCH & DEVELOPMENT (R&D)

LEVEL 5

R & D RESEARCHER

A R&D Researcher is designated to carry out research activities, assist the Head of R & D in planning, development and implementation of research activities including safety and health practices and procedures in the university. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out project research activities
2. Prepare analysis and synthesis report
3. Prepare and control R&D project budget and expenditure
4. Prepare and implement project testing planning
5. Verify data collection and report from subordinate
6. Carry out supervision on employees assigned to R & D Department
7. Coordinate compliance requirements for R&D activities
8. Perform administrative duties



ACADEMIC MANAGEMENT

RESEARCH & DEVELOPMENT (R&D)

LEVEL 6

HEAD OF RESEARCH & DEVELOPMENT

A Head of Research & Development is designated to provide leadership, guidance, and coordination with relevant parties and to actively participate in planning, development and implementation of R&D activities

In particular the person will:

1. Manage R&D projects and related activities
2. Manage and control R&D budget and expenses
3. Evaluate R&D analysis report
4. Manage employees assigned to R&D department
5. Produce rigorous research analysis and solid process management
6. Produce Key Performance Indexes (KPIs) for all R&D staff
7. Coordinate acquisition of project funding through various sources
8. Perform managerial duties



EDUCATION AND TRAINING SERVICES

(HIGHER EDUCATION)

LEVEL 7

R & D SPECIALIST

A R&D Specialist is designated to plan, develop and implement all research activities including safety and health practices and procedures in the university. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out all product development work on assigned projects and follow guidelines
2. Perform laboratory investigations, record and report on results
3. Evaluate R&D project outcome to meet customer requirements/project objectives
4. Perform production coordination, quality control and process improvement through defect analysis and corrective action implementation
5. Perform current process shortcoming analysis such defects, market demand etc.
6. Produce new process methods, procedures, and equipment or control techniques
7. Conduct meeting with customers to understand their requirements and support sales/marketing in efforts to introduce new product to customers
8. Prepare final product costs based upon raw materials, product design and process parameters
9. Conduct meeting with suppliers to discuss new raw material requirements and new product development initiatives



ACADEMIC MANAGEMENT

LIBRARY

LEVEL 3

ASSISTANT LIBRARIAN

An Assistant Librarian is designated to issue and receive library materials, sort and organize book shelves and provide general library information to users (students and faculty members). He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Issue and receive library books and other materials
2. Reshelf books and other library materials
3. Carry out clerical activities such as manual and electronic filing, word processing and occasional typing
4. Manage journal subscription policies and requirements
5. Assist in accessing basic library materials and making inter-library loans
6. Handle library records related to acquisition, issue and return of books and other publications
7. Perform related tasks such as scheduling and monitoring



ACADEMIC MANAGEMENT

LIBRARY

LEVEL 4

LIBRARIAN

A Librarian is responsible for providing library and research services for the organization and maintenance of the library and its collections. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out the selecting, developing, cataloguing and classifying of library resources
2. Manage readers' enquiries
3. Manage library systems and computer applications
4. Manage staffing requirements, including recruitment, training and/or supervisory duties
5. Prepare library yearly budgets and resources needs
6. Perform training for readers to use computer equipment and conduct literature searches
7. Perform administrative functions



ACADEMIC MANAGEMENT

LIBRARY

LEVEL 5

CHIEF LIBRARIAN

A Chief Librarian is responsible for managing library services, overseeing staff, coordinating with students and improving library facilities according to requirements. He/She is also required to carry out operational and financial planning for library operation, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce, plan and facilitate effective library facility development and expansion
2. Produce and manage library policies, collections, instruction, programs, services and budget
3. Manage books and other library resources for purchase or license
4. Negotiate agreements with vendors for electronic resources
5. Establish and implement shelving plans for on-site and off-site shelving
6. Coordinate students, researchers and faculty demands for library services and materials
7. Manage and guide the library team
8. Manage large knowledge repositories in both national and international institutions
9. Handle online document sharing platforms in multi-user contexts
10. Develop and produce budgets and expenditure controls
11. Manage and monitor library automation and information technology in an academic environment
12. Perform managerial duties



STUDENT AFFAIRS

INDUSTRIAL RELATIONS

LEVEL 3

ADMINISTRATIVE ASSISTANT

An Administrative Assistant is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



STUDENT AFFAIRS

INDUSTRIAL RELATIONS

LEVEL 4

INDUSTRIAL RELATIONS EXECUTIVE

An Industrial Relations Executive is designated to provide guidance and coordination with relevant parties (such as public and private agencies) and assist in the development and implementation of student activities such as industrial attachment and/or training at local and international levels. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out industrial placements (local or international) for students
2. Monitor that all student placements are carried out prior to completion of study
3. Maintain good relationship with industrial placement sponsors (public and private agencies)
4. Perform student career development and recruitment (employment) activities
5. Assist the Industrial Relations Manager in collecting and disbursing student's submissions
6. Provide input to strategic development of alumni relations
7. Provide up-to-date news to students and alumni members with regards to short courses offered, postgraduate opportunities, scholarships, professional development opportunities, etc.



EDUCATION AND TRAINING SERVICES

(HIGHER EDUCATION)

LEVEL 5

INDUSTRIAL RELATIONS MANAGER

An Industrial Relations Manager is designated to provide guidance and coordination with relevant parties (such public and private agencies) and assist in the development and implementation of student activities such as industrial attachment and/or training at local and international levels. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Manage student industrial placements and training
2. Manage and ensure all industrial placements are carried out prior to completion of study
3. Establish good relationship with industrial placement sponsors (public and private agencies)
4. Carry out student career development and recruitment (employment) activities
5. Manage and recommend/approve collection and disbursement of student's submissions
6. Provide input to strategic development of alumni relations
7. Provide up-to-date news to students and alumni members with regards to short courses offered, postgraduate opportunities, scholarships, professional developments opportunities, etc.



STUDENT AFFAIRS

INTERNATIONAL AFFAIRS

LEVEL 3

ADMINISTRATIVE ASSISTANT

An Administrative Assistant is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



EDUCATION AND TRAINING SERVICES

(HIGHER EDUCATION)

LEVEL 4

INTERNATIONAL AFFAIRS EXECUTIVE

An International Affairs Executive is designated to assist the International Affairs Manager to perform delivery, logistics and documentation of academic and non-academic partnership and the related communication and coordination including safety and health practices and procedures. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out the implementation of internationalization strategies, and the creation of an action plan.
2. Collaborate with strategic alliances and manage institutional partnerships
3. Cooperate with all related departments to develop their international agendas includes international agreements, funding opportunities, information on student exchanges, participation in visits and profile-raising
4. Manage the university delegation's visits to institutions in other regions of the world
5. Handle international universities' delegations and other public and private bodies to the university
6. Cooperate with international alumni and donors, in partnership with the Development and Alumni Relations Office
7. Perform promotional activities to build international profile for the university through visits, media coverage, events and conferences
8. Provide support for the University's Internationalization Steering Group
9. Manage international development opportunities for students
10. Perform tasks that relate to campus internationalization, the curriculum and services to staff, students, partners and stakeholders



STUDENT AFFAIRS

INTERNATIONAL AFFAIRS

LEVEL 5

INTERNATIONAL AFFAIRS MANAGER

An International Affairs Manager is designated to provide the delivery, logistics and documentation of academic and non-academic partnership and the related communication and coordination including safety and health practices and procedures. He/She must also lead and manage a range of projects to support the development and maintenance of international partnerships. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce and implement internationalization strategies, and the creation of an action plan
2. Manage strategic alliances and manage institutional partnerships and collaborations including university membership of the Worldwide Universities' Network
3. Establish international cooperation agendas including international agreements, funding opportunities, information on student exchanges, participation in visits and profile-raising
4. Produce ongoing schedule of visits by the university's delegations to institutions in other regions of the world
5. Manage visits from international universities and other public and private bodies to the university
6. Cooperate with the international alumni and donors, in partnership with the Development and Alumni Relations Office
7. Develop international profile for the university through visits, media coverage, events and conferences
8. Develop and manage international opportunities for students



STUDENT AFFAIRS

STUDENT WELFARE - WELFARE

LEVEL 3

ADMINISTRATIVE ASSISTANT

An Administrative Assistant is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



STUDENT AFFAIRS

STUDENT WELFARE - WELFARE

LEVEL 4

STUDENT WELFARE EXECUTIVE

A Student Welfare Executive is designated to carry out administrative tasks including record management including the provision of information and assistance to students, staff and external agencies in relation to the student administration function. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Cooperate with academic and administrative staff on welfare issues
2. Implement relevant student welfare activities
3. Produce policies relating to the management of Student Welfare Unit
4. Implement policies relating to International Students and Student Administration Department
5. Manage and control allocated departmental budget
6. Coordinate student scholarship
7. Carry out orientation activities, assist in transition activities and conduct seminar for students
8. Liaise with the Immigration Department and other related government agencies pertaining to international student matters
9. Produce weekly, monthly, and yearly reports to the Welfare Manager on all the activities undertaken to improve the welfare and the affairs of all students
10. Perform other duties as required and directed by the Welfare Manager.



STUDENT AFFAIRS

STUDENT WELFARE - WELFARE

LEVEL 5

STUDENT WELFARE MANAGER

A Student Welfare Manager is designated to provide a broad range of administrative tasks, including the provision of information and assistance to students, staff and external agencies including safety and health practices and procedures in relation to the student administration function. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce student policies and regulations relating to international students and counseling matters and the management of the Student Unit
2. Implement the policies relating to international students and Student Administration Department
3. Manage and maintain proper record for all the counseling sessions held for future reference
4. Coordinate student scholarships
5. Prepare and manage departmental budget
6. Manage and maintain links with the Immigration Department and other related government agencies pertaining to international students matters
7. Cooperate with other departments, namely business development, communications department, accommodation officers and academic departments on issues relating to all students
8. Produce weekly, monthly, and yearly reports on all the activities undertaken to improve the welfare and the affairs of all students
9. Manage the implementation of relevant student administration activities
10. Perform other duties as required and directed by the university's top management



STUDENT AFFAIRS

STUDENT WELFARE - RECREATION & CULTURE

LEVEL 3

ADMINISTRATIVE ASSISTANT

(RECREATION AND CULTURE)

An Administrative Assistant (Recreation and Culture) is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



STUDENT AFFAIRS

STUDENT WELFARE - RECREATION & CULTURE

LEVEL 4

STUDENT WELFARE EXECUTIVE (RECREATION AND CULTURE)

A Student Welfare Executive (Recreation and Culture) is designated to handle or manage recreational and cultural activities for students including the implementation of activities according to schedule, coordinate budget and activity requirements such as facilities and equipment including safety and health practices and procedures. He/She is also required to prepare activity reports to superior and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce club bulletins and others on behalf of the clubs and their members
2. Carry out recreational (leisure), sports, charitable, cultural and social activities
3. Provide information for budget and yearly planning preparation
4. Perform club membership registration, update club membership lists and organize club membership drive
5. Handle programs with NGOs, corporate and government departments
6. Prepare activity reports
7. Administer student alumni programs
8. Perform administrative functions



EDUCATION AND TRAINING SERVICES

(HIGHER EDUCATION)

LEVEL 5

STUDENT WELFARE MANAGER (RECREATION AND CULTURE)

A Student Welfare Manager (Recreation and Culture) is responsible for the welfare of all students enrolled at the university. He/She works closely with all administrative and academic departments to assist students to achieve their academic goals as well as assist students to adjust to the culture of the university and the community. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare and maintain departmental budget, planning and expenses
2. Coordinate activity facilities, equipment and financial support
3. Manage student accommodation services
4. Manage retuning and new student issues
5. Carry out induction and orientation for new students
6. Conduct students development and training programs
7. Evaluate program effectiveness
8. Manage student alumni programs
9. Establish working relationship with NGOs, corporate and government departments
10. Perform managerial duties



EDUCATION AND TRAINING SERVICES

(HIGHER EDUCATION)

LEVEL 4

COUNSELING EXECUTIVE

A Counseling Executive is responsible for the application of individual judgment in providing long-range academic counseling to students as to major courses of study, career possibilities, personal issues and counsel students regarding eligibility and procedures for reinstatement. He/She is required to participate in the development of advising materials and/or counseling resources for students in compliance with statutory and regulatory body requirements. He/She is also required adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Handle student and parent queries about the university/college admission processes and procedures
2. Manage international student admission process
3. Liaise with university/college admissions offices throughout the year
4. Cooperate with operation department to maintain records on students, including CGPA's and transcripts
5. Write an official university/college recommendation for each student
6. Produce report as requested by university/college, including evaluations of students
7. Administer the university/college counseling office budget and purchasing
8. Keep parents informed through a newsletter, and through letters about test dates, college events, and financial aids
9. Act as advisor to the students as a whole and provide academic and personal counseling
10. Participate in student academic convocation ceremony steering committee



EDUCATION AND TRAINING SERVICES

(HIGHER EDUCATION)

LEVEL 5

COUNSELOR

A Counselor is designated to provide counseling services and administrative leadership for a unique counseling project or program. He/She is to oversee all administrative aspects of the program including budget development, office and computer resources in compliance with statutory and regulatory body requirements. He/She is also required adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Provide direct support service to individual students, small groups, and classrooms
2. Completes assessments, referrals, and counseling with students and families
3. Oversee implementation of University program.
4. Complete home visits and assessments
5. Develop and maintain family outreach programs and community partnerships
6. Produce reports as required by federal, state and local agencies
7. Conduct professional development workshop on identifying at-risk students
8. Carry out student and family interviews
9. Perform oral presentations of assessments, diagnostics, home visits, and observations

OCCUPATIONAL DESCRIPTION

SUBSECTOR: TRAINING SERVICES

JOB AREA: PROFESSIONAL DEVELOPMENT TRAINING SERVICES



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - ADMINISTRATION

LEVEL 3

ADMINISTRATIVE CLERK

An Administrative Clerk responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION ADMINISTRATION - ADMINISTRATION

LEVEL 4

ADMINISTRATION EXECUTIVE

An Administration Executive is responsible for providing operational support to business operation for the organisation. He/she is also required to ensure all statutory and regulatory compliance including occupational safety and health practice and procedures is adhered to.

In particular the person will:

1. Coordinate and communicate between support and business functions
2. Coordinate business correspondence
3. Coordinate clients complaints
4. Maintain filing system
5. Coordinate office maintenance requirements
6. Coordinate organization's planning and scheduling
7. Carry out administrative functions according to organization Standard Operating Procedure



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - ADMINISTRATION

LEVEL 5

ADMINISTRATIVE MANAGER

An Operation Administration Manager is responsible for managing organization operation, preparing budgets and operational planning and provide leadership for the organization's operational functions. He/She is also required to contribute to the development and implementation of organizational strategies, policies and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Improve operational systems, processes and policies in support of organization's mission
2. Direct and oversee organization's financial and budgetary activities
3. Manage general activities related to making business products and services
4. Consult with other executives, staff and board members on organization operations
5. Participate in contract and agreement negotiations
6. Establish and carry out departmental or organizational goals, policies and procedures
7. Manage department head and manager appointments
8. Analyze financial statements, sales reports and other performance indicators
9. Carry out managerial duties in accordance with organizational Standard Operating Procedure



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - FINANCE

LEVEL 3

FINANCE CLERK

A Finance Clerk is responsible for providing administrative and support for any matters related to financial and accounts including document preparation, filing and customer service. He/She must adhere to organization financial policies and procedures at all times when handling various financial or account documentation and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Process and/or oversee the processing of financial/business forms
2. Check, correct and maintain a variety of financial and other business records and documents
3. Answer inquiries and provide information to faculty, students, staff and the public on fiscal policies and procedures
4. Prepare or assists in preparing various financial or administrative reports
5. Approve and process requisitions for supplies and equipment
6. Assist in preparation of various payrolls
7. Carry out physical and electronic filing system maintenance
8. Adhere to organization financial policies and procedures



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - FINANCE

LEVEL 4

FINANCE EXECUTIVE

A Finance Executive performs financial operations and works under the supervision of the Finance Manager by providing baseline data for financial related decisions. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform routine internal financial operations
2. Prepare departmental budgets
3. Prepare organisation expenditure report
4. Consolidate bank statements and accounts payables
5. Perform credit control and debtor ledger maintenance
6. Prepare monthly management account schedules
7. Perform scheduled ledger account reconciliations



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - FINANCE

LEVEL 5

FINANCE MANAGER

A Finance Manager plans, directs and coordinates financial operations and participates in formulating the financial policy within a government agency, corporate business, or organization. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, direct, control and coordinate internal financial operations
2. Assess organization financial situation
3. Approve departmental budgets
4. Manage financial operations
5. Control departmental expenditure
6. Represent department in financial matters with internal or external parties
7. Manage staff recruitment, selection, training and performance appraisal



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - BUSINESS DEVELOPMENT

LEVEL 3

CLERK

A Clerk is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - BUSINESS DEVELOPMENT

LEVEL 4

BUSINESS DEVELOPMENT EXECUTIVE

A Business Development Executive is responsible for generating leads and supporting new business revenue to the institution. He/She is responsible for developing a sales contact plan, building strategic proposals, responding to procurement led RFIs and pitching to individual and corporate clients, and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare current prospect database within specified business sectors
2. Develop a sales contact plan
3. Attend industry events to build relationships with key prospects
4. Respond to incoming Requests for Information (RFIs), Requests for Proposals (RFPs) in a professional and creative manner
5. Determine a prospect's business needs and work with the expert teams to develop a tailored digital marketing proposal
6. Identify common new business prospects and cross-sell integrated search and affiliate proposition
7. Represent institution at industry events, including round tables, speaking forums and new business events
8. Carry out administrative function according to organization Standard Operating Procedure



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - BUSINESS DEVELOPMENT

LEVEL 5

BUSINESS DEVELOPMENT MANAGER

A Business Development Manager is responsible for building market position by locating, developing, defining, negotiating, and closing business relationships. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out market research through industry contacts, publications, trade events and news to identify ideas for growth
2. Analyze business strategies, opportunities, requirements/pre-requisites/ and internal priorities
3. Negotiate business strategies by considering the risks and rewards, and keeping in mind the counter-parties preferences and goals
4. Lead business negotiations
5. Manage all contractual requirements and align the end result with the company's internal operations and capabilities
6. Define the company's short, medium and long term goals
7. Coordinate with other divisional heads to implement these corporate goals
8. Prepare annual business development budget in compliance with the company policy and ethical/corporate governance framework and present it to the board for approval
9. Coordinate with Marketing Department to ensure that the marketing and branding initiatives are efficient and effective
10. Develop and build a competitive business development teams



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - SALES & MARKETING

LEVEL 3

SALES REPRESENTATIVE

A Sales Representative is responsible for accomplishing business development activities by researching and developing marketing opportunities and implementing sales plans. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out market and product survey activities (customers' needs)
2. Carry out direct/retail sales
3. Carry out after-sales service
4. Perform sales self-assessment
5. Carry out online sales activity
6. Make appointments to meet new and existing customers
7. Carry out presentations to promote new products and special deals
8. Agree sales, prices, contracts and payments
9. Advise customers about delivery schedules and after-sales service
10. Keep in contact with existing customers in person and by telephone
11. Record orders and send details to the sales office
12. Carry out comparison with competitors and the products they are offering
13. Attend conferences and seminars and keep up with industry trends



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - SALES & MARKETING

LEVEL 4

SALES & MARKETING EXECUTIVE

A Sales & Marketing Executive is designated to carry out sales and marketing activities by researching and developing marketing opportunities and plans and implementing sales plans. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out product analysis
2. Carry out market analysis
3. Carry out corporate sales
4. Prepare sales budgeting
5. Prepare sales and marketing staff monitoring and control report
6. Produce sales performance evaluation report
7. Prepare marketing collateral
8. Carry out departmental administration functions
9. Carry out administrative functions according to organization Standard Operating Procedure



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT - SALES & MARKETING

LEVEL 5

SALES & MARKETING MANAGER

A Sales and Marketing Manager is responsible for managing organization sales and marketing activities by researching and developing marketing opportunities and plans, implementing sales plans and managing sales and marketing staff. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform sales activities on major accounts and negotiates sales price and discounts in consultation
2. Manage personnel and develop sales and sales support staff
3. Review progress of sales roles throughout the company
4. Prepare annual, quarterly and monthly revenue stream forecast
5. Develop specific plans to ensure revenue growth in all company's products
6. Provide quarterly result assessments of sales staff productivity
7. Co-ordinate proper company resources to ensure efficient and stable sales results
8. Formulate all sales policies, practices and procedures
9. Assist sales personnel in establishing personal contacts and rapport with top echelon decision-makers
10. Develop sales strategies to improve market share in all product lines
11. Interpret short and long-term effects on sales strategies in operating profit
12. Educate sales team by establishing strategic training programs
13. Hold regular meetings with sales staff
14. Carry out managerial duties according to organization Standard Operating Procedure



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

OPERATION MANAGEMENT

LEVEL 6

GENERAL MANAGER

A General Manager is responsible for giving vision, direction and leadership to the formulation and achievement of the institution's philosophy, objectives and strategies. He/She is also required to ensure that the institution is providing high standard of education and training services in accordance with its establishment objectives. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare overall institution business planning, financial security and effective resources management proposal
2. Lead management and administration within the strategic and accountability frameworks established by the Board of Directors
3. Develop policy proposals for Board discussion and decision
4. Evaluate business reports and implement strategies to improve institution goals
5. Assist in the formulation of marketing strategies and campaigns for institution
6. Check compliance of training requirements to rules and statutory body requirements



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

TRAINING & ASSESSMENT

LEVEL 4

PROFESSIONAL DEVELOPMENT TRAINER

A Professional Development Trainer is designated to carry out training sessions, developing training materials, conducting assessment and ensuring all the training tools, equipment and materials are in accordance with stakeholder requirements. He/She is also required to be involved in maintaining student data and participate in enrolment of new students and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out training according determined learning objectives
2. Handle practical sessions, including demonstrations of skills
3. Test and evaluate achievement of students in technical knowledge and trade skills
4. Carry out training effectiveness evaluation
5. Prepare training material preparation
6. Coordinate award of certification to students according to stakeholder requirements
7. Participate in enrolment of new students
8. Maintain records of trainees



PROFESSIONAL DEVELOPMENT TRAINING SERVICES

TRAINING & ASSESSMENT

LEVEL 5

PROFESSIONAL DEVELOPMENT TRAINING MANAGER

A Professional Development Training Manager is designated to manage training implementation, coordinate training requirements, and evaluate training effectiveness according to determined training outcomes. He/She is also required to ensure the training implementation is according to stakeholder requirements and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Monitor and evaluate training implementation effectiveness
2. Prepare, review and update training program implementation requirements
3. Coordinate training program compliance requirements
4. Coordinate award of certification to trainees according to determined criteria
5. Conduct study for prospective new courses
6. Prepare departmental budget and planning
7. Carry out quality control for training and assessment implementation
8. Coordinate and manage accreditation requirements for new courses
9. Establish advisory committee for improvement of training curriculum, assessment and certification, equipment lists, and teaching and learning materials for training implementation
10. Develop and implement organization policies and strategies, systems and procedures
11. Carry out managerial duties in accordance with organizational Standard Operating Procedure

OCCUPATIONAL DESCRIPTION

SUBSECTOR: TRAINING SERVICES

JOB AREA: SKILLS TRAINING SERVICES



SKILLS TRAINING SERVICES
OPERATION MANAGEMENT - ADMINISTRATION
LEVEL 3
ADMINISTRATIVE CLERK

An Administrative Clerk is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



SKILLS TRAINING SERVICES

OPERATION ADMINISTRATION - ADMINISTRATION

LEVEL 4

ADMINISTRATION EXECUTIVE

An Administration Executive is responsible for providing operational support to business operation for the organisation. He/She is also required to ensure all statutory and regulatory compliance including occupational safety and health practice and procedures is adhered to.

In particular the person will:

1. Coordinate and communicate between support and business functions
2. Coordinate business correspondence
3. Coordinate client complaints
4. Maintain organization filing system
5. Coordinate office maintenance requirements
6. Coordinate organization planning and scheduling
7. Carry out administrative functions according to organization Standard Operating Procedure



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - ADMINISTRATION

LEVEL 5

ADMINISTRATIVE MANAGER

An Operation Administration Manager is responsible for managing the organization's operation, preparing budgets and operational planning and providing leadership for the organization's operational functions. He/She is also required to contribute to the development and implementation of organizational strategies, policies and adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Improve operational systems, processes and policies in support of organization's mission – specifically to support better management reporting, information flow and management, business process and organizational planning
2. Direct and oversee an organization's financial and budgetary activities
3. Manage general activities related to making business products and services
4. Consult with other executives, staff and board members on organization operations
5. Participate in contract and agreement negotiations
6. Establish and carry out departmental or organizational goals, policies and procedures
7. Manage department head and manager appointments
8. Analyze financial statements, sales reports and other performance indicators
9. Carry out managerial duties in accordance with organizational Standard Operating Procedure



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - FINANCE

LEVEL 3

FINANCE CLERK

A Finance Clerk is responsible for providing administrative and support for any matters related to finance and accounts including document preparation, filing and customer service. He/She must adhere to organization financial policies and procedures and occupational safety and health practices and procedures.

In particular the person will:

1. Process and/or oversee the processing of financial/business forms
2. Check, correct and maintain a variety of financial and other business records and documents
3. Answer inquiries and provide information to faculty, students, staff and the public on fiscal policies and procedures
4. Prepare or assist in preparing various financial or administrative reports
5. Approve and process requisitions for supplies and equipment
6. Assist in preparation of various payrolls
7. Carry out physical and electronic filing system maintenance
8. Adhere to organization financial policies and procedures



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - FINANCE

LEVEL 4

FINANCE EXECUTIVE

A Finance Executive performs financial operations and works under the supervision of the Finance Manager by providing baseline data for financial related decisions. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform routine internal financial operations
2. Prepare departmental budgets
3. Prepare organisation expenditure reports
4. Consolidate bank statements and accounts payables
5. Perform credit control and debtor ledger maintenance
6. Prepare monthly management account schedules
7. Perform scheduled ledger account reconciliations



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - FINANCE

LEVEL 5

FINANCE MANAGER

A Finance Manager plans, directs and coordinates financial operations and participates in formulating the financial policy within a government agency, corporate business, or organization. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Plan, direct, control and coordinate internal financial operations
2. Assess organization financial situation
3. Approve departmental budgets
4. Manage financial operations
5. Control departmental expenditure
6. Represent department in financial matters with internal or external parties
7. Manage staff recruitment, selection, training and performance appraisal



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - BUSINESS DEVELOPMENT

LEVEL 3

CLERK

A Clerk is responsible for performing administrative and office support activities. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Assist in customer service activities
2. Maintain office electronic and physical filing system
3. Carry out business correspondence activities
4. Coordinate and communicate company meetings, events and sessions
5. Provide administrative support assistance



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - BUSINESS DEVELOPMENT

LEVEL 4

BUSINESS DEVELOPMENT EXECUTIVE

A Business Development Executive is responsible for leading and supporting new business revenue to the institution, developing sales contact plans, building strategic proposals, responding to procurement led RFIs and pitching to individual and corporate clients. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare current prospect database within specified business sectors
2. Develop a sales contact plan
3. Attend industry events to build relationships with key prospects
4. Respond to incoming Requests for Information (RFIs), Requests for Proposals (RFPs) in a professional and creative manner
5. Determine a prospect's business needs and work with the expert teams to develop a tailored digital marketing proposal
6. Identify common new business prospects and cross-sell integrated search and affiliate proposition
7. Carry out administrative functions according to organization Standard Operating Procedure



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - BUSINESS DEVELOPMENT

LEVEL 5

BUSINESS DEVELOPMENT MANAGER

A Business Development Manager is responsible for building market position by locating, developing, defining, negotiating, and closing business relationships. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out market research through industry contacts, publications, trade events, and news to identify ideas for growth
2. Analyze business strategies, opportunities, requirements/pre-requisites, and internal priorities
3. Negotiate business strategies by considering the risks and rewards, and keeping in mind the counter-parties preferences and goals
4. Lead business negotiations
5. Manage all contractual requirements and align the end result with the company's internal operations and capabilities
6. Define the company's short, medium and long term goals
7. Coordinate with other divisional heads to implement these corporate goals
8. Prepare annual business development budget in compliance with the company policy and ethical / corporate governance framework and present it to the board for approval
9. Coordinate with Marketing department to ensure that the marketing and branding initiatives are efficient and effective
10. Develop and build a competitive business development teams



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - SALES & MARKETING

LEVEL 3

SALES REPRESENTATIVE

A Sales Representative is responsible for accomplishing business development activities by researching and developing marketing opportunities and plans, implementing sales plans, and managing staff. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out market and product survey activities (customers' needs)
2. Carry out direct/retail sales
3. Carry out after-sales service
4. Perform sales self-assessment
5. Carry out online sales activity
6. Make appointments to meet new and existing customers
7. Carry out presentations to promote new products and special deals
8. Agree sales, prices, contracts and payments
9. Advise customers about delivery schedules and after-sales service
10. Keep in contact with existing customers in person and by telephone
11. Record orders and send details to the sales office
12. Carry out comparison with competitors and the products they are offering
13. Attend conferences and seminars and keep up with industry trends



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - SALES & MARKETING

LEVEL 4

SALES & MARKETING EXECUTIVE

A Sales & Marketing Executive is designated to carry out sales and marketing activities by researching and developing marketing opportunities and plans and implementing sales plans. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out product analysis
2. Carry out market analysis
3. Carry out corporate sales
4. Prepare sales and marketing budgeting
5. Prepare sales and marketing staff monitoring and control report
6. Produce sales performance evaluation report
7. Prepare marketing collateral
8. Carry out departmental administration functions



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT - SALES & MARKETING

LEVEL 5

SALES & MARKETING MANAGER

A Sales and Marketing Manager is responsible for managing sales and marketing activities by researching and developing marketing opportunities and plans, implementing sales plans, and managing sales & marketing staff.

In particular the person will:

1. Prepare annual, quarterly and monthly revenue stream forecast
2. Develop sales and marketing plan
3. Provide quarterly result assessments of sales staff productivity
4. Co-ordinate proper company resources to ensure efficient and stable sales results
5. Formulate all sales policies, practices and procedures
6. Develop sales strategies to improve market share in all product lines
7. Establish networking with a range of stakeholders including customers, colleagues, suppliers and partners
8. Perform sales activities on major accounts and negotiate sales price and discounts in consultation
9. Manage and verify the production of marketing materials, including leaflets, posters, flyers, newsletters, e-newsletters and DVDs
10. Maintain and update customer databases
11. Evaluate analysis report and produce marketing plans and strategies
12. Control sales and marketing budgets
13. Evaluate marketing campaign effectiveness
14. Carry out managerial duties according to organization Standard Operating Procedure



SKILLS TRAINING SERVICES

OPERATION MANAGEMENT

LEVEL 6

GENERAL MANAGER

A General Manager is responsible for giving vision, direction and leadership to the formulation and achievement of the institution's philosophy, objectives and strategies. He/She is to ensure that the institution is providing high standard of education and training services in accordance with its establishment objectives. He/She is also required adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Prepare overall institution business planning, financial security and effective resource management proposal
2. Lead management and administration within the strategic and accountability frameworks established by the Board of Directors
3. Develop policy proposals for Board discussion and decision
4. Evaluate business reports and implement strategies to improve institution goals
5. Assist in the formulation of marketing strategies and campaigns for institution
6. Check compliance of training requirements to rules and statutory body requirements



ACADEMIC MANAGEMENT

RESOURCE CENTRE

LEVEL 3

RESOURCE CENTRE ASSISTANT

A Resource Centre Assistant is designated to issue and receive resource centre materials, sort and organize book shelves and provide general resource centre information to users (students and faculty members). He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Issue and receive resource centre books and other materials
2. Reshelf books and other resource centre materials
3. Perform clerical activities such as manual and electronic filing, word processing and occasional typing
4. Handle journal subscription policies and requirements
5. Assist in accessing basic resource centre materials
6. Handle resource centre records related to acquisition, issue and return of books and other publications
7. Perform related tasks such as scheduling and monitoring task



ACADEMIC MANAGEMENT

RESOURCE CENTRE

LEVEL 4

RESOURCE CENTRE EXECUTIVE

A Resource Centre Executive is responsible for acquiring, organizing, managing and distributing resource centre resources, and ensuring that resource centre standard provision meets the needs of all its users. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Perform the selecting, developing, cataloguing and classifying resource centre resources
2. Handle readers' enquiries
3. Manage resource centre systems and computer applications
4. Handle staffing requirements, including recruitment, training and/or supervisory duties
5. Produce resource centre yearly budgets and resource needs
6. Perform training for readers to use computer equipment and conduct literature searches
7. Perform administrative functions



ACADEMIC MANAGEMENT

RESOURCE CENTRE

LEVEL 5

RESOURCE CENTRE MANAGER

A Resource Centre Manager is responsible for acquiring, organizing, managing and distributing resource centre resources, and ensuring that resource centre standard provision meets the needs of all its users. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Produce, plan and facilitate effective resource centre facility development and expansion
2. Produce and manage resource centre policies, collections, instruction, programs, services and budget
3. Handle books and other resource centre resources for purchase or license
4. Negotiate agreements with vendors for electronic resources
5. Establish and implement shelving plans for on-site and off-site shelving
6. Manage relatively higher coordination demands with students, researchers and faculty
7. Manage and guide the library team
8. Handle large knowledge repositories in both national and international institutions
9. Handle online document sharing platforms in multi-user contexts
10. Develop and produce budgets and expenditure controls
11. Manage and monitor resource centre automation and information technology in an academic environment
12. Perform managerial duties



TRAINING SERVICES

SKILLS TRAINING SERVICES

LEVEL 4

VOCATIONAL TRAINING EXECUTIVE

A Vocational Training Executive is designated to carry out skills training and assessment in accordance with determined performance objectives. He/She is also required to develop training materials, conduct assessment and ensure all training tools, equipment and materials are in accordance with training implementation requirements. He/She is also required to adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Carry out lecturing and demonstration according to determined learning outcomes
2. Carry out knowledge and performance assessment
3. Develop teaching aids such as instructional software, multimedia visual aids, or study materials
4. Develop curriculum and plan course content and methods of instruction
5. Prepare reports and maintain records such as student grades, attendance rolls, and training activity details
6. Prepare outlines of instructional programs and training schedules and establish course goals
7. Prepare training materials, supplies and equipment
8. Coordinate on-the-job training
9. Supervise independent or group projects, field placements, laboratory work, or other training
10. Handle student alumni programs
11. Participate in new student enrolment



TRAINING SERVICES

SKILLS TRAINING SERVICES

LEVEL 5

VOCATIONAL TRAINING MANAGER

A Vocational Training Manager is designated to manage training implementation, coordinate training requirements, and evaluate training effectiveness according to determined training outcomes. He/She is also required to ensure the training implementation is according to government rules and regulations and occupational safety and health practices and procedures.

In particular the person will:

1. Monitor and evaluate training implementation effectiveness
2. Prepare, review and update training program implementation requirements
3. Conduct study for prospective new courses
4. Prepare departmental budget and planning
5. Carry out quality control for training and assessment implementation
6. Coordinate and manage accreditation requirements for new courses
7. Prepare and implement student alumni program planning
8. Establish advisory committee for improvement of training curriculum, assessment and certification, equipment lists, and teaching and learning materials for training implementation
9. Develop and implement organization policies and strategies, systems and procedures
10. Carry out managerial duties



TRAINING SERVICES

STANDARD AND CURRICULUM DEVELOPMENT

LEVEL 4

STANDARD AND CURRICULUM DEVELOPMENT FACILITATOR

A Standard and Curriculum Development Facilitator is responsible for developing Occupational Standard and various curriculum documents according to determined formats. He/She is to work closely with employers, local authorities, academicians, skills instructors and support staff from across the industry to ensure that the standards reflect the roles of skilled workers. He/She is also required adhere to occupational safety and health practices and procedures.

In particular the person will:

1. Liaise with the industry to collect information on the development of occupational standard and curriculum
2. Carry out arrangement of brainstorming sessions including logistic and documentation preparation
3. Determine formats and approach for developing the occupational standard and curriculum
4. Facilitate development sessions according to phase of development
5. Prepare occupational standard and curriculum documentation for submission
6. Carry out presentation to industry and stakeholder
7. Carry out proofreading for developed documents

4.4 Education & Training Services Industry Occupational Area Analysis (OAS)

The Occupational Area Analysis is done so that the current job titles in the industry are translated into the job areas required of the personnel. In doing so, candidates will have better employment prospects as there will be no mismatch of job titles to expected job competencies. This is because different organisations use different job titles. Certification will also be able to reflect the job competencies correctly and avoid confusion of job scope based on job titles.

Table 4.11: Occupational Area Structure for Sub Sector Education Services

SECTOR	EDUCATION AND TRAINING INDUSTRY				
SUB-SECTOR	EDUCATION SERVICES				
JOB AREA	PRIMARY & SECONDARY EDUCATION				
	Administration				
	Financial Administration	Administration Operation			
Level 8	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level
Level 6	No Level	No Level	No Level	No Level	No Level
Level 5	No Level	No Level	No Level	No Level	No Level
Level 4	School Financial Administration	School Administration Management			
Level 3	Financial Administration	Student Hostel Management Assistance	Hostel Supervision	Educational Lab Assistance	Administration Operation Assistance (Operational and Clerical)
Level 2	No Level	No Level	No Level	No Level	General Administration Assistance
Level 1	No Level	No Level	No Level	No Level	No Level

Table 4.12: Occupational Area Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY								
SUB-SECTOR	EDUCATION SERVICES								
JOB AREA	PRIMARY & SECONDARY EDUCATION								
	Leadership				Academic Teaching				
	Administration	Student Affair	Co-Curriculum		General Education	Islamic Education	Technical Vocational Education	Sports Education	Special Needs Education
Level 8	No Level	No Level	No Level		No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level		No Level	No Level	No Level	No Level	No Level
Level 6	General Education Teaching & Learning				Islamic Education Teaching & Learning	Technical Vocational Teaching & Learning	Sports Education Teaching & Learning	Special Needs Education Teaching & Learning	General Education Teaching & Learning
Level 5	Academic Education Teaching & learning	General Education Teaching & Learning	Islamic Education Teaching & Learning	Technical Vocational Education Teaching & Learning	Sports Education Senior Teacher	Special Needs Education Teaching & Learning	General Education Teaching & Learning	Islamic Education Teaching & Learning	Technical Vocational Education Teaching & Learning
Level 4	No Level	No Level	No Level	No Level	Islamic Education Teaching & Learning	Technical Vocational Education Teaching & Learning	Sports Education Teacher	Special Needs Education Teaching & Learning	General Education Teaching & Learning
Level 3	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.13: Occupational Area Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION & TRAINING SERVICES						
SUB-SECTOR	EDUCATION SERVICES						
JOB AREA	PRIMARY & SECONDARY EDUCATION						
	Education Specialist						
	Curriculum Development	ASSESSMENT		INSTRUCTIONAL TECHNOLOGY			
		Psychometric Assessment	Assessment Development	Educational Television	Educational Radio	Interactive Multimedia	Virtual Learning Environment
Level 8	No Level	Psychometric Assessment (Theories)	Assessment Theories Development	Education Television Integration	Education Radio Integration	Interactive Multimedia Integration	Seamless Education Development
Level 7	Primary and Secondary Education Curriculum Development	Psychometric Assessment	Assessment System Development	Education Television Integration	Education Radio Integration	Interactive Multimedia Integration	Virtual Learning Environment Development
Level 6	Primary and Secondary Education Curriculum Development	Assessment Instrument Development		Education Television Integration	Education Television Integration	Education Radio Integration	Interactive Multimedia Integration
Level 5	Primary and Secondary Education Curriculum Development	Assessment Item Development		Education Television Integration	Education Television Integration	Education Radio Integration	Interactive Multimedia Integration
Level 4	Primary and Secondary Education Curriculum Development	No Level	No Level	No Level	No Level	No Level	No Level
Level 3	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.14: Occupational Area Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION & TRAINING SERVICES								
SUB-SECTOR	EDUCATION SERVICES								
JOB AREA	PRIMARY & SECONDARY EDUCATION								
	EDUCATION SPECIALIST								
	Organization Counselling Psychology	School Counselling and Guidance	Arts Coaching				Special Needs Education	Sports Coaching	
			Dance Arts	Coaching Visual Arts	Coaching Arts Theatre	Music Arts	Audiology (Education)	Sports Technical	Sports Coaching
Level 8	Family Counseling Psychology	School Career Counseling Development	Arts Specialist Teacher	Curatorial Visual Arts	Theatre Production	Music Impresario	Audiology Strategic	Sports Technical Coaching	Sports Coaching
Level 7	Family Counseling Psychology	Personality and Environment Counseling Fittings	Dance Arts Coaching	Design Visual Arts	Theatre Performing Scenography Development	Music Composition	Rehabilitation Audiology Development	Sports Technical Coaching	Sports Coaching
Level 6	Family Counseling Psychology	Environmental Counseling Development	Dance Arts Coaching	Visual Arts Communication	Theatre Improvisation	Music Composition Development	Audiology Integration	Sports Technical Coaching	Sports Coaching
Level 5	Family Counseling Psychology	Personality Counseling Development	Dance Arts Coaching	Fine Arts	Theatre Acting Development	Music Skills Development	Audiology (Education) Development	Sports Technical Coaching	Sports Coaching
Level 4	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 3	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.15: Occupational Area Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY					
SUB-SECTOR	EDUCATION SERVICES					
JOB AREA	HIGHER EDUCATION					
	Management Services					
	Human Resources (HR)	Administration	Marketing & Corporate Communication		Finance	
		Operation Administration	Marketing	Corporate Communication	Finance	Account
Level 8	No Level	No Level	No Level	No Level	No Level	No Level
Level 7	Higher Education Institution Management					
Level 6	Higher Education Institution Operation Management		Marketing Operation Management		Financial Operation Management	
Level 5	Human Resource Management	Operation Administration Management	Asset Management	Security Management	Marketing Operation Management	Corporate Communication Operation Management
Level 4	Human Resource Operation Administration	Operation Administration Operation Administration	Asset Management Operation Administration	Security Operation Administration	Marketing Operation Administration	Corporate Communication Operation Administration
Level 3	Admin Assistant				Marketing Operation	Corporate Communication Administration Assistance
Level 2	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.16: Occupational Area Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY					
SUB-SECTOR	EDUCATION SERVICES					
JOB AREA	HIGHER EDUCATION					
	Academic Management					
	Curriculum Development	Faculty/School/Department		Quality Assurance (QA)	Research & Development (R&D)	Library
		Teaching Faculty	Management			
Level 8	No Level	No Level	No Level	No Level	No Level	No Level
Level 7	Curriculum Development Consultation	Lecturing & Instructional Delivery Consultation	Faculty/School/Department Management	No Level	R&D Consultation	No Level
Level 6	Higher Education Curriculum Development	Lecturing & Instructional Delivery	Faculty/School/Department Operation Management	Quality Assurance (QA) Management	R&D Operation Management	No Level
Level 5	Higher Education Curriculum Development	Lecturing & Instructional Delivery	Faculty/School/Department Management	QA Operation Administration	R&D Operation	Library Operation Management
Level 4	Lecturing & Instructional Delivery		Program Coordination	QA Inspection	R&D Operation	Library Operation Administration
Level 3	No Level	No Level	No Level	No Level	No Level	Library Administration Assistance
Level 2	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level

Table 4.17: Occupational Area Structure for Sub Sector Education Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY				
SUB-SECTOR	EDUCATION SERVICES				
JOB AREA	HIGHER EDUCATION				
	Student Affairs				
	Industrial Relations	International Affairs	Student Welfare		
			Welfare	Recreation & Culture	Counselling
Level 8	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level
Level 6	No Level	No Level	No Level	No Level	No Level
Level 5	Industrial Relation Operation Management	International Affair Operation Management	Student Welfare Operation Management	Student Recreation & Culture Operation Management	Counselor Services
Level 4	Industrial Relation Operation Administration	International Affair Operation Administration	Welfare Operation Administration	Student Recreation & Culture Operation Management	Counselor Services
Level 3	Industrial Relation Administration Assistance	International Affair Administration Assistance	Welfare Administration Assistance	Student Recreation & Culture Administration Assistance	Counselor Services Assistance
Level 2	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level

Table 4.18: Occupational Area Structure for Sub Sector Training Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY				
SUB-SECTOR	TRAINING SERVICES				
JOB AREA	PROFESSIONAL DEVELOPMENT TRAINING SERVICES				
	Operation Management				Training & Assessment
	Administration	Finance	Business Development	Sales & Marketing	
Level 8	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level
Level 6	Professional Development Operation Management				No Level
Level 5	Professional Development Administration Management	Professional Development Financial Management	Business Development Management	Sales & Marketing Management	Professional Development Administration Management
Level 4	Professional Development Administration Operation	Professional Development Financial Operation Administration	Business Development Operation Administration	Sales & Marketing Operation Administration	Professional Development Administration Operation
Level 3	Professional Development Administration Assistance	Professional Development Financial Administration Assistance	Business Development Administration Assistance	Sales & Marketing Operation	Professional Development Administration Assistance
Level 2	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level

Table 4.19: Occupational Area Structure for Sub Sector Training Services (continued)

SECTOR	EDUCATION AND TRAINING INDUSTRY						
SUB-SECTOR	TRAINING SERVICES						
JOB AREA	SKILLS TRAINING SERVICES						STANDARD AND CURRICULUM DEVELOPMENT
	Operation Management					Training & Assessment	
	Administration	Finance	Business Development	Sales & Marketing	Resource Centre		
Level 8	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 7	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 6	Skills Training Operation Management				No Level		No Level
Level 5	Skills Training Administration Management	Skills Training Financial Management	Business Development Management	Sales & Marketing Management	Resource Centre Management	Vocational Training Management	No Level
Level 4	Skills Training Administration Operation	Skills Training Financial Operation Administration	Business Development Operation Administration	Sales & Marketing Operation Administration	Resource Centre Administration	Vocational Training Operation	Standard And Curriculum Development Facilitator
Level 3	Skills Training Administration Assistance	Skills Training Financial Administration Assistance	Business Development Administration Assistance	Sales & Marketing Operation	Resource Centre Operation	No Level	No Level
Level 2	No Level	No Level	No Level	No Level	No Level	No Level	No Level
Level 1	No Level	No Level	No Level	No Level	No Level	No Level	No Level

4.5 Critical Job Titles and Summary of Job Titles

List of Critical Job Title for Education and Training Services Industry

No.	Job Area	Job Title	Level	Critical Level
1.	Academic Teaching - General Education	General Education Teacher	4	***
2.	Academic Teaching - General Education	General Education Senior Teacher	5	***
3.	Academic Teaching - General Education	General Education Master Teacher	6	***
4.	Academic Teaching - Islamic Education	Islamic Education Teacher	4	***
5.	Academic Teaching - Islamic Education	Islamic Education Senior Teacher	5	***
6.	Academic Teaching - Islamic Education	Islamic Education Master Teacher	6	***
7.	Academic Teaching - Technical Vocational Education	Technical Vocational Education Teacher	4	***
8.	Academic Teaching - Technical Vocational Education	Technical Vocational Education Senior Teacher	5	***
9.	Academic Teaching - Technical Vocational Education	Technical Vocational Master Teacher	6	***
10.	Academic Teaching - Sports Education	Sports Education Master Teacher	4	***
11.	Academic Teaching - Sports Education	Sports Education Senior Teacher	5	***
12.	Academic Teaching - Sports Education	Sports Education Teacher	6	***
13.	Academic Teaching - Special Needs Education	Special Needs Education Teacher	4	***
14.	Academic Teaching - Special Needs Education	Special Needs Education Senior Teacher	5	***
15.	Academic Teaching - Special Needs Education	Special Needs Education Master Teacher	6	***
16.	Academic Management - Curriculum Development	Curriculum Coordinator	5	***
17.	Academic Management - Curriculum Development	Curriculum Development Designer	6	***
18.	Academic Management - Curriculum Development	Curriculum Development Specialist	7	***

No.	Job Area	Job Title	Level	Critical Level
19.	Academic Management – Quality Assurance	Quality Assurance Executive	4	***
20.	Academic Management – Quality Assurance	Quality Assurance Assistant Manager	5	***
21.	Academic Management – Research & Development	R&D Assistant Researcher	4	**
22.	Academic Management – Research & Development	R&D Researcher	5	**
23.	Training And Assessment	Vocational Training Executive	4	**
24.	Training And Assessment	Vocational Training Manager	5	***
25.	Standard And Curriculum Facilitator	Standard And Curriculum Development Facilitator	4	***

Legend

- * Moderately Critical – (4-5 year)
- ** Critical – (1-3 year)
- *** Highly Critical – (Immediate)

Summary of Job Titles

SECTOR	SUB SECTOR	LEVEL								TOTAL
		L1	L2	L3	L4	L5	L6	L7	L8	
EDUCATION AND TRAINING SERVICES INDUSTRY	EDUCATION SERVICES	0	2	19	26	42	29	21	15	154
	TRAINING SERVICES	0	0	9	12	11	2	0	0	34
TOTAL JOB TITLE										188

4.6 Conclusion

This chapter focuses on the findings of the Occupational Analysis which include Occupational Structure, Occupational Area Structure, list of critical job title and the summary of job title. These findings were based on focus group interview and panel discussions as well as telephone survey was conducted. A total of 188 job titles were identified in education and training services.

5. CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter will conclude the findings from research done for this study. This will be followed by the recommendations for future improvement for this study area which has been put forth by the researcher based on input throughout the development of this OA.

5.2 CONCLUSION

The conclusion is divided into the earlier objectives of the research as elaborated below:

i. Objective 1: Occupational Structure and Occupational Area Structure

Based on the findings obtained throughout the Occupational Analysis on the Education and Training Services, a total of 2 sub sectors, namely Education Services and Training Services were identified. Whereas a total of 188 job titles were recognized as well, with some job areas starting at Level 2 ended at Level 8 in various positions according to their respective areas.

ii. Objective 2: identification of critical job title for Education and Training Services workforce.

Using focus group, a list of panel members from the Development Panel members had determine the new critical jobs requirement by the industry. Critical job refers to new jobs requirement and also to current jobs that have been identified that are needed by the industry for the next 1-5 years.

About 18 new jobs in the education and training industry have been identified as highly critical namely in academic teaching in various disciplines such as in general education , religious, vocational, sports and special needs disciplines and in academic management the requirement is in curriculum development specialist.

In order to gather the existing critical jobs in the education and training sector, a telephone survey was carried out. The findings indicate that highly critical jobs are quality assurance executive, quality assurance assistant manager, vocational training manager and standard and curriculum development facilitator. Moderate critical jobs have been identified are R&D assistant researcher, R&D researcher and vocational training executive while no jobs has been identified as critical.

5.3 RECOMMENDATION

In order to keep abreast of the industry requirement this study should be reviewed in five years' time period so that new job areas can be identified according to the industry needs. Is also recommended that critical areas of NOSS for this industry should be developed to fulfil the industry requirements.

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**ANNEX 1: MALAYSIAN OCCUPATIONAL SKILLS
QUALIFICATION FRAMEWORK
(MOSQF) LEVEL DESCRIPTOR**

**MALAYSIAN OCCUPATIONAL SKILLS QUALIFICATION FRAMEWORK (MOSQF) LEVEL
DESCRIPTOR**

Level	Level Description
1	Achievement at this level reflects the ability to use relevant knowledge, skills and procedures to complete routine and predictable tasks that include responsibility for completing tasks and procedures subject to direction or guidance .
2	Achievement at this level reflects the ability to select and use relevant knowledge, ideas , skills and procedures to complete well-defined tasks and address straightforward problem . It includes taking responsibility for completing tasks and procedures, and exercising autonomy and judgment subject to overall direction or guidance.
3	Achievement at this level reflects the ability to identify and use relevant understanding , methods and skills to complete task and address problems that are well defined with a measure of complexity . It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgments within limited parameter . It also reflects awareness of different perspectives or approaches within an area of study or work.
4	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address problems that are well defined but complex and non-routine . It includes taking responsibility for overall courses of action as well as exercising autonomy and judgment within fairly broad parameters . It also reflects under-standing of different perspective or approaches within an area of study or work.
5	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address broadly-defined, complex problems . It includes taking responsibility for planning and developing courses of action as well as exercising autonomy and judgment within broad parameters. It also reflects understanding of different perspectives, approaches or schools of thought and the reasoning behind them .
6	Achievement at this level reflects the ability to refine and use relevant understanding, methods and skills to address complex problems that have limited definition . It includes taking responsibility for planning and developing courses of action that are able to underpin substantial change or development, as well as exercising broad autonomy and judgment . It also reflects an understanding of different perspectives, approaches of schools of thought and the theories that underpin them .

Level	Level Description
7	Achievement at this level reflects the ability to reformulate and use relevant understanding, methodologies and approaches to address problematic situations that involve many interacting factors. It includes taking responsibility for planning and developing courses of action that initiate or underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of theoretical and relevant methodological perspectives, and how they affect their area of study or work.
8	Achievement at this level reflects the ability to develop original understanding and extend an area of knowledge or professional practice. It reflects the ability to address problematic situations that involve many complexes, interacting factors through initiating, designing and undertaking research, development or strategic activities. It involves the exercise of broad autonomy, judgement and leadership in sharing responsibility for the development of a field of work or knowledge, or for creating substantial professional or organisational change. It also reflects a critical understanding of relevant theoretical and methodological perspectives and how they affect the field of knowledge or work.

ANNEX 2: LIST OF DEVELOPMENT PANEL, FACILITATORS AND PROOFREADER

**LIST OF INDUSTRY PANEL MEMBERS FOR THE EDUCATION & TRAINING SERVICES INDUSTRY
OCCUPATIONAL ANALYSIS DEVELOPMENT**

NO	NAME	EXPERTISE	POSITION	ORGANISATION
1	HJH. RASHIDAH BINTI HASSAN	Standard & Quality Development	Ketua Penolong Setiausaha	Bahagian Pembangunan dan Penilaian Kompetensi, Kementerian Pendidikan Malaysia
2	PN. SABARIAH BINTI ABDUL KADIR	Standard & Quality Development	Penolong Setiausaha	Bahagian Pembangunan dan Penilaian Kompetensi, Kementerian Pendidikan Malaysia
3	ASSOC. PROF. DR. AZAHARI BIN JAMALUDIN	Higher Education	Associate Professor	Twintech International University College of Technology
4	DR. RAEMAH BINTI ABDULLAH HASHIM	Higher Education	Senior Lecturer	Open University Malaysia (OUM)
5	PN. NOR AIN BINTI AHMAD	Vocational Training	Vocational Training Officer	Centre for Instructor and Advanced Skill Training (CIASST)
6	EN. NABLAN BIN YUSOFF	Professional Development Training	Managing Director	Idaman Jauhari Sdn.Bhd.
7	EN. SUHAIMI BIN ARIFFIN	Professional Development Training	Senior Trainer cum Consultant	Minda Training Consultancy
8	PN. NORSHEILA BINTI ABDULLAH	Early Childhood Education	Managing Director	Community Learning Curve
9	PN. NUR ADILLAH BINTI RAMLY	Early Childhood Education	Managing Director	Bonda Islamic Kindergarten

**LIST OF FACILITATORS FOR THE EDUCATION & TRAINING SERVICES INDUSTRY
OCCUPATIONAL ANALYSIS DEVELOPMENT**

FACILITATORS

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ENGKU MOHD AZMI BIN DATO' ENGKU HATIM

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