

**TNE Graduate Employment Study: An Analysis of Graduate Employment Trends in
Malaysia (A Research Study in Three Phases)**

**PHASE I : EMPLOYABILITY OF GRADUATES IN MALAYSIA : THE PERCEPTIONS
OF SELECTED EMPLOYERS**

Rozilini M Fernandez - Chung

Cheong Kee Cheok

Leong Yin Ching

Christopher Hill

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FOREWORD

EXECUTIVE SUMMARY

While education broadly framed is more than about human capital, the latter has loomed large in the theories explaining economic growth, in particular, and the development discourse, in general. The depth of human capital is particularly crucial to middle-income countries seeking to be elevated to high-income status, with the ‘middle-income trap’ awaiting those failing to upgrade their human resources.

Malaysia, the focus of this study, has particular relevance not only because it is one of the middle-income countries aspiring to graduate to high-income through its Vision 2020 blueprint but also because its heavy expenditure on education and the objective of becoming an international education hub has translated into enrolment gains but a deterioration in the quality of education when benchmarked against international peers. This challenge has been diagnosed to have its roots in the politicization of education and the state’s mentality of control to the detriment of creative thinking. The results have been multiple experiments, policy reversals, and a lack of strategic direction in education.

A casualty of compromised education is the quality of the workforce. Yet with the country’s long history of sending students overseas, the Malaysian workforce includes both the products of the local education system as well as of those overseas (mainly Western) systems. Amid the frequent refrain of unemployable graduates, this study seeks to provide an empirical basis for such claims. In this first phase, the perceptions of employers, the consumers of human capital, are being ascertained.

The methodology for this study is mixed quantitative and qualitative, with a structured questionnaire administered online to companies, complemented by selected in-depth interviews of employers or their representatives. A total of 102 questionnaire responses were received while 16 in-depth interviews were conducted over a period of six months, from November, 2013 to April, 2014. The questionnaire responses and interviews were from companies, both public (government and government-linked) and private, that spanned the entire range of activities and that, by employment, consisted of both SMEs and large firms. Of note is the much larger size by employment of public companies, a testimony to the role played by these in the Malaysian economy.

To be able to assess the employability of graduates, employers need to have a sound understanding of the different types of tertiary education programmes available to students. It was comforting that those sampled did indeed have that knowledge, so that their expressed views and judgment could be considered credible.

A second but not so surprising finding is the greater emphasis on soft skills as opposed to hard skills. These soft skills include, very importantly, language (English) and communications skills. Such a finding is consistent with extant studies but, in the present study, applied also to areas of work, like engineering and law, where hard skills should have been vital.

The questionnaire responses and interviews allowed the construction of an ideal graduate employee in the eyes of employers. Such a person would combine desirable qualities that make up the values, personality, knowledge and skill which meet the needs and interests of the recruiting companies. While personality and values are shaped as much by factors outside the school as inside, knowledge and skills are the primary responsibility of the education system. The clear implication of this finding is that an education system, even if not fully responsible for producing 'job-ready' graduates, should do its best in imparting the requisite skills.

How did reality compare with this ideal? A striking finding is that of graduates of local public universities falling short, sometimes far short, of their foreign-educated, transnational education educated, and even local private institutions-educated peers in terms of soft skills, especially in the command of English. This language deficiency, in turn, affects adversely the confidence of graduates. It is for this reason that employers had expressed their preference for, in descending order, foreign graduates, graduates of transnational education, local private university and college graduates, with graduates from local public universities taking up the rear.

Yet, this finding should not lead to a rush for judgment that all foreign-educated are superior to local graduates in terms of employability. Employers are well aware that each type of graduate brings specific strengths to the organizations. While foreign graduates top in language, communication skills and confidence, local university graduates are prepared to work hard, committed and are familiar with the local business environment. At the same time, not all graduates, even from the same background, are alike. In considering local universities, the more established institutions like University of Malaya and University of Science Malaysia consistently

out-ranks other public universities. Employers, therefore, need to perform a balancing act in recruiting graduates so as to maximize leverage of their respective strengths.

Adding to this mix is the option of hiring foreign nationals, which is substantial for public companies. While the stated reasons for recruiting them are to take advantage of their skills and to deal with foreign partners, their employment also speaks to the shortage of local graduates who can perform these functions.

To bridge the gap between ideal and reality, employers made a number of suggestions. Graduates seeking jobs are advised to develop their soft skills, if not possible within the education then outside. While providing a nurturing environment, parents are advised to encourage their children to express themselves and to confront challenges as much on their own as possible. The role of education institutions, especially with respect to local universities, is better achieved through moving away from a culture of rote learning and from heavy reliance on academic learning. These are over and above the many institutional and structural deficiencies at all levels of the education system that responsible authorities must address. Industry itself has a role in complementing the operations of education institutions through collaborations like internship programmes so that the transition of graduates from university to the world of work is a smooth one.

Finally, while this study is focused primarily at the micro- and firm level, two implications that have system-wide significance can be drawn. First, the affirmative action-based education policies may have succeeded in boosting the numbers of disadvantaged *Bumiputera* students enrolled and graduating but they may have also accentuated the qualitative disadvantage and ultimately competitiveness of these very students in the labour market. Second, any effort at raising the level of critical thinking skills must go beyond the education system to create a social environment that encourages openness to different views, debates on issues considered important by citizens as much as by those who hold the reins of power. Sans this environment, Malaysian graduates will find it difficult to be on par in terms of creativity and innovation with their peers in advanced countries.

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The research team would like to thank the British Council, United Kingdom, for its financial support of this study entitled 'Employability of Graduates in Malaysia: The Perceptions of Selected Employers'. This is the first of a three-phased study on employability of graduates, in general, and transnational graduates, in particular, and is based on the perceptions of selected Malaysian employers. It is envisaged that phases two and three of the study on graduate employability will be focused on students and parents, and higher education providers respectively. All three phases constitute the series on 'Transnational Education Graduate Employability Study: An Analysis of Graduate Employment Trends in Malaysia'.

With regard to data collection, we are grateful for the support of the 102 employers who responded to our questionnaire and 16 others who accepted our request for interviews. As we studied their responses, we appreciated the time and effort taken by the respondents in providing us with background information, their preferences in employment of graduates, and suggestions as to how expectations can be better realized in the real world of work. For the team members, it has been a learning process as we analyzed the data and reflect on the good times we had in the interviews as issues were discussed and ideas for their resolution exchanged with interviewees.

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Assoc. Prof. Dr. R.M. Fernandez-Chung

Vice-President

HELP University

CONTENTS

	Page
FOREWORD	iii
EXECUTIVE SUMMARY	iv
ACKNOWLEDGEMENTS	vii
CONTENTS	ix
FIGURES	xii
TABLES	xiii
ABBREVIATIONS	xiv
1.0 INTRODUCTION	1
1.1 Importance of human capital and its assessment	1
1.2 Role of education in human capital formation	1
1.3 Objectives of the study	2
2.0 THE FOUNDATIONS OF EMPLOYABILITY: EDUCATION AND ECONOMIC DEVELOPMENT	4
2.1 The role of education in society	4
2.2 Economics in the development discourse	5
2.3 Measuring human capital	6
2.4 Employability in practice – the importance of context and structure	7
3.0 THE MALAYSIAN CONTEXT	10
3.1 Vision 2020 and human capital	10
3.2 The Malaysian education system	10
3.3 Funding education: Generous funding but falling performance	12
3.4 Existing studies of employers’ perceptions	16
3.5 The government’s response to the education challenge	18
4.0 METHODOLOGY	22
4.1 The mixed research paradigm	22
4.2 Operationalizing the research: sampling and data collection	23
4.2.1 The survey instrument	23
4.2.2 Sampling	23
4.3 Validation	25

5.0	FINDINGS OF THE STUDY	26
5.1	Profile of companies sampled	26
5.1.1	Ownership of companies	26
5.1.2	Main business of companies	26
5.1.3	Number of employees	28
5.2	Employers knowledge of higher education qualifications	29
5.2.1	Level of understanding of higher education qualifications	29
5.2.2	Explaining the high level of understanding of higher education qualifications	30
5.3	Perceptions of an ideal graduate employee	32
5.3.1	Attributes: values and personality	32
5.3.2	Competencies: knowledge and skills	33
5.3.3	Profile of an ideal graduate employee	36
5.3.4	Corroboration from other data sources	37
5.4	The realities of graduate employment	39
5.4.1	Relevant criteria for recruitment	40
5.4.2	Graduate employment by type of higher education institutions graduating from	40
5.4.3	Graduate employment by level of qualification	42
5.4.4	Graduate employment by field of study	43
5.4.5	Employers' satisfaction with graduate employees	44
5.4.6	Employment of foreign nationals	49
5.5	Public, private, local and foreign tertiary institutions: insights from interviews	51
5.5.1	Strengths of Graduates	51
5.5.2	Weaknesses of graduates	53
5.6	A balancing act for employers	55
6.0	BRIDGING THE GAPS BETWEEN EXPECTATIONS AND REALITIES OF GRADUATE EMPLOYMENT	57
6.1	The expectations of employers	57
6.2	Bridging the gaps	57
6.2.1	Job seekers	57
6.2.2	Parents and family	58
6.2.3	Educational institutions	59

6.2.4	Industry stakeholders	62
6.2.5	The government	63
7.0	CONCLUSIONS AND POLICY IMPLICATIONS	64
7.1	Conclusions	64
7.2	Policy implications	67
7.3	Limitations of the study	68
	NOTES	69
	REFERENCES	72
Appendix 1:	Survey Questionnaire on Graduate Employment	81
Appendix 2:	Interview Schedule	98

FIGURES

	Page
3.1 Education System of Malaysia	12
5.1 Respondents by Company Type	27
5.2 Respondent Companies by Number of Employees and Company Type	28
5.3 Respondents' Understanding of the Types of Qualifications	30
5.4 Important Attributes in a Graduate Employee	32
5.5 The Importance of Graduate Language Competencies	35
5.6 Relevant Criteria for Recruitment	40
5.7 Graduate Employees by Higher Education Institutions	41
5.8 Selection of Graduates from Higher Education Institutions by Company Type	42
5.9 Graduate Proportions by Levels of Qualification	43
5.10 Employees with Bachelors' Degree by Company Type	44
5.11 Distribution of Graduate Employees by Fields of Study	45
5.12 Employer Satisfaction with Graduates from the Different Categories of Higher Education Institutions	46
5.13 Industry-specific Attributes in Which Graduate Employees Need to Improve on	48
5.14 Key Work Ethics Attributes Which Graduate Employees Need to Improve on	49
5.15 Key Critical-thinking Attributes that Graduate Employees Need to Improve on	50
5.16 Employment of Foreign Nationals by Company Type	50

TABLES

	Page
3.1 Educational Streaming and Occupational Pathways	11
3.2 Public Expenditure in Education – Selected Asian Countries, 2004 – 2008	13
3.3 Education Expenditure and Total Public Expenditure, 2000 – 2010	14
3.4 Indicators Showing the Expansion of Higher Education in Malaysia, 1967-2007	15
3.5 Qualitative Deficiencies in Human Capital	15
3.6 Malaysia’s Performance in TIMSS and PISA Benchmarked against Selected Countries 1999 – 2012	17
3.7 Graduate Employment and Unemployment, 1990 – 2010	18
3.8 Selected Studies of Employers and Other Perceptions of Graduate Employability	20
4.1 Companies Listed in <i>Bursa Malaysia</i> by Industry Group, 2013	24
5.1 Profile of Companies Surveyed	27
5.2 Values and Skills Sought in Advertisements in <i>The Star</i> Newspaper, January to March, 2014	38
5.3 The Bar Council Employability Survey 2012 – Ranking of Attributes/Skills	39

ABBREVIATIONS

ASEAN	Association of South East Asian Nations
CAP	Critical Agenda Project
CLP	Certificate in Legal Practice
GDP	Gross Domestic Product
GEB	Graduate Employability Blueprint
GNI	Gross National Income
HRDF	Human Resource Development Fund
ICT	Information, Communication and Technology
IEA	International Association for the Evaluation of Educational Achievement
IES	Institute of Education Services
MDGs	Millennium Development Goals
MOE	Ministry of Education
MOHE	Ministry of Higher Education
MyQUEST	Malaysian Quality Evaluation System for Private Colleges
NCIHE	National Committee of Inquiry into Higher Education, UK
NEF	New Entrepreneur Foundation
NEP	New Economic Policy
NHESP	National Higher Education Strategic Plan
NIEs	Newly Industrialised Economies
OECD	Organisation for Economic Co-operation and Development
PISA	Program for International Student Assessment
PTPK	<i>Perbadanan Tabung Pembangunan Kemahiran</i> or Skills Development Fund Corporation
QC	Queen's Counsel
SETARA	Rating System for Malaysian Higher Education Institutions
SME	Small and Medium Enterprise
SPM	<i>Sijil Pelajaran Malaysia</i>
STPM	<i>Sijil Tinggi Pelajaran Malaysia</i>
TIMSS	Trends in Mathematics and Science Study
TNE	Transnational Education
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organisation

1.0 INTRODUCTION

1.1 Importance of human capital and its assessment

Although the accumulation of physical capital was considered the ticket for developing countries to graduate from low to middle-income status, human resource has been increasingly recognized to be vital as these countries continue their advance up the income ladder. This role has been acknowledged in the field of development economics through the concept of human capital most often associated with Becker (1964)¹. It is also the cornerstone of evolutionary economics with its emphasis on learning and Schumpeterian 'creative destruction'. The increasing pace of technological advance has given concrete substance to the importance of human capital, with evolutionary economics framing discussions of such advance. Finally, globalization has brought to the fore the notion of national competitiveness. A nation's human resource pool is at the core of this competitiveness.

How is human capital to be measured and who does the measuring? Human capital can be measured by both its breadth (numbers) and depth (quality). Breadth is measured easily by the number of people educated or trained. A measure of the quality of human capital is often referred to as 'employability'. This measure is, however, at best approximate, primarily because employability is a subjective notion. Clearly, an assessment that matters is that of employers who make judgments based on the work employees are expected to perform. However, employers' assessments are often at variance of those of the employees themselves. Even among employers, context matters – the nature of the industry, organizational culture, regulatory framework, as examples - all affect employers' judgments. Yet, any study of employability requires an operational definition. The question then is to identify a set of attributes that are applicable in most contexts.

1.2 Role of education in human capital formation

Behind the issue of employability lies the fundamental question of whether preparing the young for the workplace is the primary role of education. Although this role has received the greatest emphasis, there is an active debate as to whether the treatment of human resource as a 'factor of production' which has a price depending on demand and supply and can be traded in the market for labour, the 'commodification of education' is the right way to view education provision. If it is, should employability be framed narrowly to mean only the revenue stream that an employee can

generate for the company or, more broadly, to include contributing to the company's social responsibilities, referred to nowadays as corporate social responsibility? If it is not the case, so that education is to be more than just about job-readiness, are employers expecting too much from the education system itself?

In seeking answers to these issues, Malaysia has particular relevance for several important reasons. First, after over a decade of heady growth, the country, with a per capita Gross Domestic Product (GDP) of US\$10,432 in 2012 according to the World Bank, joined the group of upper-middle-income countries and is within striking distance of the next level – that of high income. In 1991, then Prime Minister, Dr. Mahathir bin Mohamad announced 'Vision 2020', with its target of achieving high-income status by year 2020. Yet in 2010, alarm bells were sounded in the New Economic Model (2010) that instead of moving to high-income, Malaysia is in danger of falling into a 'middle-income trap'. Among the many contributory factors cited, one is the poor quality of the education system. This has been borne out by such tests as the Program for International Student Assessment (PISA) of the Organisation for Economic Co-operation and Development (OECD) and Trends in International Mathematics and Science Study (TIMSS) of the Institute of Education Sciences' (IES), United States, in which Malaysia's performance has not only been declining in relative but also in absolute terms. These results stand in sharp contrast to the copious number of distinctions given to students in national school examinations at the *Sijil Pelajaran Malaysia* (SPM) and *Sijil Tinggi Pelajaran Malaysia* (STPM) levels.

Although the alarm had been sounded, there has as yet been little evidence that Malaysia's competitiveness has suffered – the country ranks highly in the World Economic Forum's Global Competitiveness Index as well as the World Bank's Doing Business Index². However, this is possible only because of Malaysia's continued reliance on a 'cheap labor' model built around imported unskilled labour. But this cheap labour model is precisely what will leave Malaysia trapped in the middle-income status – with insufficient technology to move up the value chain and genuinely low labour cost countries sapping the country's competitiveness.

1.3 Objectives of the study

In this situation, researching employers' perceptions permits discovery of whether the existing quality of human capital is adequate to the task of supporting even the current model. With this overarching objective, the specific objectives of this research are to determine:

- What are the specific attributes employers require from the graduates of tertiary education institutions they recruit.
- Whether the above attributes are found in the graduates they employ or are looking for to employ.
- What are the factors, in their view, that contribute to these attributes' availability or lack thereof.
- Whether the type of education providers matter in providing these attributes.
- How they can go about remedying any deficiencies in these attributes themselves.
- How may the education system be adapted to address issues raised by the employers.

In answering these questions, this report is cognizant of the fact that only one group of stakeholders is being studied in the current project. Obtaining the views of other major stakeholders – the graduates themselves, and their parents/guardians, senior management and academic staff of tertiary education institutions, and government officials supervising the education sector – would provide a balanced perspective of the issues highlighted. This will be undertaken in subsequent phases of the project.

This report is structured as follows. In the next section (Section 2), theoretical and general aspects of the importance of employability are discussed. This is followed in section 3 by a brief description of the Malaysian context, in which this study is situated, with an overview of the education system, assessment of its performance, and existing studies of employer perceptions. Section 4 describes the research methodology employed, including its justification and how the research subjects were chosen while the findings of the study are presented in Section 5, Section 6 concludes with several implications for policy.

2.0 THE FOUNDATIONS OF EMPLOYABILITY: EDUCATION AND ECONOMIC DEVELOPMENT

2.1 The role of education in society

What is the role of education in society? Dearing (1997), in his report; *Higher Education in the Learning Society*³, noted:

We believe that the aim of higher education should be to sustain a learning society. The four main purposes which make up this aim are:

- To inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well equipped for work, can contribute effectively to society and achieve personal fulfilment;
- To increase knowledge and understanding for their own sake and foster their application to the benefit of the economy and society;
- To serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels;
- To play a major role in shaping a democratic, civilized and inclusive society.

This view of the role of education in society clearly goes beyond that of preparing youth for the workplace to include the inculcation of all qualities that allow an individual to lead a meaningful life in, as well as contribute to, the society of which he/she is a part. UNESCO (1960) echoed this in its reference to education as ‘a means to empower children and adults alike to become active participants in the transformation of their societies. Learning should also focus on the values, attitudes and behaviors which enable individuals to learn to live together in a world characterized by diversity and pluralism’.

A little more specificity came with linking education to development, with international organizations leading the clarion call for action. UNESCO has given education a central role in its Millennium Development Goals (MDGs). Of the eight MDGs, two relate specifically to education⁴. The World Bank (2014), with its Human Development Network⁵, opines in its webpage on education that “Education is a powerful driver of development and one of the strongest instruments for reducing poverty and improving health, gender equality, peace, and stability’.

2.2 Economics in the development discourse

Although development entails far more than economics, there is little doubt that it is economics that is in the driver's seat when it comes to policies and their implementation for developing countries. Even UNESCO (2009); in discussing education for sustainable development, makes reference to poverty reduction and sustainable consumption as two of several goals of education. How did this come about? The rising prominence given to two related branches of economics has brought with it greater attention to education. These are in the arenas of development economics and technological advance.

With respect to development economics, the early emphasis has been on the accumulation of physical capital, not on education. Thus, early neoclassical growth models did not include education as a major input to production (Harrod 1939; Domar 1946; Solow 1956; and Harberger, 1998: 1-2). However, as early as the 1960s, there was growing awareness of education's importance, thanks to a growing body of empirical work on Western economies (Schultz 1961, Denison 1962). From simply helping to explain a part of the unexplained residual in a growth accounting framework, theoretical development has progressed to link education explicitly to income, trade, and the family, among other areas (Ozturk 2001). In work pioneered by Becker (1964), with whose name the term 'human capital' came to be associated, and Mincer (1974), other studies like Leuven (2011) and Department of Business Innovation and Skills (2013) have estimated the impact of education on earnings.

Education and human capital were also associated with the literature on technological advance in contributing to economic growth. In the area of evolutionary economics, the 'new growth theories' that integrate technological learning into the process of growth characterized by Schumpeterian creative destruction, although recognizing the fact that education represents but one of many factors enabling this learning, nevertheless are also aware that education underlines most other factors of which policy framework, governance, technological capability are among the most important. In short, education plays a decisive role in enhancing productivity and engendering innovation, both of which are essential for increasing value-added in production. Indeed, it has been argued that while physical capital is vital in the early stages of a country's development, human and knowledge capital come into their own as it moves up to middle-income and, indeed, determines whether it can cross over to the high-income threshold.

2.3 Measuring human capital

Human capital has been variously defined. A convenient definition is that of Pishke (2012: 3): ‘any stock of knowledge or characteristics the worker has (either innate or acquired) that contributes to his or her ‘productivity’. This broad definition, eschewing mention of specific attributes that contribute to this productivity, has the virtue that it highlights the fact that education is just part, albeit an important part, of human capital. At the same time, this lack of specificity means that if it is hard enough to measure physical capital, it is even harder to measure human capital. First, the specific skills embodied in human capital are not independent of one another but likely to be either synergistic or antagonistic (Andrews and Higson 2008: 419). Second, the boundaries of this concept remains hazy – arguments have been advanced that it captures too little of what contributes to productivity. Hence, the emergence of ‘social capital’ as an alternative (and broader) concept for consideration.

Apart from the haziness of the conceptual boundary, there is also the subjective nature of the many attributes that make up human capital. Given different stakeholders involved in the production and use of human capital, that subjectivity comes partly from which stakeholder is defining the concept. Since human capital is framed in the context of the world of work, it makes sense for employers as the consumers and beneficiaries of human capital to make that definition. This is the reason why most empirical research focuses on employer perceptions. However, some have also compared the perceptions of employers with those of potential and existing employees as the owners of knowledge capital.

Employers typically make reference to the quality of human capital as ‘employability’, described by Wilton (2012: 2) as ‘typically conceptualized as individual ‘human capital’ in the form of a list of generic qualities that recruiters expect or desire in applicants, whether for placements or graduate roles’. For specific examples of these skills, he cited the report of the Department for Business, Innovation and Skills of United Kingdom (2009) that listed communication, motivation, independence, analysis, confidence and problem solving as among the most important. Others have classified skills as ‘soft’ and ‘hard’. For Andrews and Higson (2008: 413), transferable soft skills include professionalism, reliability, the ability to cope with uncertainty, to think critically for problem-solving, and to communicate effectively. These skills are contrasted against ‘hard’ knowledge of a particular discipline. Hodges and Burchell (2003: 16) referred to ‘competencies’, each of which is defined as a ‘characteristic of an individual that is causally related to job

performance'. As a third example, Oliver (2011: 106) refers to 14 'capabilities' as employability indicators. These are knowledge, writing, speaking, thinking, quantitative, using Information, Communication and Technology (ICT), teamwork, independent learning, intercultural understanding, problem-solving, values and ethics, community engagement, industry awareness, and social contexts.

While the above attributes provide useful insights into the complexities of employers' perceptions of graduates and the construction of what they consider to be a desired graduate identity, a grouping of attributes beyond just 'soft' and 'hard' skills remains useful. Hinchcliffe and Jolly (2009: 1) provide a convenient grouping of attributes. They referred to a:

four-stranded concept of (graduate) identity that comprises value, intellect, social engagement and performance. Value includes personal ethics but also a commitment to social values such as diversity and sustainability. Social engagement refers to the ability to interact with persons constructively across a range of situations and communities of practice. Intellect is what the degree programme of study itself delivers whilst performance refers to the potential to deliver results.

They argue that, together, these concepts define, in the eyes of employers, a graduate's capability in the sense of Sen (1993).

2.4 Employability in practice – the importance of context and structure

Graduate employability has been the subject of a large and growing number of empirical studies (Hesketh 2000; Hodges and Burchell 2003; Hinchcliffe and Jolly 2009; Gallup 2010; Lowden *et al.* 2011; Oliver 2011; and the literature review of Cicekli 2013). While all empirical studies deal with the relative importance of specific skills, some are able to identify factors that are outside the typical skill set. For instance, Hesketh (2000) discovered that the particular education institution graduates came from figured in employers' perceptions. Gallup (2010: 5) noted the significance of international dealings among firms in the European Union and the preference of firms for graduates with bachelors' degrees.

While the skills, competencies or capabilities mentioned above are applicable across firms and indeed countries, the relative strength of each varies according to a number of contextual factors. These include work culture of countries or regions, firm-specific organizational culture, and type of industry. The impact of cultural differences on the workplace has been intensively explored in the

work of Hofstede (1980). Based on interviews of subsidiaries of a multinational firm in 40 countries, Hofstede argued (1980:11) that four cultural dimensions – power distance, uncertainty avoidance, individualism and masculinity – defined the work culture in a particular country. This work culture clearly affects how much weight employers (and also graduates) attach to particular skills. Accounts of these differences abound (for instance, Matic 2008; and Miller, 2013) so that the findings of employer perceptions in a particular country are likely to have much less relevance in another country which belongs to a different culture grouping.

Quite apart from the work culture discussed above, firm-specific organizational culture also affects employer perceptions. A firm's organizational culture is its personality. Where that culture is well established, as with Japanese firms, top management in a firm is part of and reinforces that culture (Jaivisarn 2010). Where one person plays a dominant role, as is typical with founders of firms, that individual shapes the firm's organizational culture. In the first instance, employer perceptions are shaped by the firm's organizational culture. In the second case, perceptions are basically those of the dominant leader.

Employer perceptions of employability may also be shaped by the type of industry a firm is in. For instance, firms that embody significant technology are likely to emphasize hard knowledge among the persons it wants to employ. Those in the service industry may be more concerned with interpersonal communication skills. For small-medium enterprises that need to survive against competition from much larger firms, critical thinking skills that are needed to recognize new business opportunities and to solve problems are likely to be valued.

A final (structural) factor that makes for variation in perceptions across countries and regions is the education system. Developing countries as well as Asian economies have often been accused of emphasizing rote learning over critical thinking as well as being examination oriented (Yelland 2012; and Saleh 2013). The extent to which these should be viewed negatively is contested (Vandermansbrugge 2004; and Snider 2011). At the same time, it is obvious that these approaches are not mutually exclusive. However, to the extent that education systems have different emphases and strengths, employers who are situated within, if not products of, these systems will have perceptions affected by or attuned to them.

The above differentiations imply that a literature review of international experience may yield few insights for a particular country with its specific work culture, industrial structure and education

system. This does not mean that the generic skill sets are irrelevant but it does mean that the weight attached to each skill depends on specific contextual and structural factors. For this reason, no such literature review is attempted in this report. Instead, a review of existing studies on the Malaysian scene will be undertaken in the discussion on Malaysia in the next section.

3.0 THE MALAYSIAN CONTEXT

3.1 Vision 2020 and human capital

After a decade and a half of rapid economic growth, Malaysia has achieved the status of an upper middle-income nation using World Bank definitions⁶. Flushed with confidence and as befitting its elevated status, Malaysia has embarked on an ambitious plan to transform its economy with the aim of becoming a developed country by year 2020. This plan, labeled 'Vision 2020', was announced by then Prime Minister Mahathir Mohammad at the tabling of the *Sixth Malaysia Plan* in Parliament in 1991. At the time of its launch, the plan appeared eminently achievable. However, two financial crises in a decade have dented the country's growth. Instead of achieving the Vision 2020 goal, Malaysia is in danger of falling into 'the middle-income trap'⁷.

With its cheap-labour model sustained only by the import of unskilled labour, Malaysia, which cannot hope to compete in terms of labour cost with the countries from which its imported labour originated from, would seem a classic example of being caught in this 'trap'⁸. To break free from this trap requires the deployment of human capital for the production of high value-added goods and services. The key issue is whether Malaysia's human capital is up to the challenge. In this section, we look at the country's education system, the institutional infrastructure that produces this capital, and the effectiveness of this infrastructure – the quantity and quality of human capital. Existing studies of employer perceptions of the output of the education system are also reviewed.

3.2 The Malaysian education system

The Malaysian education system has two tracks, one academic and the other vocational. Academic education has traditionally been the focus of attention, to the extent that the term 'education system' has frequently been used to refer exclusively to academic education. That public perception of vocational education as an alternative for individuals who cannot make the grade in academic education has not helped.

Students of Malaysia's system can select their education track when they complete their primary education, during secondary education, and at the tertiary education level. Students who complete their primary education can continue in junior vocational education institutions at the secondary school level, while those at upper secondary level can opt to enter vocational institutes. This means

their choice of stream is made after six years of schooling, and between the tenth and eleventh years. Movement between the academic and vocational streams is also possible for students in tertiary level institutions (Fig. 3.1). It should be noted that while polytechnics and technical institutes are classified under the academic track because their pathways upwards are to universities and university colleges, they are also a part of the vocational education system.

The output of the above system is also ‘streamed’ in terms of occupational structure although such streaming is not rigid. The major occupations taken up by graduates of each type of education is shown in Table 3.1. To the extent that graduates of a particular level of education are in occupations requiring a lower level of education, inefficient use of human capital results from such a mismatch. Shyamala *et al* (2014) found evidence of this in the case of female university graduates, despite being more numerous than their male counterparts, taking up clerical occupations, in lower paying jobs, temporary employment, or being unemployed.

Table 3.1: Educational Streaming and Occupational Pathways

Education Stream	Institution	Occupation
Academic education	Universities and other tertiary education institutions, both public and private	Managerial, professional occupations, including those requiring technology
Technical and vocational education	Polytechnics, technical institutes or colleges and community colleges	Supervisory occupations, including technical assistants and supervisors
Vocational skills training	Skills training institutions, both public and private	Skilled and semi-skilled occupations

Source: Pang Chau Leong (2010). *The Integration of the National Occupational Skills Standard-based Training System and the National Dual Training System in Malaysia*, Batu Pahat: Penerbit Universiti Tun Hussein Onn.

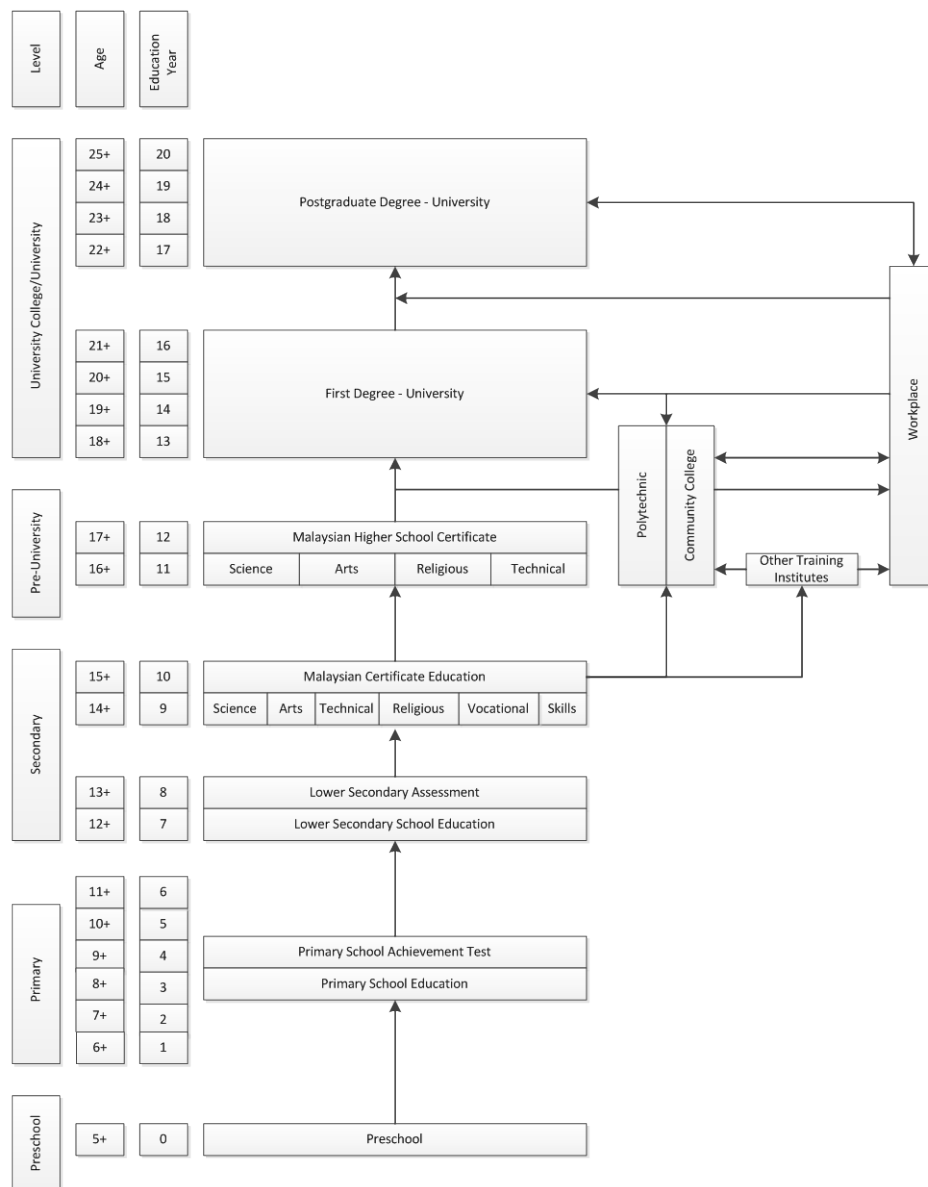


Figure 3.1: Education System of Malaysia

Source: Malaysia. Ministry of Education (2001). Education Plan 2001-2010. Cited at www.moe.gov.my. Original text is in Bahasa Malaysia (Malay)

3.3 Funding education: Generous funding but falling performance

The education system is not wanting in terms of funding. Indeed, Malaysia spends the highest proportion of its total public expenditure as well as GDP on education among countries in East and Southeast Asia (Table 3.2). Significantly, as a percentage of GDP, Malaysia spends twice as much as Singapore and South Korea, the latter countries perennial top performers in international scholastic

tests and much better-placed in university rankings than Malaysia. Also, Malaysia allocates the highest percentage of its education expenditure to tertiary education.

From a temporal perspective, total education expenditure has also risen considerably over the first decade of this century (Table 3.3). Thus, this expenditure has more than doubled from RM14.1 billion in 2000 to RM30.5 billion in 2010, with a peak of RM31.3 billion in 2009. This represents an annual growth rate in excess of 10 %. That education expenditure as a percentage of total public expenditure has fallen between 2000 and 2010 is only because the latter has grown even faster at 14.5 %.

Table 3.2: Public Expenditure in Education – Selected Asian Countries, 2004 – 2008

Country	Public Expenditure on Education as Percentage of GDP ^a	Public Expenditure on Education as Percentage of Total Public Expenditure ^b	Public Expenditure on Tertiary Education as Percentage of Total Public Expenditure ^b
Malaysia	5.8	25.2	37.6
China	4.1	--	--
India	2.8	10.7	19.6
	(2008)		
Indonesia	3.5	17.5	--
Philippines	2.9	15.2	13.3
Singapore	3.2	--	--
South Korea	3.3	--	--
Thailand	3.8	20.9	17.9

Source: Cheong, Kee-Cheok, *et al* (2011). 'Education and Human Capital Formation', in *Malaysian Economy: Unfolding Growth and Social Change*. Edited by Rajah Rasiah, Kuala Lumpur: Oxford University Press, p.159 – 184.

Notes:

^a Data for 2011-2012 are from Key Indicators for Asia and the Pacific 2009, of the Asian Development Bank.

^b Data are from World Bank Edstats database as of July 2009.

Table 3.3: Education Expenditure and Total Public Expenditure, 2000 – 2010

Year	Total Education Expenditure (RM bil)	Total Public Expenditure (RM bil)	Education Expenditure as Percentage of Public Expenditure
2000	14.1	78.0	18.0
2001	18.6	91.0	20.4
2002	20.7	100.5	20.6
2003	26.2	109.8	23.9
2004	23.9	112.5	21.2
2005	16.7	117.4	14.2
2006	19.8	136.7	14.5
2007	22.1	159.5	13.9
2008	29.5	176.8	16.7
2009	31.4	207.9	15.1
2010	30.5	191.5	15.9

Source: Malaysia Ministry of Education, Quick Facts (Various issues)

What has these substantial allocations achieved in terms of education performance? First, the country has seen a substantial increase in enrolment, especially in tertiary education and in particular, among females (Table 3.4). This increase has been fuelled by the dramatic expansion of private tertiary education, especially after the passage of the Private Higher Educational Institutions Act 555, 1996. Thus, at least in quantitative terms, increases in education spending have led to an expansion of the country's stock of human capital.

As evidence of this success, Malaysia has achieved all the MDGs at the United Nations Development Programme (UNDP), two of which are to achieve universal primary education (MDG1) and to achieve gender equality in education (MDG3) (United Nations, 2011). Also, in the newly developed Human Capital Index of the World Economic Forum, Malaysia has been ranked a creditable 22nd out of 122 countries overall, although in education, it ranked only 39 (World Economic Forum 2013) ⁹.

But human capital is not all about numbers. When it comes to quality, Malaysia still has some way to go, as evidenced by Table 3.5. A much smaller proportion of Malaysia's workforce is skilled compared to those in advanced nations. Malaysia is also at a disadvantage with respect to the

proportion of its labour force with a tertiary education, although, here, the gap is smaller. However, those with tertiary education were reported to be not up to employers' expectations (Bernama, 2012).

Table 3.4: Indicators Showing the Expansion of Higher Education in Malaysia, 1967-2007

Indicators	1967	2002	2007
No. of public universities	1	18	20
No. of private universities ^a	0	16	37
No. of other private higher education institutions	2	518	488
No. of students	4,560	262,626	873,238
(Postgraduate students)	(398)	(31,501)	(45,888)

Source: Hill, Christopher, *et al* (2013). 'TNE – Transnational Higher Education or Tension between National and External – a Case Study of Malaya'. *Studies in Higher Education* cited at <http://www.tandfonline.com/doi/full/10.1080/03075079.2012.754862>. (Accessed on January 8, 2014).

Note. ^a Includes branch campuses of foreign universities.

Table 3.5: Qualitative Deficiencies in Human Capital of Selected Countries

Countries	Percentage of Labor Force with Tertiary Education 2007	Percentage of Workforce Who Are Skilled 2008
Malaysia	23.4	28.0
Hong Kong	25.6	36.0
Singapore	35.9	51.0
OECD Average	27.4	37.6

Source: Malaysia (2010). *Tenth Malaysia Plan, 2011-2015*. Putrajaya: Economic Planning Unit, Prime Minister's Department.

While the relatively low proportion of skilled labour can be traced to the low labour cost model that the country has adopted, the smaller proportion of the labour force with tertiary education points towards challenges in the education system. Indeed, these challenges are manifest from international benchmarking tests, TIMSS and PISA¹⁰. What these tests (Table 3.6) show are that:

- In both mathematics and science, Malaysia falls far behind the leaders made up of the Newly Industrialised Economies (NIEs). In reading skills, Malaysia, with a lengthy history of English language use, is also well behind economies with much more recent histories of acquaintance with the language.
- Even more worrying is that the absolute scores have declined over time, with mathematics and science scores materially lower in 2011 compared to 1999 in TIMSS. This is despite the fact that improved student results for national examinations are reported every year.
- Malaysia's reading scores in PISA is suggestive not only of poor but also falling English language skills at a very time when globalization demands an ability to use English, now the *lingua franca* of commerce.

These findings have major implications for employers who are the consumers of the education system's output. Next, we survey the existing empirical literature on this subject.

3.4 Existing studies of employers' perceptions

What does the situation at the firm level look like? Two major stories have appeared in the media in recent years. The first is of graduate unemployment (Fleming and Sjøborg 2012; Noor Azina Ismail 2011)¹¹. Media reports relate both to the numbers unemployed (Chew, 2013) and graduates duration of unemployment (Yu, 2013). Concerns about numbers have arisen because of the dramatic expansion in tertiary education, mentioned earlier on, that has brought about a corresponding rapid increase in the number of graduates in the labour market. As a result, the graduate unemployment rate, between 3 % and 4 % from 2000 to 2010, is higher than that for the decade before (Table 3.7). This rise also means that from a situation where the graduate employment rate was lower than the overall unemployment rate between 1990 and 2000, it has caught up with the latter between 2000 and 2010.

**Table 3.6: Malaysia's Performance in TIMSS and PISA Benchmarked against Selected Countries
1999 - 2012**

Subject and Country	TIMSS Scores				PISA Scores	
	1999	2003	2007	2011	2009	2012
Mathematics						
Malaysia	519	508	474	440	404	421
Korea	587	589	597	613	546	554
Taiwan	585	585	598	609	543	560
Science						
Malaysia	492	510	471	426	422	420
Korea	549	558	553	560	536	538
Taiwan	569	571	561	564	520	523
Reading						
Malaysia					414	398
Korea					539	536
Taiwan					495	523

Source: TIMSS and PISA databases.

These concerns might have given rise to numerous studies on graduate students' employability since 2010 (Table 3.8). Assessments of employability made indicated, generally, that graduate employees' performance fell short of employers' expectations (Rahmah Ismail *et al* 2011; Salina Daud *et al* 2011, Manjet Kaur and Chuah 2012; Ting and Cheah 2012). Several of the studies pointed specifically to a lack of English proficiency (Guvinder Kaur and Sharan Kaur 2008; Manjet Kaur and Chuah 2012). Other studies had simply focused on skills their employers looked for in graduates whom they would hire (Hoo *et al* 2009; Mohamad Sattar Rasul and Puvanasran 2009; Mohd Yusof Husain *et al* 2010). Also explored was the divergence in perceptions between employers and faculty (Parmjit Singh *et al* 2013), and employers' perception differences between local and foreign graduates (Hoo *et al* 2009).

Table 3.7: Graduate Employment and Unemployment, 1990 – 2010

Year	No. of Employed Graduates (‘000)	No. of Unemployed Graduates (‘000)	Graduate Unemployment Rate (%)	Overall Unemployment Rate (%)
1990	382.5	9.1	2.3	4.5
1995	563.1	9.7	1.7	-
2000	1,000.4	32.8	3.2	3.0
2004	1,479.0	64.0	4.1	3.5
2008	1,660.3	54.1	3.2	3.3
2010	2,030.6	65.5	3.1	3.6

Sources: Malaysia, Department of Statistics, Malaysia (2011). *Labour Force Survey Report 2011*. Kuala Lumpur: National Printers, Table A1 (a); Malaysia, *Tenth Malaysian Plan*. Putrajaya: Economic Planning Unit, Prime Minister’s Department.

Several characteristics of these studies are worth noting. First, they were overwhelmingly about graduates of academic education. Second, they were small sample surveys of specific industries or subsectors of industries, or of subgroups of graduates. Third, they were largely disconnected from the larger issues relating to the education system and the labour force model, with the result that recommendations were frequently made to align university curricula to what employers wanted, with no consideration for how this was to be undertaken. As a result, even if these findings remain of interests, their associated recommendations are of little practical use.

3.5 The government’s response to the education challenge

Recognizing the unsatisfactory quality of the school system, the government has put out an Education Blueprint (MOE 2012). Launched in September 2012, Malaysia Education Blueprint 2013 - 2025 is to intended provide a comprehensive framework to support ‘the rapid and sustainable transformation’ of the country’s education system to enable Malaysia ‘to compete with the best in the world’. It identifies the challenges the current education faces, establishes a vision for the next decade, and proposes a comprehensive transformation programme to realize this vision. This programme is built around 11 major “shifts” (MOE 2012: E15-16). These shifts relate to the access to

quality education, proficiency in English, together with a range of institutional initiatives, to realize the above objectives. Significantly, it recognized the existence of multiple pathways – academic, vocational and religious – and proposed measures to strengthen each.

The government is also cognizant of the problem of graduate unemployment. The National Higher Education Strategic Plan (NHESP) identifies graduate employment as a Critical Agenda Project (CAP), both in the first and second phases of the plan. Recent activities towards enhancing graduate employment include:

- RM440 million to be allocated for the Perbadanan Tabung Pembangunan Kemahiran (PTPK) or Skills Development Fund Corporation, to provide loans for trainees to undergo skills training.
- Setting up a New Entrepreneur Foundation (NEF) with a start-up of RM50 million as part of its efforts to help young ICT entrepreneurs. The NEF would be the platform to provide training and guidance programmes.
- A Young Entrepreneurs Fund to be set up with RM50 million by the Small and Medium Enterprise (SME) Bank to provide soft loans to jobless youth aged 30 and below.
- An allocation of RM200 million for the setting up of a Graduate Employability Taskforce to strengthen employability of jobless graduates and develop a graduate employment blueprint.

In accordance with the 2013 budget, a taskforce was set up and the National Graduate Employability Blueprint 2012-2017 (GEB) developed (MOHE 2012). The overarching objective of the GEB is to support the national vision of producing competent graduates to fulfill national and international manpower needs with the target of achieving 75 % of graduates employed within six months of graduation.

The GEB identifies significant graduate employability issues and challenges as:

- unknown market size and needs for a high income economy;
- unknown intake and exit attributes except for a few professional courses;
- poor intake attributes;
- the notion that industry prefers ready-made instead of fundamentals;

- stop-gap measures versus immersion at institutions of higher learning; and
- not obtaining the right choice of courses.

The issue of graduate skills is related to the second challenge that is, the general difficulty in identifying job-related attributes for most jobs. It argues that it is difficult to meet employers' demands for graduate skills if these demands are unknown. This argument, however, flies in the face of the generic attributes/skills for graduate employability identified in the Malaysian Qualifications Framework and given substance by the many empirical studies already cited in the previous section. The attributes identified by the GEB itself differ little from those already identified.¹²

Despite the official hype that these blueprints are designed to elevate the country's education system to a higher plane, it is clear that in practice these are remedial efforts to address a failing education system in the context of moving Malaysia up the development ladder. The efficacy of the implementation of these blueprints remains to be seen. The Education Blueprint has detailed a raft of measures but has been silent on the sources of the challenges these measures were supposed to confront. With respect to the GE Blueprint, the expansiveness of its strategic rhetoric and budgetary allocations has been matched by the absence of specific measures to operationalize strategies.

Table 3.8: Selected Studies of Employers and Other Perceptions of Graduate Employability

Authors	Sample	Findings
Guvinder Kaur and Sharan Kaur (2008)	211 employers, 257 graduates in Klang Valley	Employers prefer graduates from public universities, with ICT, teamwork, communication skills
Hoo <i>et al</i> (2009)	56 employers	Most important by employers are: communication skills, confidence, integrity, dependability, IT skills and adaptability. Employers' perceive foreign graduates to be superior compared to local, and twinning programme graduates.
Sattar Rasul and Puvanasaran (2009)	107 employers from manufacturing	Basic skill, thinking skill, sources and resources skill, system and technology skill, and personal qualities were most important
Mohd Yusof Husain <i>et al</i> (2010)	180 employers of engineering firms	Employers value employability skills. Findings invariant across firm sizes

Table 3.8: Selected Studies of Employers and Other Perceptions of Graduate Employability (contd.)

Authors	Sample	Findings
Rahmah Ismail <i>et al</i> (2011)	749 employers in service sector	Employers gave moderate scores for local and overseas graduates
Nor Azina (2011)	3025 graduates	Employment prospects of graduates with a good command of English and who possess leadership and technical skills are better
Salina Daud <i>et al</i> (2011)	479 employed graduates	Soft skills, personality and social skills need to be developed
Manjet Kaur and Chuah (2012)	Manufacturing, information from secondary sources	Graduate employees' English language proficiency skills below employers' expectations.
Ting and Cheah (2012)	45 bank managers	Gap between the employers' perception and the actual performance of Malaysia business graduates. Strengths and weaknesses of business graduates from different universities were identified
Parmjit Singh <i>et al</i> (2013)	66 employers, 58 instructors	Employers-instructors dissonance in what are most important skills. Employers like integrity, communications; instructors like teamwork

4.0 METHODOLOGY

4.1 The mixed research paradigm

The choice of research paradigm – quantitative or qualitative – is a subjective exercise. Whether to make the choice is in itself a choice. For this study, we believe this choice is unnecessary. As indicated by Krauss (2005:759), despite the major paradigms' epistemological differences, 'ultimately, the heart of the quantitative-qualitative 'debate' is philosophical, not methodological'. It is therefore appropriate to view these paradigms not as competitive but complementary (Onwuegbuzie and Leech 2005). The philosophical paradigm that does this is realism (Healy and Perry 2000) within which framework both quantitative and qualitative methodologies have a place, depending on the circumstances. A less hallmark, then, of this paradigm is pragmatism. The objective of the researcher adopting realism is to combine the strengths of quantitative and qualitative paradigms – the so-called Fundamental Principle of Mixed Research.

For this paradigm, the mixed model approach for data collection is used. A structured questionnaire administered to respondents from a large number of firms is combined with in-depth interviews with key informants (Yin 2009). The use of multiple data collection methods increases both the breadth and depth of data collection. The key informants are selected purposively in the spirit of Luborsky and Rubinstein's (1995:6) 'sampling for meaning', that is, informants are chosen who can add meaning to the research. In the interest of time, it was decided that data collection using both the above methods be undertaken simultaneously. This meant the merging of both sets of data into a larger data set for analysis¹³.

The mixed research paradigm has several advantages which this research intends to exploit. First, data collection using probabilistic sampling ensures external validity, permitting generalization of findings. Second, the use of key informants should yield analytical insights not possible with structured questionnaires. Third, key informants also help to validate findings from the questionnaires, thereby enhancing the reliability of these findings. Fourth, the range of responses coming from informants with different backgrounds and from different types of firms also ensures the neutrality of findings.

4.2 Operationalizing the research: sampling and data collection

Although the data obtained is cross-sectional, the study is both embedded and (potentially) longitudinal from a data perspective. It is embedded in the sense that although the unit of analysis is the company, information is sought from managers within the unit. It is potentially longitudinal in the sense that the units of analysis considering employees had joined the firms at different times under different circumstances. What is the importance of the time dimension? It lies in the fact that context needs to be taken into account in analysis.

As with all research involving primary data collection, operationalization involves the design of the survey instrument and of sampling. These aspects are discussed next.

4.2.1 *The survey instrument*

The survey instrument consists of a set of questionnaires, one for each phase of data collection discussed in 4.2.2. The first is a structured questionnaire to be used to survey company perceptions and practices. This questionnaire, reproduced in Appendix 1, is made up of four sections. Section A seeks background data relating to the companies surveyed. Section B probes employers' ability to distinguish between qualifications of graduates offered by different types of education institutions. Section C solicits information about the graduate employees hired by the companies. The final section (Section D) asked employers about the attributes they would like to see in their employees.

The schedule for detailed interviews, the second phase of data collection, consists of a set of questions that serve primarily as prompts in what is expected to be open-ended but deep discussions. This set of questions is shown in Appendix 2.

4.2.2 *Sampling*

The sampling frame for data collection via a structured questionnaire consists of two data sets. The first is that of companies listed in *Bursa Malaysia* (formerly the Kuala Lumpur Stock Exchange) and published in the *New Straits Times*. Table 4.1 shows these companies, classified by industry group. This list of 986 companies covers the largest publicly-listed companies. Simple random sampling was used to select 776 companies, approximately 75.0 % of all listed firms. A structured questionnaire was sent to these selected companies through email obtained from their respective webpages. Out

of the 776 questionnaires sent, 187 (24.0 %) were returned undelivered because the email addresses in the respective websites had either been changed or removed. As a result, only 589 questionnaires were administered (Table 4.1). That a quarter of the websites listed were inoperative reflects poorly on their management by the listed companies concerned as well as on the monitoring role of *Bursa Malaysia*.

Of the 589 questionnaires administered, only 102 (17.3 %) could be used as the study sample from the perspective of fully or adequately answered responses. However, in the process of categorising the companies by type of business, the total number involved is 120. This is due to the fact that 16 companies were involved in more than one business and two others were 'social enterprises' which were categorised as 'others'.

Table 4.1: Companies Listed in Bursa Malaysia by Industry Group, 2013

Industry Group	No. of Companies	Percentage Distribution	Number in Samples
Consumer Products	151	49.7	75
Industrial Products	286	46.5	133
Construction	59	69.5	41
Trading/Services	221	75.6	167
Finance	40	100.0	40
Infrastructure Project Companies	8	100.0	8
Hotels	4	100.0	4
Properties	110	53.6	59
Plantations	42	52.4	22
Technology	42	52.4	22
REITS	17	76.5	13
Closed-End Fund	1	100.0	1
Special Purpose Acquisition Companies	4	75.0	3
Total	986	59.7	589

Source: The Bursa Malaysia list in the News Straits Times (November 15, 2013)

The second data set consists of 16 accounting and law firms. Selection was made purposively for practical reasons, these 16 being among the larger firms based in the Klang Valley. Of these, six (37.5 %) responses were received. Together with the 102 returns from the first lists, a total of 108 yield a total of 17.9 % return.

In-depth face-to-face interviews were carried out between 5 March and 6 May 2014. The selection of respondents principally followed the theme used in the survey, that is, companies listed in *Bursa Malaysia*. A total of 30 companies were approached and of these, 16 responded positively to the request for interviews. The response rate for interviews was 53.3 %.

4.3 Validation

Validation of the findings of this study is through triangulation. First, triangulation is used through deploying both a large-scale online survey through a structured questionnaire and a series of face-to-face interviews, the details of which have been described in the previous section. Second, other sources of information are used to validate the results from this study. These are recruitment advertisements from *The Star* newspaper over the period January 1 to March 31, 2014, and the Bar Council's Employability Survey 2012 (Thiru and Ang, 2012). These other sources permit triangulation through data as well as through investigators.

5.0 FINDINGS OF THE STUDY

5.1 Profile of companies sampled

As indicated in Section 4.0, data collection was based on a questionnaire to the study sample and interviews which were simultaneously conducted with a selection of public and private companies, including professional organisations in law and accounting which were classified under the category 'others'. In relation to the background data of companies, aspects to be covered are (a) ownership of companies (b) main business of companies and (c) number of employees.

5.1.1 Ownership of companies

Questionnaire responses were received from 43 public sector companies¹⁴ (47.5 %), 51 private sector firms (50.5 %) and 2 others (2.0 %) relating to social enterprises (Fig. 5.1). Of the 43 public sector companies, 38 (88.4 %) were listed in *Bursa Malaysia* and 5 (11.6 %) As for the interviews, opinion and perceptions gathered were from 6 public companies (37.5 %) 8 private companies (50.0 %) and 2 others (12.5 %) which were professional and governing organisations. Comparatively, a slightly higher proportion of private than public companies responded to both questionnaires (50.0 % as against 47.5 %) and interview requests (50.0 % as compared to 37.5 %) respectively.

5.1.2 Main business of companies

In relation to the main business that the sample respondents were engaged in, it was categorized into five main types, these being infrastructure, manufacturing, finance, trading services and others. Based on the questionnaire responses (Table 5.1), 31 (25.8 %) of the respondents were involved in infrastructure business, 22 (18.3 %) in manufacturing, 18 (15.0 %) in trading services, 13 (10.8) in finance, and 36 (30.1 %) in 'others'. As for the interviewees, 3 each (18.8 %) were engaged in finance and trading services, 2 each (12.5 %) in infrastructure and manufacturing, and 6 (37.4 %) in 'others'. Relatively, a higher proportion of the interviewees were in trading and finance (37.6 %) than in infrastructure and manufacturing (25.0 %). The reverse could be said of the questionnaire respondents which had a higher proportion from the infrastructure and manufacturing (44.1 %) than trading and finance (25.8 %).

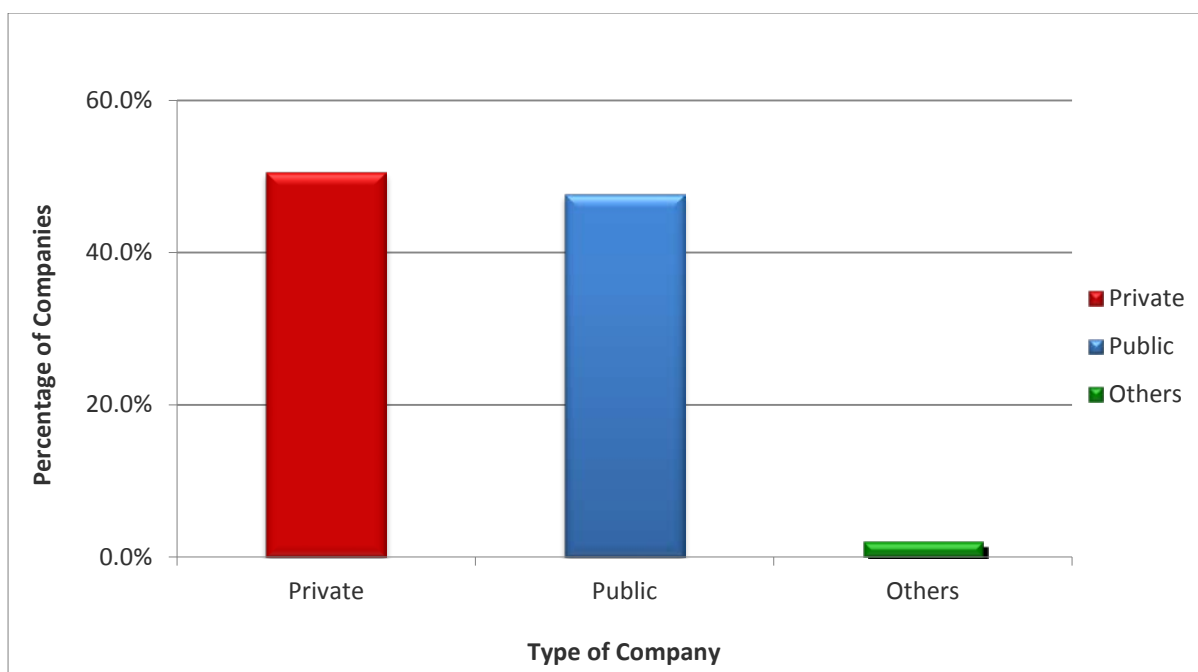


Figure 5.1: Respondents by Company Type

Table 5.1: Profile of Companies Surveyed

Background Aspects	Characteristics	Number of Questionnaire Respondents	Number of Interviews
Ownership	Public	43	6
	Private	51	8
	Other	2	2
	Unspecified	6	--
Main Business	Manufacturing	22	2
	Infrastructure	31	2
	Trading and related services	18	3
	Finance	13	3
	Others	36	6
Number of Employees	More than 1,000	32	8
	500 – 999	22	2
	100 – 499	14	3
	Fewer than 100	31	3

5.1.3 Number of employees

The number of employees was provided by the respondents to the questionnaire. A total of 32 companies (32.3 %) employed more than 1,000 staff, followed by 22 (22.2 %) with 500 to 999, 14 (14.1 %) between 100 and 499, and 31 (31.3 %) had fewer than 100 employees (Fig. 5.1). Therefore, the study sample represented a range of companies in relation to the number of staff employed, their size (by employment) classifiable into large (more than 1,000), fairly large (500 to 999), medium (100 to 499) and small (fewer than 100). Perhaps because of the sampling frame, the distribution of the companies surveyed is bimodal, with modes at the largest and smallest companies. Of the 16 companies interviewed, eight (50.0 %) were with large companies, and the others with fairly large (12.5 %), and medium and small (18.8 % each).

To ascertain if company size varies with ownership, the data on the number of employees was cross-tabulated by the type of company. The resulting cross-tabulation suggests that the large companies were in the public sector (74.5 %) while the small businesses (86.0 %) were in private hands (Fig. 5.2). This is consistent with the widely held and documented view that government and government-linked companies dominate the Malaysian ‘public’ sector (see, for example, Gomez and Saravanamuttu 2013; Menon and Ng 2013).

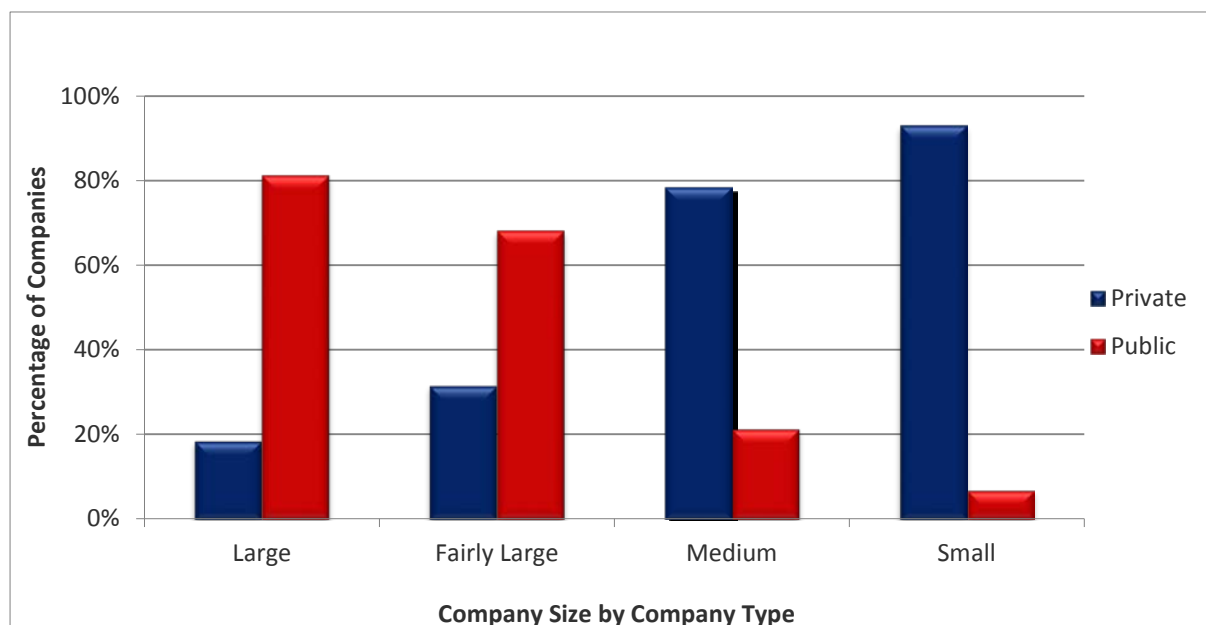


Figure 5.2: Respondent Companies by Number of Employees and Company Type

Knowledge and understanding of the background of companies are essential in the interpretation of the data analyzed. This is because company background can be important in determining attitudes towards the type of employees needed, as well as policies and practices of employment of graduates. For this reason, the above background data are cross-tabulated with other variables to ascertain the similarities or differences of employers' knowledge of national, foreign and transnational tertiary qualifications, graduates employed and their background, and employers and their preferences.

In the sections which follow, quantitative information, primarily cross-tabulations of data from the on-line survey, are used to provide baseline assessments to answer the research questions stated earlier in Section 1.3. Opinions and perceptions expressed during the in-depth interviews provide qualitative data which both enriches and provides a degree of triangulation to the quantitative findings of the study.

5.2 Employers knowledge of higher education qualifications

In the process of recruiting graduates for employment, it is necessary for employers to familiarize themselves with higher education, its qualifications and the institutions providing the awards. This is particularly important for Malaysia, with the blossoming of private education producing a wide range of foreign-local partnerships under the broad banner of 'transnational education' (TNE) (see Hill *et al* 2013). The extent of familiarity of employers with higher education qualifications has been ascertained by their understanding of national, foreign and transnational qualifications. Furthermore, the perceptions of employers are gleaned from a comparison of transnational education with local and tertiary institutions.

5.2.1 *Level of understanding of higher education qualifications*

Of the 85 employers who responded to this question, 84 showed varying levels of understanding of higher education qualifications. Only one respondent indicated that he or she was unaware of the differences in qualifications offered by various types of institutions at the tertiary level.

Overall, firms were well informed about the qualifications from different types of higher education institutions in the country. The long history of internationalization of education and the large numbers of students who had graduated from each type of institution explain this familiarity. Thus,

as high as 80.9 % of the responding companies indicated that national qualifications are awards obtained from a Malaysian institution of higher learning (Fig. 5.3). About 71.9 % of the respondents indicated that transnational education qualifications were foreign awards obtained by the students who have either wholly or partially studied the programme in a local higher education institution or a foreign branch campus in Malaysia. Fewer, although still the majority (61.8 %) of the respondents understood that foreign qualifications are awards obtained wholly overseas with students spending the full duration of study in the country where the awarding university was located, for example, in the United Kingdom or Australia.

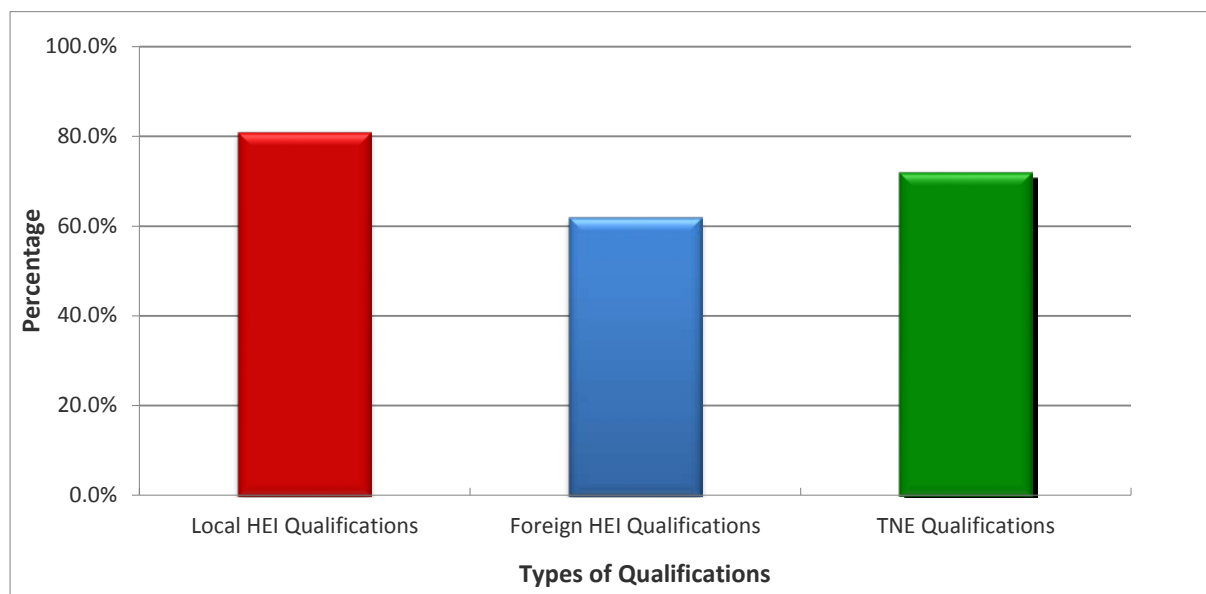


Figure 5.3: Respondents' Understanding of the Types of Qualifications

5.2.2 Explaining the high level of understanding of higher education qualifications

The responses to the level of understanding of higher education qualifications indicate that the respondents were familiar with national qualifications from local higher education providers, transnational education qualifications and foreign qualifications.

What explains this high level of understanding of higher education qualifications? First, the questionnaires were sent on-line to the human resource departments of the sampled companies. Human resource personnel needed to be familiar with higher education providers which are regular sources for staff recruitment. Second, the print media is a continuous source of information as it publishes articles on higher education and educational supplements, and carries advertisements of

institutions of higher learning, thus generating revenues for the press. Third, there are the annual education fairs, examples being those of *The Star* Education Fair and roadshows or information/open days organized by the British Council for universities in the United Kingdom and the International Development Programme (IDP) of Australian universities and colleges which are attended by human resource personnel. Fourth, Information Technology has facilitated the establishment of websites and social media to disseminate information on higher education providers and qualifications awarded. Fifth, understanding of higher education qualification is further enhanced by word of mouth, considered to be one of the most cost effective approaches in advertising educational institutions. Perhaps, the most convincing reason being, the human resources personnel (Manager or Director) are themselves parents seeking or identifying options (like all Asian parents would) for their children and, therefore, are familiar with the types of qualifications that are available in the market.

Given the dramatic increase in the number of higher education providers and student enrolment, it remains a continuous and a rather arduous task to be up-to-date with tertiary qualifications in both the public and private education sectors. In the public sector, for example, there were 12 universities in 2005 and 20 universities in 2013, an increase of about 82.0 %. As for the private sector, the 12 private universities, 10 university colleges and 4 branch campuses of foreign universities in 2005 had increased to 53 private universities, 26 university colleges and 7 foreign branch campuses, representing an increase of 341.0 %, 160.0 % and 75.0 % respectively in 2013. Therefore, this phenomenal increase in institutions of higher learning may have contributed to a proportion between 61.8 % and 80.9 % of the respondents in understanding the qualifications awarded via local, transnational and international education.

The 16 interviewees were also asked about their understanding of qualifications awarded by the various types of tertiary institutions, namely, national, transnational and foreign. All those interviewed; directors of human resource departments, senior management and company stakeholders were fully aware of the various higher education qualifications referred to. However, the observation was also made that reference to specific Malaysian institutions of higher learning were the universities established pre-1980s, for example, the University of Malaya and University of Science Malaysia, being better known than institutions of higher learning established in the last three decades.

5.3 Perceptions of an ideal graduate employee

Questions were asked of the questionnaire respondents and posed to interviewees regarding their perception of the ideal graduate employee. These questions relate to the importance of values, personality, knowledge and skills. Responses to these questions permit construction of a profile of an 'ideal' graduate employee as envisaged by the sampled respondents and interviewees, which is the substance of this section.

5.3.1 Attributes: values and personality

The respondents were required in Question 26 to indicate the extent of importance for graduate employees to have attributes like values, personality traits, knowledge, skills and international exposure. Of the attributes provided, 'values' was considered by as high as 98.0 % of the respondents to be very important (Fig. 5.4). About 95.0 % of the respondents considered 'personality' to be very important and 90.0 % each viewed 'knowledge' and 'skills' to be very important. As an attribute, the need for 'international exposure' was considered to be very important only by 47.0 % of the respondents.

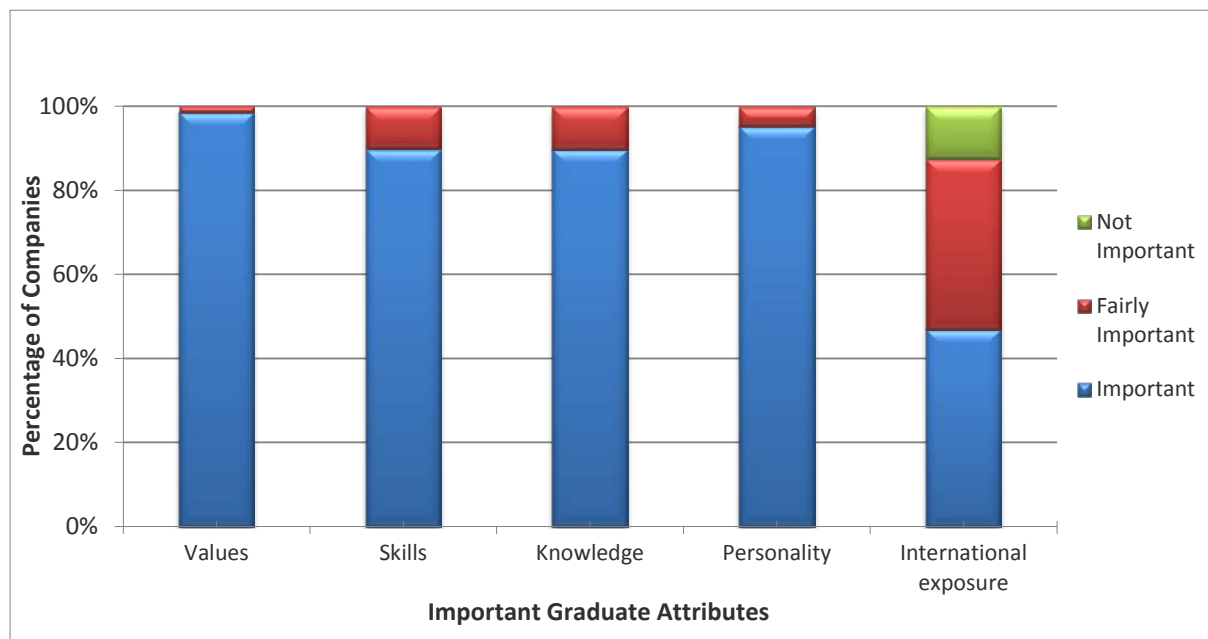


Figure 5.4: Important Attributes in a Graduate Employee

To the respondents, what the 'ideal' graduate employee brings to the company in terms of a set of values or beliefs and priorities is of paramount importance. These values, defined partly by personality but influenced by parents, family, friends, peers, religious and educational affiliations, educational experiences and the like, are the fundamental beliefs of an employee or a company. They are the guiding principles that dictate behaviour and action. Values help employees to know what is right from wrong; they can help companies to determine if they are in the right path, and fulfilling their business goals. Examples of worthwhile values are dependability, loyalty, honesty, innovativeness, creativity, commitment, leadership and courage.

Personality and its traits, like values, are distinguishing qualities or characteristics that constitute the embodiment of an individual. These traits determine habitual patterns of behaviour, temperament and emotions of an employee. In psychology, five factors are considered in determining the different personality-types, and they are openness, conscientiousness, extraversion, agreeableness and neuroticism. Examples of good personality traits are adaptability and compatibility to get along with others, being honest no matter what the consequences are and having the courage to do what is right in difficult situations.

5.3.2 Competencies: knowledge and skills

Next to values and personality, the respondents considered knowledge and skills to be important in an employee. The kind of knowledge required in an employee is dependent on the type of post being considered for recruitment. A company that advertises for a construction engineer will expect the applicant to be knowledgeable in civil engineering and related fields. As with all professions, there is a need for academicians to work closely with the engineering industry to ensure that the curriculum meets the needs of professional engineers. However, knowledge by itself is insufficient as the employee has to know how to apply it to resolve issues at work. As expressed by Ang (2014), a Director of Human Capital¹⁵:

The industry and the employer will be looking towards how graduates can apply the knowledge acquired in the working world. Certainly, if they are taught to have a more diversified and an all-round exposure in their education, then students will be better able to apply the knowledge to the work situation.

Skills are learnt capacity to carry out specific tasks. They refer to competencies, talents or special abilities acquired through training and experience. In a knowledge economy, two categories of skills

are required and asked of the respondents. They are the hard skills (information technology) and the soft skills (ability to communicate in English, *Bahasa Malaysia* and other languages).

The importance of information technology competencies was asked of the employers. There was unanimous agreement that both Word Processing and Spreadsheet applications are important. Furthermore, some of the respondents emphasized the importance of specialized software like AutoCount Accounting (Auto CAD), Java, SQL Accounting and Customer Relationship Management (CRM).

In relation to language competencies, English was considered to be very important by 90.9 % of the respondents, with 9.1 % assessing it to be important (Fig. 5.5). This was followed by *Bahasa Malaysia* and Mandarin, each language to be viewed as important by 54.0 % of the respondents. Other Asian languages like Japanese, Korean and Thai are progressively seen to be important by about 35.5 % of the respondents. About a quarter of the employees, 25.0 %, indicated that competency in European languages such as French, German and Russian was important.

It is not surprising to note that English is considered important by practically all of the respondents. The former Prime Minister of Malaysia, Tun Dr. Mahathir Mohamed has reiterated that wealth alone will not ensure Malaysia's move towards the status of a developed nation¹⁶ (The Sun, 2014). Malaysians must master knowledge to make Vision 2020 a reality. In particular, it is essential to master science, technology, engineering and mathematics as they are regarded the backbone of a nation's development. Most of the writing in these fields is in English. Also, it is crucial that Malaysians master the languages used by the western countries, among which is the English language, to seek knowledge to develop the nation. Learning English does not mean rejecting *Bahasa Malaysia* or turning us into westerners – only that the language is the gateway to advanced knowledge, especially for technology.

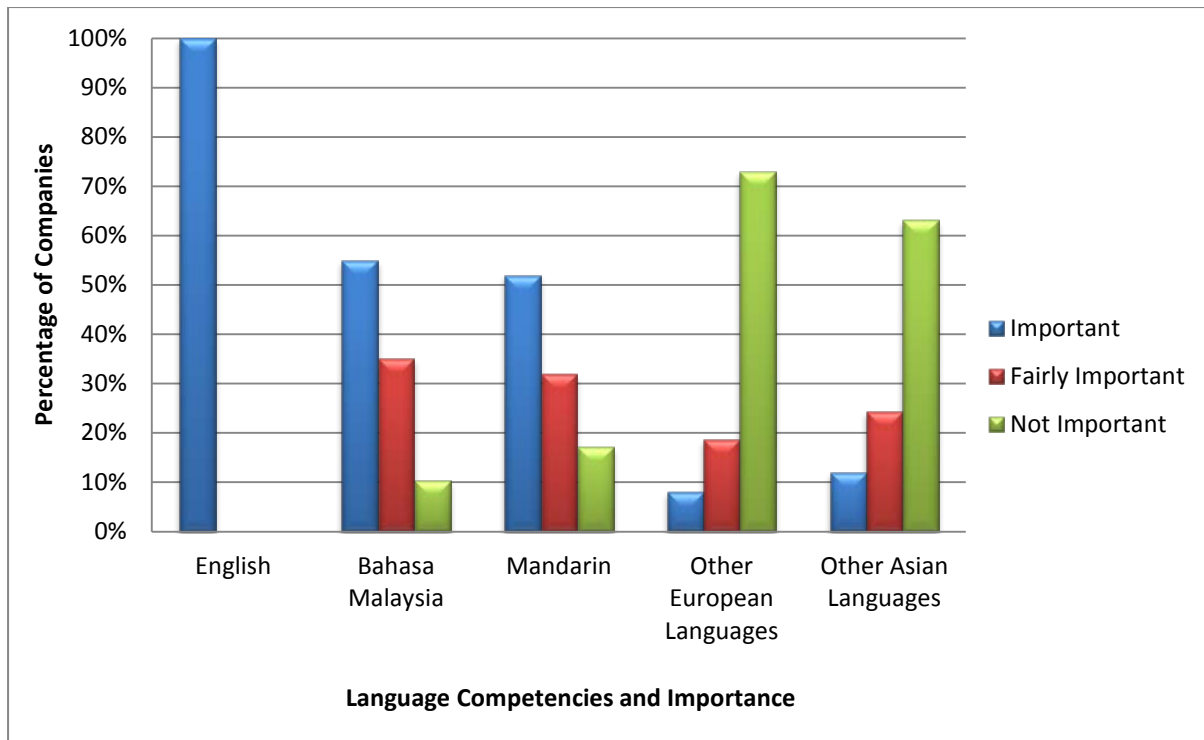


Figure 5.5: The Importance of Graduate Language Competencies

The importance of language competencies in English, *Bahasa Malaysia* and Mandarin was cross-tabulated with types of company in the sample. As shown in Fig. 5.5, all respondents considered English to be important, irrespective of the type of company (public or private). This consensus of opinion was not reached with regard to *Bahasa Malaysia*, the national language, and Mandarin. While 61.0 % of the respondents in private companies viewed *Bahasa Malaysia* as important, a relatively low proportion (46.0 %) of public companies considered the national language to be important. The reverse is true of the results for Mandarin which was thought to be important by 58.0 % of the public companies as against 48.0 % of private companies.

How can these divergences with respect to *Bahasa Malaysia* and Mandarin be explained? As indicated earlier on, the private companies are relatively small, based on the number of employees recruited. These private companies are required, in their dealings with the government, to communicate in the national language. Therefore, the need for competency in *Bahasa Malaysia* among the graduate employees is more critical than those employed in the public companies. Similarly, public companies consider Mandarin to be more important relative to *Bahasa Malaysia* as their business is likely to be international in operation. Thus, international business conducted with

partners in China, now Malaysia's largest trading partner¹⁵, requires employees to be proficient in Mandarin.

5.3.3 Profile of an ideal graduate employee

The responses from the questionnaire and interviews allow us to build up a profile of an ideal graduate employee. This has been made easier by the close correspondence between the two types of respondents. There is general agreement that such a person is an individual who has the appropriate values, personality, knowledge and skills which meet the needs and interests of the recruiting companies in both the public and private sectors. Specifically these are:

5.3.3.1 Values and personality

- Ability to learn, work diligently and engaged in extra-curricular activities. They will then perform beyond expectations.
- Be humble enough to want to learn, willing to have ownership of work, and be committed.
- Positive outlook, basic intelligence, initiative and be imaginative, and comfortable working in an informal environment.
- Be agile and responsive to customers, openness to learning, hardworking, hands-on, humble, able to communicate and be street smart.
- Have passion for one's work and be adventurous.
- Have the right attitude and aptitude. Be humble and completely open to the organisation, although not necessarily 'job-ready'.

5.3.3.2 Knowledge and skills

- Need to be grounded in confidence and ability to articulate, especially in English.
- Good communication skills, analytical skills to think outside the box, appropriate aptitude and presenting themselves well.
- Being innovative is important, a high-risk appetite and entrepreneurial. The mantra is 'Do whatever you want to do as long as you work hard and smart towards it'.
- Having Internship experience, if possible.
- Be willing to learn.

The perceptions of an ideal graduate employee suggest the strategy of “Recruiting for attitude and training for skills”. An interviewee commented that

...we shouldn't lose the whole essence of what makes the company successful. What makes the company successful is really the people and the people bring the best out of the company. It is a people's business at the end of the day.

The importance of human capital and its attributes is further substantiated with data from other sources.

5.3.4 *Corroboration from other data sources*

First, a randomly selected 139 recruitment advertisements in the newspaper *The Star*¹⁶ for the period January to March 2014 show the values and skills required by employers (Table 5.2). Soft skills were considered the most essential, with communication (79.8 %) and people's skills (65.5 %) well ahead of the third (51.8 %) and other lower-ranked attributes.

As for language requirements, 59.7 % (83 out of a sample of 139 advertisers) expressed their preferences. Almost all of them (100.0 %) had placed English as the first or second language requirement. Of the 83 advertisers, 57.8 % (48) indicated *Bahasa Malaysia* as a requirement and was placed first on the list. Thus, English and Bahasa Malaysia were considered to be the most important language requirement by advertisers, a finding consistent with that of the graduate employment study.

For IT competencies, 32.4 % (45 advertisers) expressed a specific need for Word Processing. This was followed by Spreadsheet and specialized tools like AutoCAD and Page Maker.

Second, reference was made to the Employability Survey of the Malaysian Bar Council with 393 law firms in West Malaysia in 2012 (Thiru and Ang 2012). In this survey, a range of attributes and skills was ranked by participating firms. The proportion of firms ranking specific attributes/skills, broadly classified as language skills, communication and presentation skills, knowledge and application of the law, and 'drivenness' as very important is shown in Table 5.3.

Table 5.2: Values and Skills Sought for in Advertisements in *The Star* Newspaper, January to March, 2014

Rank	Value or Skill	Distribution of Advertisements	
		Number ^a	As % of Total Sample
1	Communication skills	111	79.8
2	People skills	91	65.5
3	Independent worker	72	51.8
4	Analytical skills	54	38.8
5	Team skills	42	30.2
6	Problem solving skills	25	18.0
7	Organisation skills	24	17.3
8	Efficient worker	20	14.4
9	Trustworthiness	1	1.0

Source: *The Star*. MyStarjob.com.

^a Numbers do not add up to the total sample size because some advertisements stated more than one requirement.

These findings again corroborate with those of the study on graduate employability. These are:

- A high priority accorded to language skills
- The greater importance of English compared to *Bahasa Malaysia*.
- The emphasis on soft skills as opposed to hard skills.

The primacy of English with respect to its importance relative to *Bahasa Malaysia* and other attributes/skills is hardly surprising, given the nature of the discipline. After all, the corpus of case histories in English is so much larger and deeper than in *Bahasa Malaysia*. What is a little surprising, though, is the considerable gap in the degree of importance between English language capability and hard skills related to the knowledge and application of the law. It appears that the strategy of ‘recruiting for attitude and training for skills’ mentioned earlier on also applies to disciplines where hard skills are important.

Table 5.3: The Bar Council Employability Survey 2012 – Ranking of Attributes/Skills

Attribute/Skill Group	Attributes/Skills	Percentage of Firms Rating Very Important
Language skills	English – oral	74.0
	English – written	75.0
	<i>Bahasa Malaysia</i> - oral	46.0
	<i>Bahasa Malaysia</i> – written	50.0
Communication and presentation	<i>Communication skills</i>	59.0
	Interpersonal skills	57.0
	Confidence	54.0
	Self-presentation and poise	37.0
Knowledge and application of the law	Analytical skills	51.0
	Able to provide creative solutions	43.0 58.0
	Knowledge of the law	
Drivenness	Commitment to the firm	74.0
	Motivation	52.0

Source: Adapted from *Thiru and Ang (2012): Chart 1.3*

5.4 The realities of graduate employment

What is the reality of graduates employed in relation to the ideal identified above? The responses from the surveys throw light on this question. Some of the perspectives explored that speak to this are (a) relevant criteria for recruitment (b) percentage of graduates employed by higher education institutions graduating from, level of qualifications and field of study (c) level of satisfaction of employers regarding the attributes and skills of their employees (d) relevance of types of education and influence in the development of appropriate attitudes (e) recruitment of foreign nationals and (f) training provided to employees.

5.4.1 Relevant criteria for recruitment

With regard to the recruitment process, respondents were asked to indicate the criteria used as guidelines. About 70.1 % of them selected the field of study that was relevant to the needs of the company (Fig. 5.6). This was followed, in terms of responses, by language skills from the country where the award-issuing institution was located (34.3 %) and the culture of the country in which the institutional qualification was awarded. While the primacy of field of study is to be expected, and the language skills stressed presumably referred to the English language, it is unclear what weight firms placed on the culture of the country which provided the education to prospective hires, nor whether this was a positive or the reverse. Unexpectedly, about 19.4 % of the respondents had not considered the relevant criteria for recruitment previously.

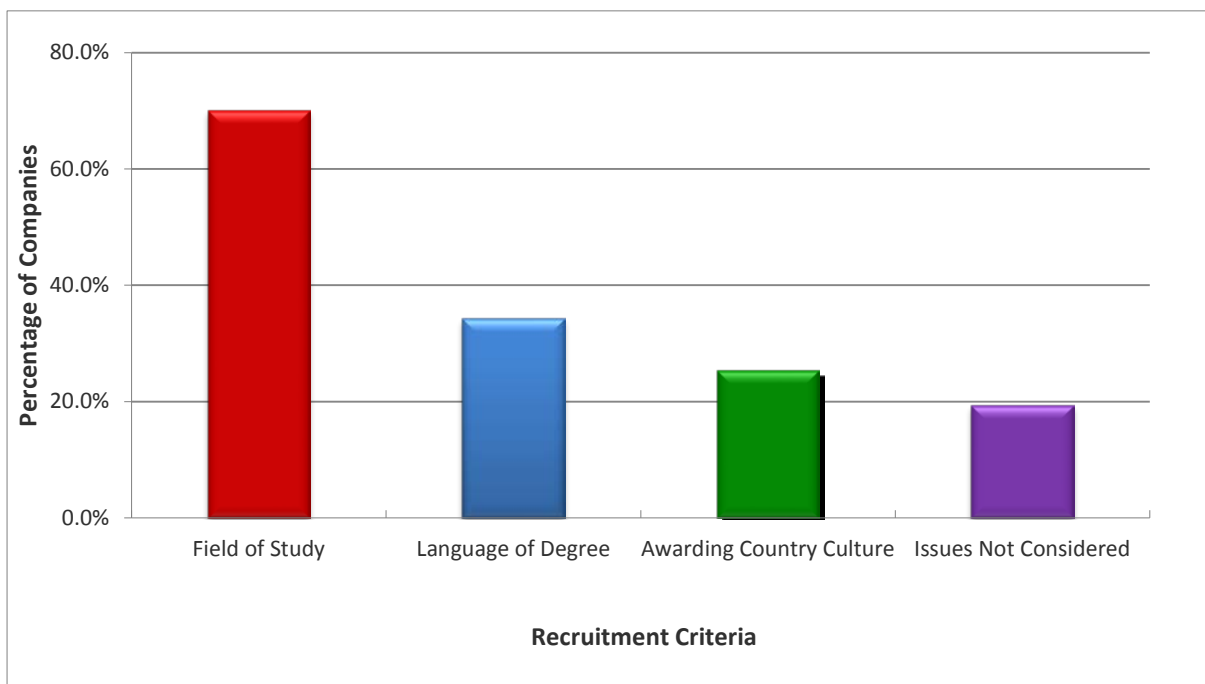


Figure 5.6: Relevant Criteria for Recruitment

5.4.2 Graduate employment by type of higher education institutions graduating from

Of the companies whose employees constituted 75.0 % and above of graduates, the respondents were asked to indicate the type of higher education institutions from which their employees had graduated. While about 83.0 % of the graduate employees were from private universities, university colleges and colleges, only 29.0 % were from the branch campuses of overseas universities in

Malaysia (Fig. 5.7). This result is due partly to the fact that there are 53 private universities, 26 university colleges and 413 private colleges in Malaysia in 2012 as compared to 7 branch campuses of overseas universities on Malaysian soil.

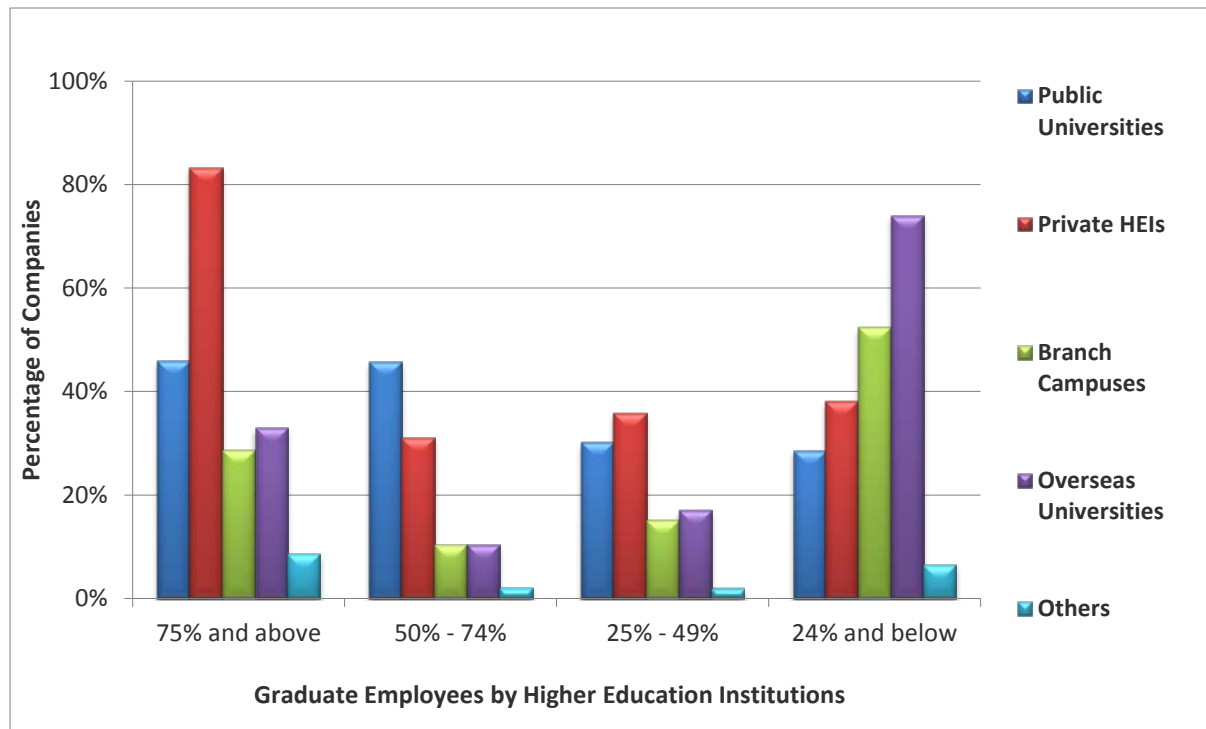


Figure 5.7: Graduate Employees by Higher Education Institutions

The cross-tabulation of the data by the type of companies yielded some interesting results. Across each percentage category of graduate employees recruited, a clear preference for the hiring of graduates from private higher education institutions was shown (Fig. 5.8). Furthermore, both public and private companies employ more overseas graduates than those from local public universities. The only exception to this pattern of results was for companies with more than a work force from 75.0 % to 100.0 % of graduate employees. These were either government-linked or companies with strong links to the government.

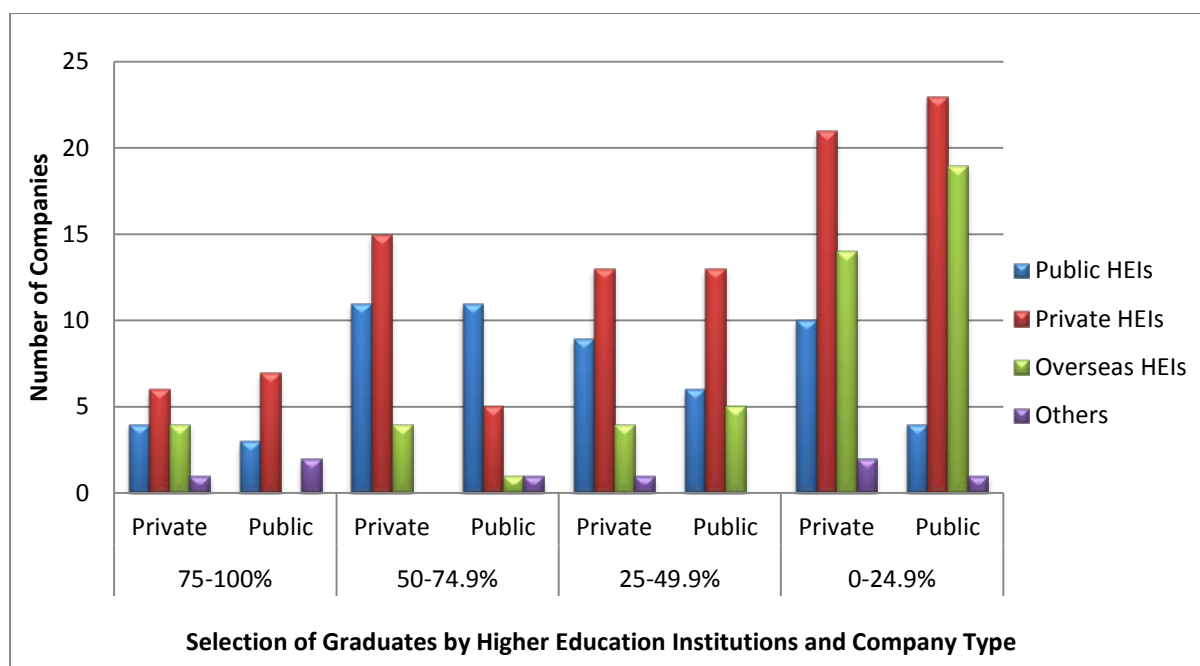


Figure 5.8: Selection of Graduates from Higher Education Institutions by Company Type

5.4.3 Graduate employment by level of qualification

The focus of this section is on the employment of graduates by their level of qualification, namely, bachelors, masters, doctoral and professional qualifications. There were no surprises here. Slightly more than two-thirds of the companies (67.6 %) reported that their employees consisted mainly of holders of bachelor's qualification (Fig. 5.9). Only 14.5 % of the companies had more than half of their employees with postgraduate and professional qualifications.

In the cross-tabulation analysis by type of companies, it appeared that private companies are more likely to appoint bachelor degree holders than their counterpart in the public sector (Figure 5.10). This preference can be accounted for by the fact that private companies are relatively small in the number of employees recruited and are unlikely to bear the higher salaries demanded of holders of postgraduate qualification. Also, the nature of the business operated may not justify the recruitment of staff with postgraduate qualifications.

5.4.4 Graduate employment by field of study

The distribution of graduate employees by field of study speaks to the importance of specific disciplines in the labour market. Figure 5.11 indicated that over three-quarters of the graduate employees (78.1 %) had backgrounds in business, two-thirds (65.8 %) in accounting and over half (57.5 %) in finance. Subjects which were not in demand were agriculture (4.11 %), languages (8.2 %) and physical sciences (15.0 %). Be it in the public or private education sector, enrolment in the social sciences, business and law tend to be among the highest at the undergraduate level. This corresponds with the Tracer Study data provided by the Ministry of Education in 2012. Of the 186,956 graduates who participated in the study, 106,206 (56.8 %) are graduates from the social sciences, business and law.

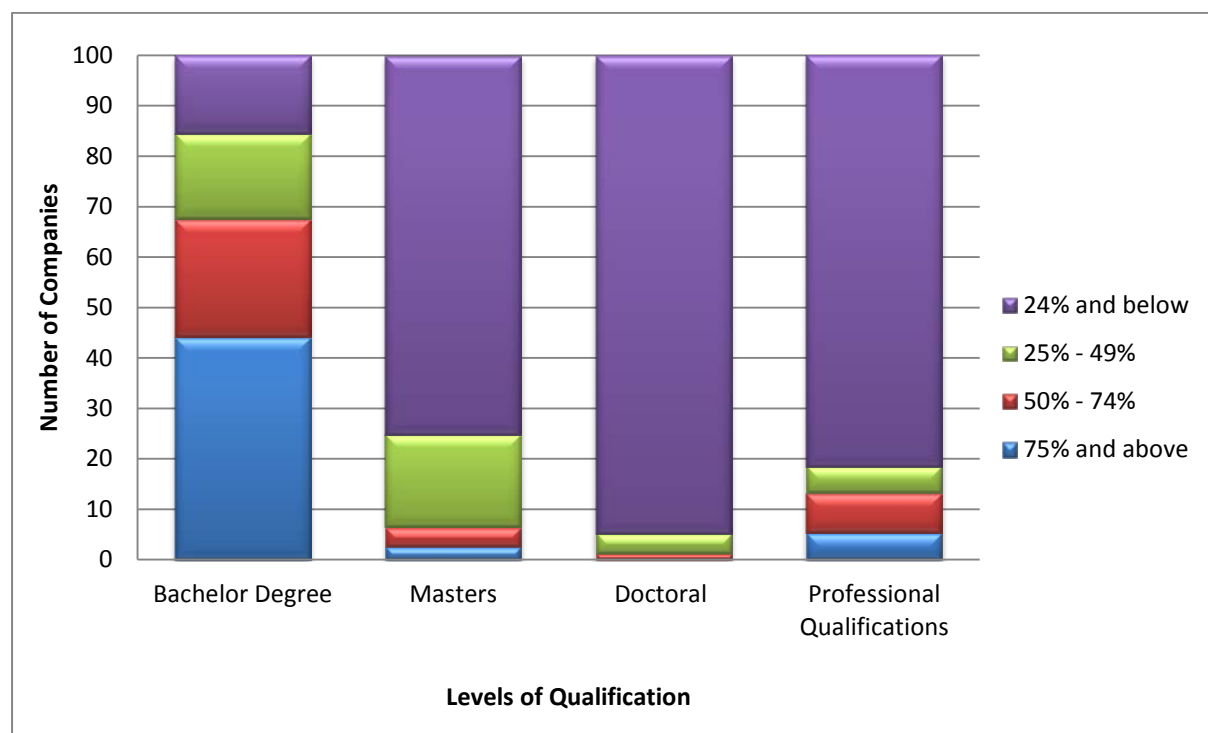


Figure 5.9: Graduate Proportions by Levels of Qualification

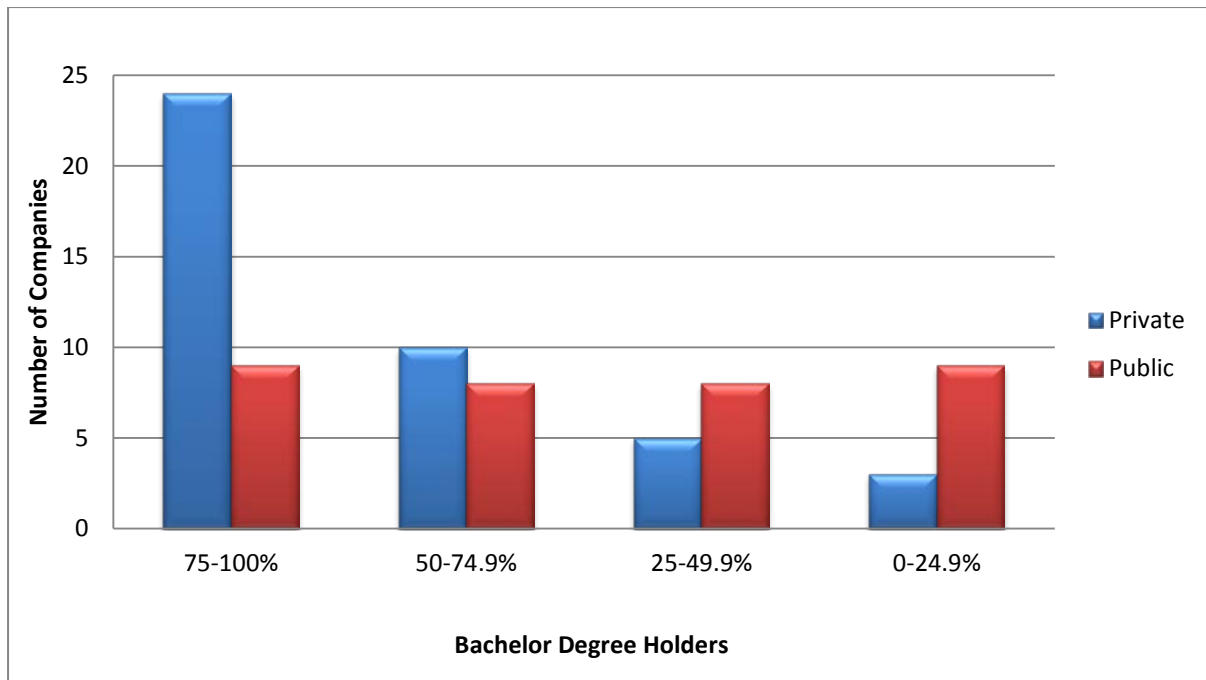


Figure 5.10: Employees with Bachelors' Degree by Company Type

Matching the nature of companies' businesses to graduate recruitment suggests unsurprisingly that the latter is undertaken by discipline, and a majority of their graduate employees are at the bachelor's level in qualification. Of these graduate employees, a majority of them are qualified in the social sciences, mainly in business, accounting and finance. Both public and private companies seem to have a preference for employing graduates from the private institutions of higher learning. Comparatively, both public and private companies employ more overseas graduates than those from the local public universities.

5.4.5 Employers' satisfaction with graduate employees

There exists several dimensions to what is referred to as 'employers' satisfaction' of graduate employees. These relate to (a) the relevance of the type of higher education institutions (b) required improvements in industry-specific attributes (c) work ethics (d) critical thinking and (e) language competencies. What did the survey and interviews reveal?

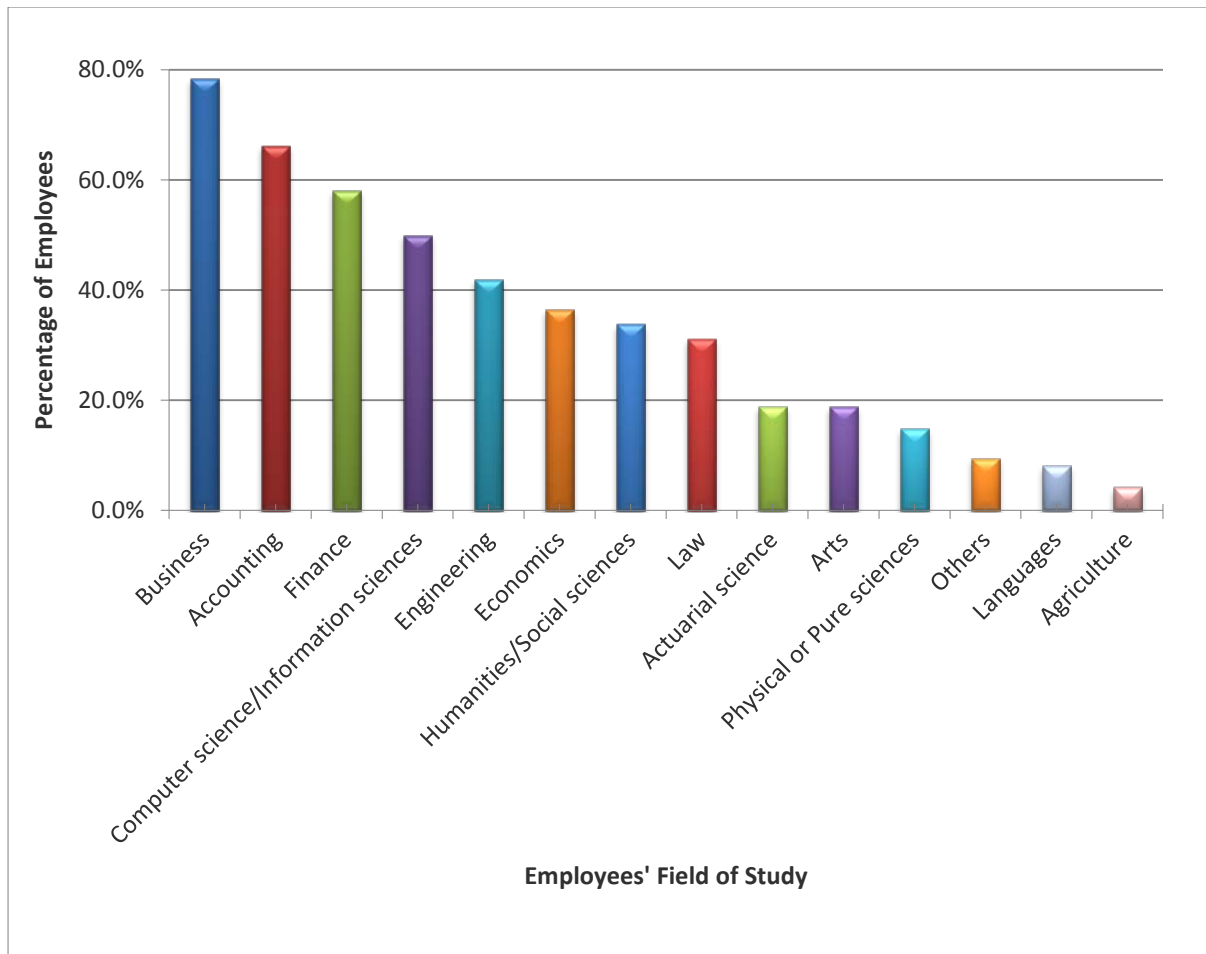


Figure 5.11: Distribution of Graduate Employees by Fields of Study

5.4.5.1 Overall satisfaction of employers with graduates from different types of educational institutions

The questionnaire responses revealed that employers were most satisfied with graduates from the foreign universities outside Malaysia with a satisfaction rate of 79.0 % (Fig. 5.12). This was followed by graduates from the foreign branch campuses in Malaysia with a satisfaction rate of 63.0 %, from local private universities at 62.0 %, from private colleges at 52.0 % and from local private university colleges at 45.0 %. The lowest level of satisfaction of 39.0 % was reserved for graduates from the local public universities.

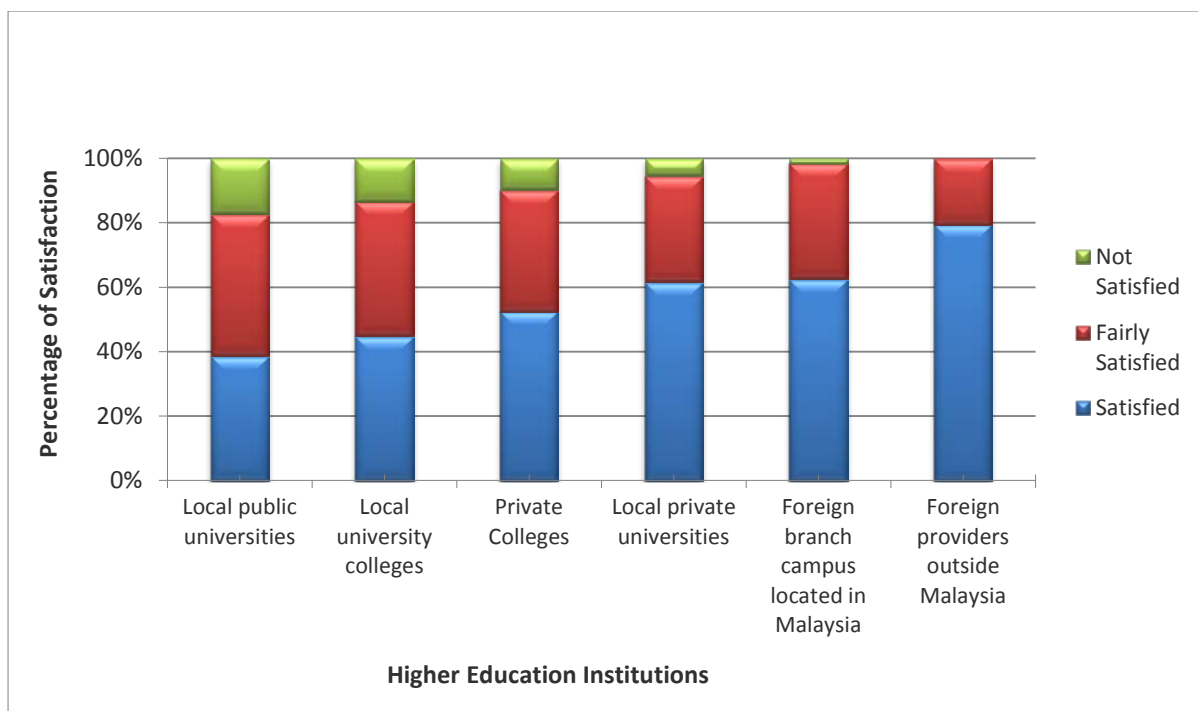


Figure 5.12: Employer Satisfaction with Graduates from the Different Categories of Higher Education Institutions

The expressed level of dissatisfaction confirmed the above analysis, although the differences between types of higher education institutions were much less pronounced. The proportion was 17.0 % for local public universities, 13.0 % for local university colleges, 10.0 % for private colleges, 5.0 % for local private universities and 2.0 % for foreign branch campuses. It is suggested that, given the choice, employers are likely to employ graduates first from foreign providers outside Malaysia, followed by those from foreign branch campuses located in Malaysia, local private universities, private colleges, local university colleges and lastly local public universities, all other things being equal.

The narrowing of the gap between those expressing satisfaction and those expressing dissatisfaction was the result of the size of the group that was 'fairly satisfied', with this group being the largest, those expressing (full) satisfaction was relatively the smallest group. One can only speculate as to why this was the case. One explanation is that graduates from local public universities who garnered the lowest level of satisfaction were able to improve their performance over time. It is also possible, however, that 'fairly satisfied' was a politically correct assessment to make, especially if the company is owned by or linked to the government. This finding can be contrasted with that from the Bar Council Employability Survey referred to earlier on, which concluded that 'local law graduates

failed to meet ... standards consistently across the board. Local law graduates fell far short of the expectations of law firms ...' (Thiru and Ang 2012: 19).

The above assessment notwithstanding, it is important to remember that all institutions within a category of higher education institutions are not the same. The United States is well-known for universities that range from the world's best to for-profit degree mills. The Bar Council Employability Survey provides another reminder. Of the six local universities assessed, the University of Malaya was ranked the best, well above the lowest ranked Universiti Utara Malaysia (Thiru and Ang 2012: 18).

5.4.5.2 Areas for improvement: industry-specific attributes

Beyond the type of education institutions, industry-specific attributes, work ethics and critical thinking were clearly important areas for improvement. The analysis (Fig. 5.13) suggests that employers require graduate employees not only to have the necessary knowledge but also to have the ability to apply it in work situations. As most employees were educated at the bachelor's level and small companies do not normally invest in research and development, capability in research was not considered important.

Hence, the ability to reason and analyze was selected by 87.5 % of employers as being the most important attribute to improve on. This was followed by knowledge of and skills related to subject matter (75.0 %), ability to ask the right questions (73.4 %), able to apply theory to practice (53.1 %) and knowledge beyond industry-specific matters (50.0 %). As already noted, research ability was rated the lowest (43.8 %) by the respondents as an area for improvement.

In identifying the three key attributes pertaining to work ethics which need to be improved, the respondents focused on professionalism (70.8 %), and initiative and integrity (55.4 % each). Figure 5.14 also illustrates the fact that the areas which need least improvement among the graduate employees were gratitude (6.2 %), respect (23.1 %) and reliability (46.2 %). From young, Malaysians have been taught to be respectful to the elders and to be grateful for what they have. Using an analogy, a recent research from Stanford University, as part of the 'tiger-mum' controversy, found that children of Asian-American mothers are more likely to observe hierarchy and respect the authority of a teacher than European-American students.

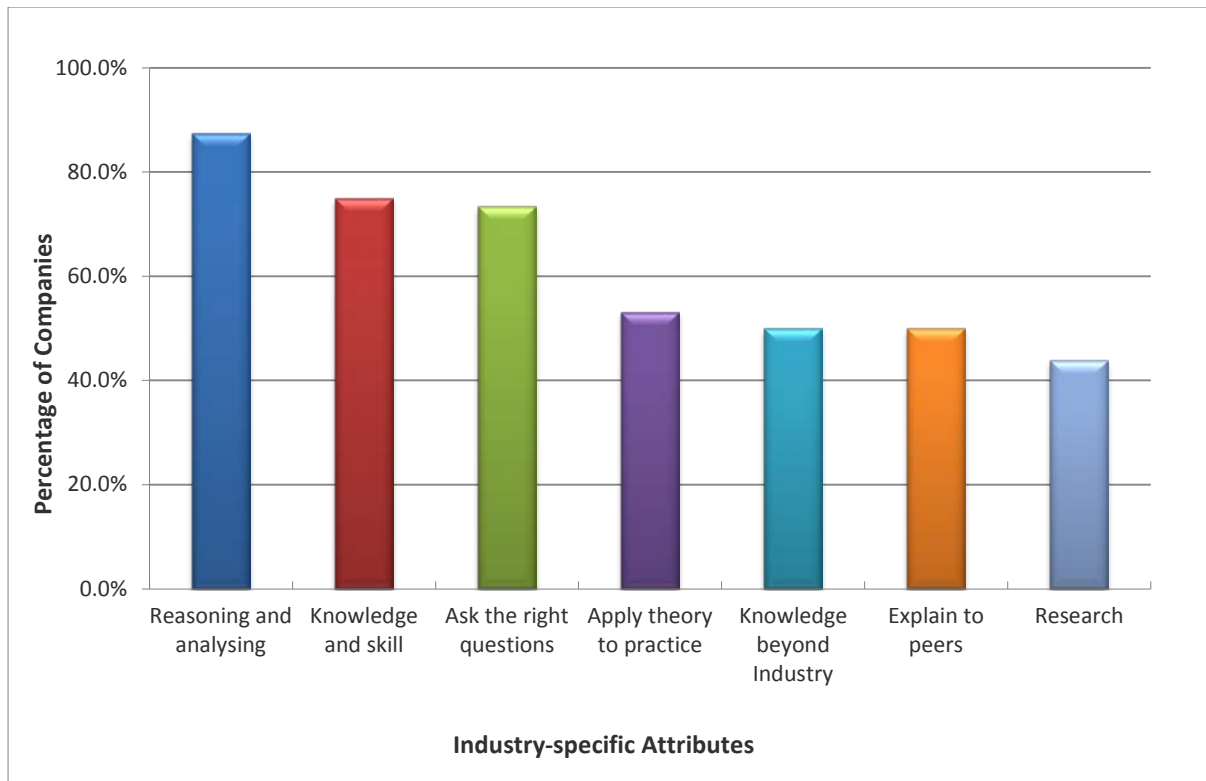


Figure 5.13: Industry-specific Attributes in Which Graduate Employees Need to Improve on

As for critical thinking, the respondents were required to identify five key attributes which could be improved on by the graduate employees. A total of 78.7 % of the employers felt that graduate employees should have the ability to seek new ways to solve a problem – by thinking outside the box (Fig. 5.15). This was followed by listening carefully to others (60.7 %), understanding that critical thinking is a lifelong process of self-evaluation/assessment (54.1 %), looking for evidence to support decisions made and the ability to examine problems closely (47.5 %).

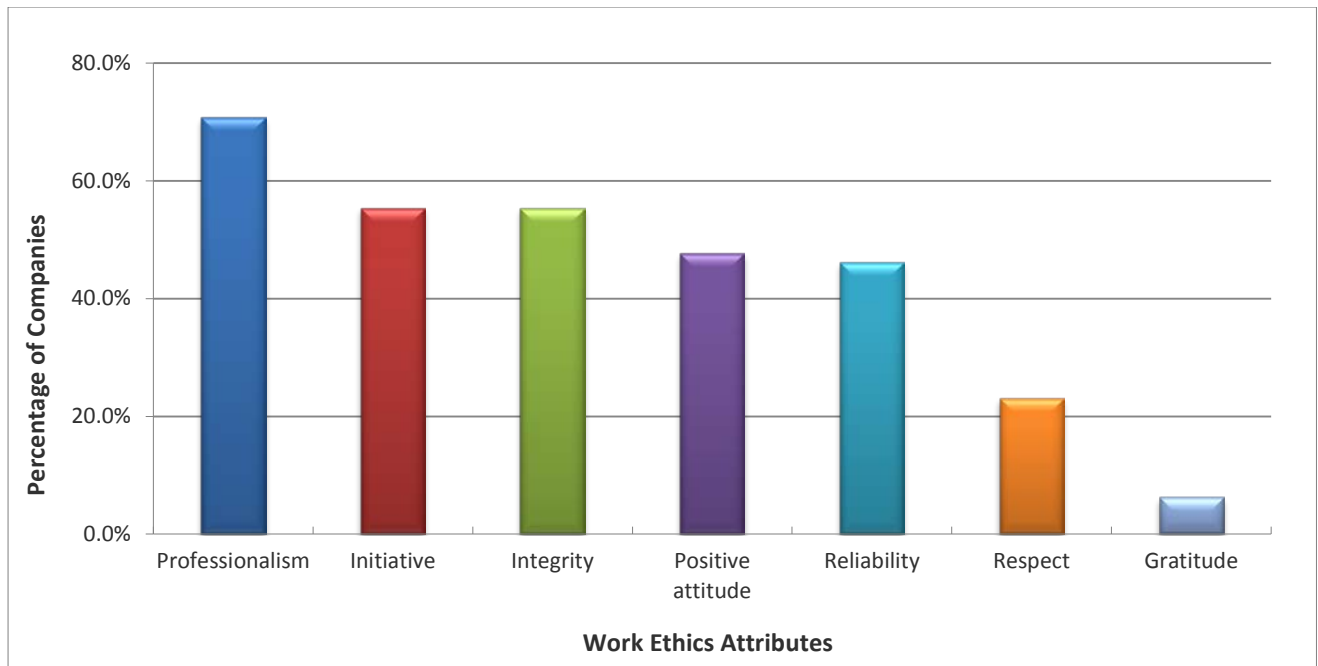


Figure 5.14: Key Work Ethics Attributes Which Graduate Employees Need to Improve on

Generally, employers expressed the view that these graduate employees are short in taking the initiative to solve problems independently and thinking outside the box by way of reasoning, analyzing and integrating the issues in hand. These attributes and their development are likely to be influenced by the home, school and college/university environment, including interpersonal relationships with key personnel like parents, teachers and lecturers in the main.

5.4.6 *Employment of foreign nationals*

Although much has been made of foreign low-skill labour in Malaysia, much less has been written on foreign skilled labour. In this study, a substantial proportion (42.7 %) of the respondents employed graduate foreign nationals. Of this total, 55.9 % of public companies and 30.0 % of those in the private sector engaged graduate foreign nationals at work (Fig. 5.16). In the public companies, graduate foreign nationals were employed mainly to engage with their graduate foreign partners or counterparts. As for the private companies, the primary reason was stated to be to recruit the best talents available. Whether cost was a consideration, as was well-known in the case of IT professionals from China and India, was not explicitly mentioned. For those which did not hire graduate foreign nationals, the main reason was difficulties encountered in obtaining work permits for them. Furthermore, almost half of the respondents indicated that there was no necessity to recruit graduate foreign nationals in the first instance.

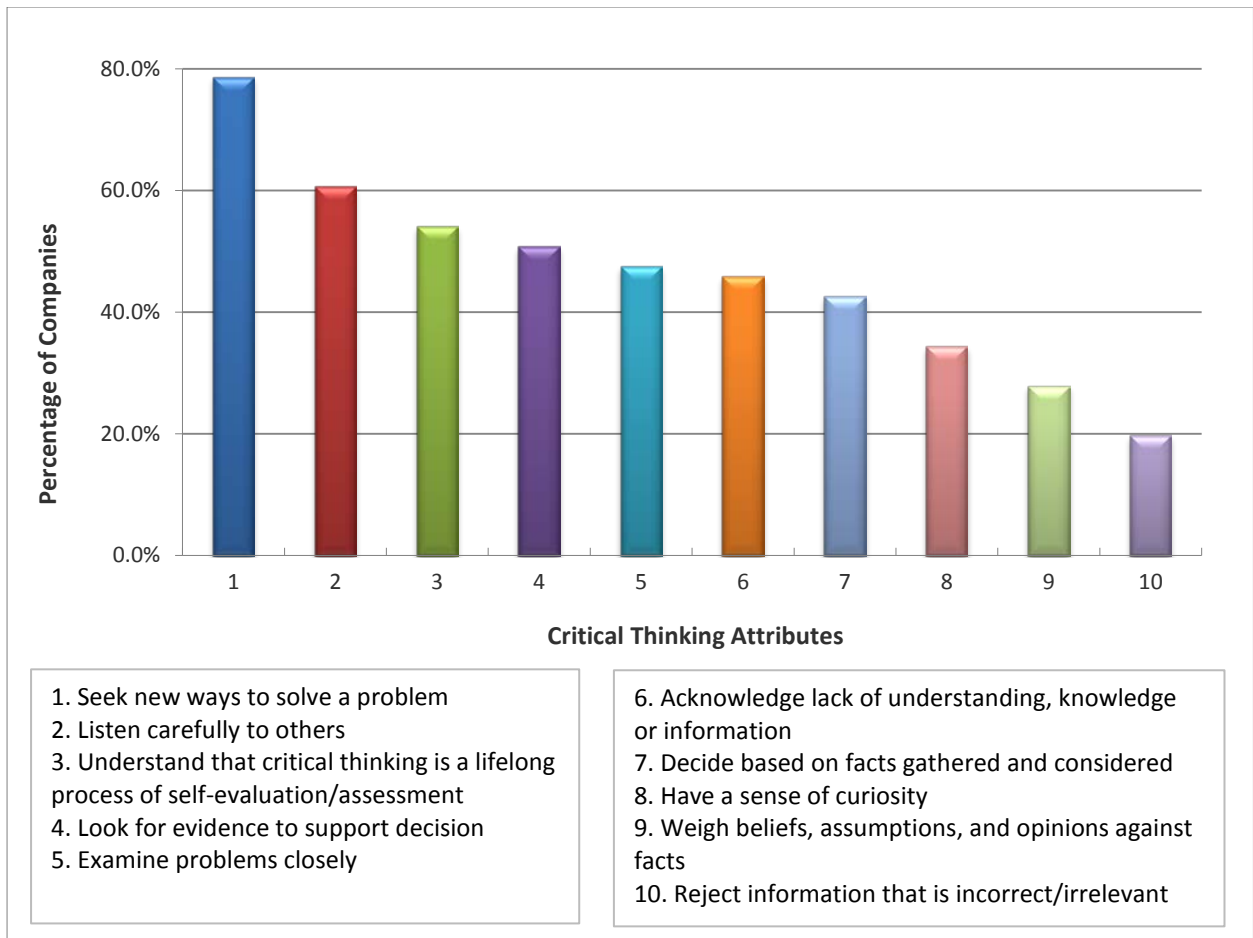


Figure 5.15: Key Critical-thinking Attributes that Graduate Employees Need to Improve on

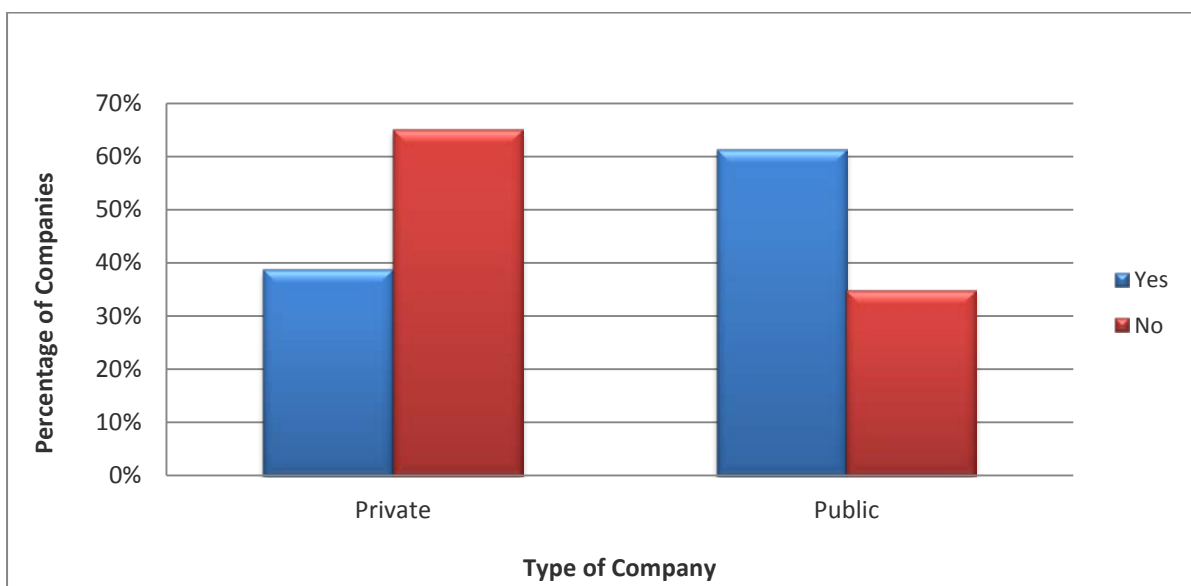


Figure 5.16: Employment of Foreign Nationals by Company Type

5.5 Public, private, local and foreign tertiary institutions: insights from interviews

Why did employers have such pronounced differences in preferences for different types of institutions? Were these differences the result of stereotyping in perceptions or were there rational explanations? Were preferred institutions superior in all areas of interest to employers? Do even less preferred institutions have areas of strength that employers could use? None of these questions could be answered from the questionnaire survey. It was the interviews that were designed to provide these insights. In particular, the focus is on the strengths and weaknesses of these graduates from the various types of higher education institutions.

5.5.1 Strengths of Graduates

5.5.1.1 Foreign graduates

The interviews revealed that there seemed to be a thin line drawn between foreign graduates and those who have been exposed to transnational education. The marked distinction, however, was between foreign graduates, including those from foreign universities with campuses in Malaysia and with a transnational education background, and local graduates.

Foreign graduates were perceived to be excellent in terms of their knowledge and presentation skills. Being more proficient in English than their local counterpart, they were well-prepared for interviews and were focused in their thinking. The consensus was that foreign graduates were vocal, able, confident and articulate. They were resourceful and open-minded in accepting advice and criticism. Overall, the foreign graduates performed better than those from local private universities as they were able to think out of the box, giving them a high level of confidence.

Noted one of the interviewees:

Ease of communication is observed. They are comfortable in interviews to start off with and when it comes to on-the-job, they seem to be even more comfortable once they get on with it. I think that is the basic difference but again, let me qualify, NOT ALL overseas graduates have shown that. Some need a little bit more hand-holding, especially if they come from a different discipline and into a different line of work. Generally, it is the communication skill that is the key to the high confidence level shown.

5.5.1.2 *Transnational education graduates*

Transnational education was perceived to provide students a rounded education with a world-wide perspective and this global feel was useful at work. The students had a good command of English and a practical approach to a given task. Interviewees argued that these students had undergone programmes in partnership with foreign institutions that might have included stints of study abroad. They had garnered skills like the ability to communicate and be proactive. With just a year abroad, for example, students may have gained a broader perspective compared to those who undertook completely local study. With transnational education, just as with foreign graduates, time spent overseas in the host country where the foreign university was located was an important consideration¹⁷. However, the international experience/exposure may not be limited to graduates who had travelled abroad. As TNE programmes attract international students, those completing their studies locally receive some exposure as one interviewee remarked:

Transnational education students can tell you about friends from Kazakhstan, Iran and Gambia to name a few examples. Perhaps, because transnational education institutions are private, everyone is at a more equal footing in terms of their background. Therefore, we can see more people interacting differently.

Clearly, the impact of transnational education on students depended on the higher education provider itself. At the university college and college levels, undergraduates were considered more sheltered and how they turned out depended on who the lecturers are and the courses taught. Higher education providers who failed to recruit local lecturers tended to employ staff from other countries, sometimes for cost-saving purposes. A lack of stability for students pursuing a three-year programme locally was perceived, especially if it was a British programme which tended to be intensive in scope. To the interviewees, transnational education programmes kept evolving. Interviewees were fully aware that there was considerable variation in the quality of TNE provided, particularly between branch campus and other collaborative programmes. Question 5 in the questionnaire focused on the quality of TNE qualifications, in particular comparing branch campus and other collaborative programmes.

5.5.1.3 *Local graduates*

Despite being the least preferred, local graduates were commended as very good workers. They were more skill-specific than graduates from other types of tertiary education, very humble, eager to learn and willing to go the extra mile at work. Their knowledge and use of *Bahasa Malaysia* was, as

expected, good. Local graduates were seen as understanding the Malaysian business environment and work culture.

The specific university mattered for employers. Graduates of the University of Malaya and University of Science Malaysia which were established in the 1950s and 1970s respectively were considered to be relatively easy to work with. Although these graduate employees might not be as flexible in their work ability as graduates with a non-local education initially, they were able to pick up the ropes as work progressed.

More than the specific local university, ethnicity was a factor in view of the enrolment quotas established under the New Economic Policy (NEP). Thus, in responding to the question on the quality of graduate employees from the various types of educational institutions, one of the interviewees expressed the following opinion:

To be frank, we have to go by race in the case of local universities. If it is non-*Bumiputera* graduates to be recruited, they would have been really good – the ‘best of the best’. For them, getting into local universities is difficult due to the limited places and the quota system¹⁸. Their parents would have encouraged them to do well at the *Sijil Tinggi Pelajaran Malaysia* to be admitted to local universities. These are the students who will be looking for postgraduate studies and how to enhance themselves at work.

5.5.2 Weaknesses of graduates

5.5.2.1 Foreign graduates

Some of the interviewees were uncertain about the extent that foreign graduates are able to cope with the sensitivity that may arise due to the diverse cultures and challenging business landscape in the Malaysian society. The foreign graduates might have been assimilated to the culture of the host country where they studied and, a life style and values which are different in the Malaysian context. For example, foreign graduates might be unable to understand and cope with the rural/urban divide and the sensitivity of living and working with people of different cultural and religious affiliations.

Foreign graduates were also perceived to be very calculating and demanding at times. Interviewees attributed such behavior to their belief that with their education abroad, good communication skills, English proficiency and self-confidence, foreign graduates expected that they would be recruited upon graduation.

5.5.2.2 *Transnational education graduates*

Concern was expressed regarding the quality of transnational education provided by some of the institutions of higher learning in the private sector. This arose from the fear that some private institutions put profit ahead of providing a holistic education experience. This concern was succinctly expressed by one of the interviewees who felt that

...nation-building is taken out of the equation. The emphasis is on financial profits and sustainability rather than the noble objectives of a holistic education of quality.

5.5.2.3 *Local graduates*

Sentiments were expressed that there is a fair amount of indoctrination in local universities which is not only 'unhealthy' but also reduces the practice of critical thinking. Even when this did not occur, considerable reliance had been placed on rote-learning and spoon-feeding methods, with notes provided to students and assessment based on memorising facts in all subjects. This had produced graduates who seemed overly modest, and unable to articulate clearly. This in turn reduced the level of confidence among local graduates which compounded their communication problem.

The main difference between local and foreign graduates, interviewees noted, was English proficiency and the thinking process demonstrated, that is, the ability to think creatively. Local graduates tended to wait for instructions as opposed to taking the initiative and being proactive. At interviews, *Bumiputera* candidates did not seem to be concerned with the need for communication skills. When they were asked questions, there were times when questions had to be simplified to facilitate understanding on the part of the job applicants, said several interviewees.

In summing up local graduates, one of the interviewees expressed the opinion that:

While local graduates may be subject-specific and very solid in terms of learning, I do not think they have very good interaction skills. They are very good at interacting among themselves but the students with a transnational background tend to interact more with international students and thus gain a different dimension of life and work.

5.6 A balancing act for employers

Generally, the employers were aware of the strengths and weaknesses of graduates from the various types of institutions of higher learning in their undergraduate studies. They recognized there was a place for each and every type of undergraduate to be employed, depending on the individual capacity and capability for work, and the level and type of posts appointed to.

In the world of work, employers do not segregate graduates according to the educational institutions attended. Rather, they take into account the many attributes already discussed, as well as how they conduct themselves during job interviews. Whether they employ local or foreign graduates depends very much on the specific needs of the companies concerned. As an example, an investment company may place priority on the employment of foreign graduates. This will be in the investment analysis department as the employees form the backbone of the company. Fresh graduates are employed, trained to be researchers and groomed to be fund managers in the future. Here, the preference may well be to employ graduates who have studied abroad at least two or three years though preference is for all years of studies.

This is evident from the comments of some of the employers as listed below.

One cannot say, with certainty, that local public universities do not produce good graduates. There are always exceptions to the rule. But, by and large, the order is true – foreign: foreign branch campus in Malaysia: transnational education and local graduates – in relation to the quality of graduates produced.

There are no significant variations between graduates of different fields of studies as it solely depends on the capability and discipline of each individual graduate.

Our students are intelligent. There is no doubt that they will perform just as well if only they have been given more chances. There is no doubt in my mind about that but one of the handicaps is language. I am sitting here in the office like an English teacher, correcting the English of my officers.

But I like all categories of graduates as they have various strengths and weaknesses. There is a need to create a balance of graduate employees – the intellectual capacity of foreign graduates mixed with the local graduates and, hopefully, the graduates of transnational education somewhere in between as they have had both the benefits of a foreign education provided in the local context.

Actually, it is good to have both – local and foreign graduates.

In the actual work place, it is more of team work and a balance between life and work itself.

Foreign graduates are not as driven and, in a way, may feel that they have made it, that is, have obtained overseas degrees. They have a certain comfort level and in their minds, especially those who have studied in the prestigious universities, they expect to be recruited by the top employers. More often than not, that seemed to be the case. Employers will 'snap up' the foreign graduates because when you recruit fresh graduates from a top university, the feeling is wonderful. But once they commence work, you will see, three months down the road, it is the transnational graduates who go a little further in progress. It all depends on how much the person wants to push his/her individual self forward. The overseas graduate has a certain polish that the transnational graduate does not have. For example, when a client comes in, the foreign graduate communicates and engages him/her better and the confidence level reflected is higher than that of a transnational graduate. At work, what is important is that we need a combination of different types of graduates. For a transnational graduate to attain the skill-set that the foreign graduate has, it may take a year or two. But he/she will get there – it just takes a longer time to achieve. However, the foreign graduate with the drive of a local graduate will move up faster in the organisation.

The questionnaire and interview responses suggest that the employers in the sample are aware of the differences of educational backgrounds of potential recruits based on the type of education received, foreign, transnational or local. Each type of education provided has its strengths and weaknesses. Though there is a preference for foreign over local graduates, and foreign over TNE graduates, the crux of the matter is the individual himself or herself, that is, the extent that they would want to push forward in terms of work and social mobility. Where companies are concerned, there is a need for team work and a combination of graduates from different backgrounds.

6.0 BRIDGING THE GAPS BETWEEN EXPECTATIONS AND REALITIES OF GRADUATE EMPLOYMENT

6.1 The expectations of employers

Employers in this study expect graduate employees to be knowledgeable and skilled, and at the same time possess desirable attributes such as good values and personality traits. They need to be competent in languages, especially in the English language, for global communication, and be able to analyze and resolve problems in work situations. The ability to think 'outside the box' is an asset in a knowledge-based economy to which Malaysia aspires.

According to the expectation of employers, the highly employable graduates are likely to have completed their undergraduate studies preferably in foreign universities, followed by branch campuses of overseas universities in Malaysia, transnational education providers, and local private and public universities. However, it was emphasized, at the same time, that employable graduates with the '++ factors' (UNESCO 2012) are not necessary the product exclusive to any one type of higher education providers in Malaysia.

The employers have found gaps between their expectations and the observed performance level of graduate employees at work. These gaps have to be bridged to fulfill the expectations of employers and to enhance the employability of graduates.

6.2 Bridging the gaps

The respondents were asked to identify areas for improvement to reduce the gaps between the expectation of employers and the performance of graduate employees. These areas for improvement relate to job seekers, parents and family, educational institutions, industry stakeholders and the government.

6.2.1 Job seekers

In the Malaysian education system, the overall emphasis is on academic achievement, the number of 'A's attained at the primary and secondary levels, and the class of award at the tertiary level being benchmarks of achievement both for students and parents, and the government. Though academic

qualifications are important, attitudes and aptitudes referred to as soft skills have been found to be more essential to the employers. These are the abilities to think critically, resolve problems, and motivate and communicate effectively. Besides being able to work independently, job seekers are expected to contribute to the company's development as a team member as well. As commented by one of the interviewees, 'Straight 'As' can help a child in school but does not guarantee success in life'. Thus, there seems to be somewhat a mismatch between key stakeholders of the education system and the sampled employers.

Job seekers need to keep an open mind in acquiring knowledge, skills and new techniques. With the development of new technology which has changed very significantly the way of work, young minds should be broadened rather than narrowed. The yearn to learn lies with the individual, irrespective of where they had graduated from. Loyalty to a company with years of long service has been replaced by the need to be mobile and a willingness to work in different jobs and industries throughout a career.

The environment for employment has been shifted. Young people do not just work to earn a living and to achieve social mobility. In bridging the gaps, employers have to realize that young people work because they genuinely like to do what they want and, for them, work-life balance is important.

6.2.2 *Parents and family*

Parents have a major role to play in the nurturing and development of their children. Values and personality traits are transmitted to their sons and daughters. In fact, the character of job seekers is influenced and shaped by their upbringing, in part, in and outside the home.

Following the publication of the controversial parenting memoir *Battle Hymn of the Tiger Mother*, by Amy Chua, researchers from Stanford University asked high school students to describe their relationships with their mothers and challenged them to a series of tasks that were designed to make the respondents fail in their attempts. The objective was to test the children's level of motivation and perseverance (*The Star* 2014: 2).

The major findings were that (a) children of Asian-Americans drew on their connectedness to their mothers to overcome difficulties while children of Western mothers viewed themselves as

independent (b) while children of Western mothers considered the pressure they received from them as negative, students of Asian-American mothers expressed that they felt supported regardless of the pressure experienced, and (c) children from Asian-American mothers were more likely to observe hierarchy and respect the authority of a teacher than European-American students.

Findings of the Stanford study have been highlighted as they seem to reflect how Asian mothers tend to nurture their children where, from young, they have been taught the values of hard work, persistence at given tasks, and to be obedient and respect the elders. These values, inculcated from young, seemed to have been so ingrained that though living in a 'foreign' country like the United States, they are exhibited in American classrooms and homes. A mix of the three types of mothers, namely, Asian, American and European, and their approach in parenting would be a case of taking the middle road without being either too restrictive or liberal.

An opinion expressed by the interviewees was the tendency for parents to be more involved in the secondary education of their children than at the tertiary level. Parents need to allow their children to express their views and encourage them to think on their own. They need to play the role of a facilitator, a consultant and advisor to their own children, and allow them to grow, develop and be independent with a sense of responsibility for his or her own actions.

In the words of an interviewee, 'Parents will have to instill positive values in their children. Give moral support, understand children's interests and provide friendly advice. Allow children to face uncertainties and obstacles. Otherwise, the children will grow into adults with a string of issues, ranging from inability to accept failures, lacking in creativity and resilience to fears'

6.2.3 Educational institutions

The fact that, generally, young Malaysians spend thirteen years from Standard One to Upper Form Six, and three years in institutions of higher learning for undergraduate studies, what happens in schools and colleges or universities – the curriculum taught, the assessment undertaken, and extra-curricular activities organized to name a few – will have a strong impact on their development as adolescents and adults in preparing for work and life after schooling. Perspectives discussed by interviewees of educational institutions to bridge the gaps so that young people are more employable when they are ready to join the work force relate to a selection of shortcomings of the education system. These shortcomings need to be addressed in order to produce the appropriate

workforce for the knowledge-economy and challenges in the fast-paced twenty-first century. These shortcomings relate to:

- *Wide variation in quality.* In quantitative terms, the increase in the number of educational institutions and student enrolment in both the public and private sectors in the last decade has been phenomenal. This proliferation of institutions and student enrolment has raised rather than assuaged concern over the issue of educational quality, and teaching and learning standards. In an earlier section of the report, Section 3.3, indication has been made that though funding for education has been generous, performance in TIMSS and PISA has been falling over time between 1999 and 2013. None of the Malaysian universities made it to the Top 10 universities in Asia as ranked by *QS University Rankings: Asia* in 2013. At the same time, the unemployment rate of graduates has moved up from 2.3 percent in 1990 to 3.1 percent in 2010. Obviously, the ability of the educational authorities to monitor and enforce standards has been outpaced by the rapid growth of the education industry. Inconsistencies remain in required standards across the public and private education sectors. The mechanism introduced to rank educational institutions like SETARA for university colleges and universities, and MyQUEST for private colleges has raised issues of objectivity and accuracy in the ranking process.
- *Economies of scale.* The education industry consists primarily of small and medium enterprises, especially in the private education sector. This creates fragmentation and a serious shortage in human expertise and resources, both physical and financial. A case in point is the provision of medical education where a surge of colleges and universities has created an exodus of invaluable experts from the public to the private institutions of higher learning. The push factor in the public medical schools is financial and heavy schedules of work.
- *Inefficiencies in the regulatory framework.* Although regulatory bodies have been established to oversee quality education in both the public and private sectors, there has been delays in processes such as approval and accreditation of programmes. In spite of stated rules and regulations for the conduct of educational programmes, poor or uneven enforcement creates a situation where ‘there is no level playing field’.
- *Frequent changes in language policies for teaching of science and mathematics.* In 2002, the government announced that science and mathematics would be taught in English from 2003. This was to ensure that Malaysians would be able to keep pace with a world that is being

increasingly globalized with English the *lingua franca*. However, this decision was heavily criticized by Malay linguists for fear that such a policy would erode the use of Bahasa (The Malay language). There was also some opposition from interest groups that were concerned with the status of vernacular schools at the primary level. Yet, the Parent Action Group for Education, Malaysia, appealed in the media and to the government that their children should not be denied the learning of mathematics and science in scientific English (The Star 2014). The final decision of the government was a reversal of the language policy on the teaching of mathematics and science in 2012.

- *The Education Blueprint 2013 -2025*. The government is committed to transforming the Malaysian education system in the next one and a half decades. A primary goal of this transformation is to provide a holistic education to young Malaysians in preparing them to meet the opportunities and challenges of the 21st century. Though the blueprint incorporates some good reforms over a list of 11 shifts, it remains silent over the process of implementation, including the allocation of resources, to achieve stated goals. For example, Shift No. 2 states that the blueprint will ensure every child being proficient in Bahasa Melayu and the English language. This is a laudable goal but the government's silence on the recommendation to consider the re-introduction of English-medium schools or the national integrated school proposal, and the reversal of the language policy on science and mathematics referred to earlier on are unlikely to enhance the proficiency of the English language by young Malaysians.

Some of these concerns of the interviewees regarding the role of educational institutions and their enhancement of the employability of job seekers are indicated below. The criticism that came with these concerns has at times been rather scathing.

- 'Perhaps, we should start from the kindergarten stage. An example is a child who is sent to a non-Montessori kindergarten. Here, the child is given heaps of homework. When the same child is sent to a Montessori -based kindergarten, she learns quite a lot (Show and tell Friday sessions) and there is confidence-building in character which enhances her ability to engage others in conversation.'
- 'Do not send your children to school as it is not unlocking their potential skills. Instead, school authorities want the children to be compliant in nature without having them to put on their thinking caps. The world is opening up. It is a business world. So, graduates should be prepared

to deal with all types of people. The Asian way of thinking is different from that of the Western approach though we value the values of the former. We tend to keep quiet, we dare not argue, and we dare not debate. Institutions need more activities to mold the characters of their clientele.'

- 'The 'spoon-fed' mentality is ever so present so that local graduates will find it difficult to blend in a working environment where they will be tasked to undertake independent research and provide practical solutions based on the current analysis of the latest development in law. Local graduates will find it extremely challenging as it is difficult to change the mindset of a 'spoon-fed' individual. I venture to think that it is due to a lack of teaching to inculcate in graduates the stimulation to think and to evaluate ideas.'
- 'Case in hand – the CLP and the Bar finals. I did the Bar finals and it is not just going to class and study. There is the practical aspect of it. It comes from you having a Queen's Counsel (QC) to whom you report to. You go to the Bar, do your practical and have the dining experience. You have 18 dinners with senior QC, judges and other students, local and international. When I came back, I did a CLP as well. I tried to do the CLP and it was just books. Go to class, read books... and you just memorize. The difference in learning comes from there!'
- 'There is no feeling that we want excellence. We talk about that we must have somebody on the moon; we must have an astronaut; we must have a Noble-prize winner. But the basic is that I will give up all that! I will rather that all our students be competitive.'
- 'Reconstruct Malaysian education. It has lost touch with what parents want, students need and what employers are crying for.'

6.2.4 Industry stakeholders

There is a need for more dialogue between higher education providers and the industry stakeholders. This need is evident in professions such as law, accounting, engineering and hospitality management. It calls for a more holistic outlook with an emphasis on the 3 Cs – creativity, communication and collaborative skills. The introduction of internships for undergraduates will help to bridge the gaps between expectations and realities of graduate employment.

Although little discussed in this study, linking education and training with industry has become a major theme with technical and vocational education and training (TVET) (Cheong, *et al* 2013). Some progress has been made. Unfortunately Malaysians regard TVET as the last resort of those who cannot make it in academic education, not realizing that in countries like Germany and South Korea, TVET graduates are the bedrock of their prowess in technology.

6.2.5 *The government*

As is clear from the strong criticism of Malaysia's education system, the burden of reform rests on the government. Unfortunately, education policies have been part and parcel of Malaysia's affirmative action through the NEP. Putting ethnicity above merit, together with the penchant for control, has produced the challenges that were referred to by interviewees earlier. There is the question of whether the Ministry and the education system can rise above politics, in general, and ethnic politics, in particular, to effect the transformation to a more robust system. Apart from the 11 shifts indicated in the Malaysia Education Blueprint, Lim (2014) has added four other shifts and they are:

- Learning from the past and not be imprisoned by past paradigms.
- Ensuring that educational rights are not made a political football because of perceived racial, social or economic disparities.
- Practicing transparency, openness, fairness and integrity of governance in all aspects of education. Positive values are necessary not only as values for students but also for Ministry officials and teachers engaged in education.
- Rising above racial, religious or political agendas. Every component of our national school system must be regarded as important in our multiracial society and must be provided fair and equal treatment.

It remains the task of the next section to draw conclusions from this research study as well as policy implications to enhance the employability of our graduates.

7.0 CONCLUSIONS AND POLICY IMPLICATIONS

7.1 Conclusions

Although the focus of this study is employability, education is more than about preparing for the workplace. Taken in its broadest sense, it is about broadening the mind through both knowledge and creative thinking. In the context of development, however, with the drive towards a high level of economic welfare as a primary objective, these broader considerations must necessarily take a back seat. This drive is motivated not only by the material benefits that enhanced economic welfare would bring but also the desire to catch up with countries that have already reached higher income and avoid the many ‘traps’ along the way that can derail progress. It is in this context that employability has achieved primacy in the human development discourse.

This discourse has brought to the forefront the concept of human capital with economics, in particular, and social science, in general, in the driver’s seat. Human capital development is seen as critical in technological advance, the ticket to economic growth and competitiveness for middle-income nations. Its importance has been abetted by the process of globalization, itself made possible by technologies like production fragmentation.

As an ‘emerging economy’ driven by its Vision 2020 to achieve high-income if not developed nation status, Malaysia sits squarely within the above framework but is also the product of its recent economic history. After two decades of heady growth, economic advance has moderated and alarm bells have been sounded about the looming ‘middle-income trap’. Within the country, there is broad consensus that its human capital, the product of its education system, is at the heart of its future growth, and the state of the system’s health will determine whether the country will fall into the ‘middle-income trap’.

This study of graduate employability in Malaysia speaks to this vital question. By examining the quality of the output of the nation’s tertiary education system from the perspective of the consumers of this output, it seeks to throw light on how useful to a group of key institutions entrusted with producing the country’s growth – Malaysian businesses, both private and belong to/associated with the state.

What did the study find? First, despite the proliferation of tertiary study modes, employers have a sound understanding of the diverse academic backgrounds of their employees and prospective employees. They should therefore be able to capitalize on their strengths while fully aware of their limitations. As the tertiary education sector continues to expand with the help of government policy to make Malaysia an education hub, remaining on top of the academic scene will become an increasingly challenging task.

Second, in common with what other studies have found, the ideal employee exemplifies for employers the combination of attributes – values and personality – and competencies – knowledge and skills that are conducive to productivity at work. The values and personality that would contribute to this outcome are ability to learn, work diligently and readiness to go the extra mile, humility, commitment to and hence willingness to take ownership of work, possession of a positive outlook and openness to new ideas. Competencies include both soft skills like good language skills, especially in English, communication skills, innovativeness arising from critical thinking skills, and hard skills related to the respective disciplines of study.

Third, the importance of this menu for employability of attributes suggests that the values, attributes and knowledge are shaped by the home environment, education institutions, industry stakeholders, the government, all of which are part of the social environment within which graduates function. Each stakeholder has a role to play in creating this ideal employee. The focus on education as a major factor in this study and elsewhere is not to absolve other stakeholders of this role but is simply an acknowledgment of the very important role it plays with respect to employability.

Fourth, as is to be expected, the reality is quite different from the ideal. What is significant, however, is the magnitude of this divergence. Employees as well as job applicants have been found wanting especially in the soft skills. This is particularly disappointing given that firms rate this criterion above hard skills when they hire – following the so-called principle ‘recruiting for attitude and training for skills’. This is true even for firms like engineering and construction where knowledge of hard skills is vital.

Fifth, not all graduates suffer the same deficiencies. Firms hold in much higher regard graduates from overseas universities, have the lowest level of satisfaction for local graduates, and with graduates of foreign universities located in Malaysia, transnational education and private

universities ranked in between. The deciding factor is the command of soft skills. This attitude of foreign preference by itself is not novel, the expression likely of feelings that 'the grass is greener on the other side' or post-colonial notions of Western superiority moderated somewhat by the rise of the likes of Japan, South Korea, Taiwan, and now China. However, employers are driven by their bottom line and should not be driven by notions of subjectivity and prejudice. This finding is therefore alarming in that very substantial financial and human resources from the public purse have been poured into public education.

Sixth, the ability to deploy effectively soft skills is closely related to the hard skills the education system provides. While factors like personality, family background and social environment are all relevant, an education system that imparts poor language skills and discourages creative thinking while promoting compliance damages communication and interpersonal skills through eroding confidence in major situations like interviews. This link, more than the oft-repeated accusation that universities do not adequately teach soft skills, is responsible for graduate deficiencies in this area.

Seventh, the study reveals that in at least two ways this general perception needs to be nuanced. The first has to do with the fact that despite the stereotyping often being applied, not all tertiary education institutions are in a particular category. It has been noted that American-based universities range from the world's best in education quality and experience to degree mills with qualifications that can be purchased. Although regulated, there exists differences in reputation among British and Australian universities. In Malaysia itself, the University of Malaya has been repeatedly ranked locally and internationally through the QS rankings as higher than other local public universities.

Eighth and, perhaps , even more important is that whatever the preference expressed, graduates from each type of tertiary institution brings to the table the strengths of the system that institution possesses. For instance, the much maligned local public university graduate is considered by employers to be hard-working, reliable, and knows the local business culture. The much preferred foreign graduates, while armed with superior language and communications skills, may not be conversant with the local business culture. Employers, when they recruit, therefore seek a balance that can tap the strengths of different types of graduates while also fully aware of their respective limitations.

Ninth, nowhere in the interviews did the study find employers expecting graduates to be 'job-ready' at the time of recruitment. This is clear from the recruitment principle stated earlier on. It also came through during in-depth interviews. However, employers emphasize that while knowledge is important, it is even more important to apply that knowledge in the real world. It is in this context that graduate shortcomings are framed.

7.2 Policy implications

Given the evidence that represents a major criticism if not indictment of Malaysia's education system, the most obvious implication is the need to address its many deficiencies. However, because this study is focused on issues at the micro- and firm level, criticisms and remedies at the sector and macro-levels are best left to other commentaries. What it did show are where the local graduates fall considerably short compared to their peers educated overseas or under transnational education programmes. In relation to these weaknesses, some pertinent issues have also been raised in the last section. Suffice it to say here that unless this is addressed with some degree of seriousness, employers will continue to prefer foreign over local graduates, raising questions about the efficacy of the use of resources for education, in particular, and the directions of policies, in general.

Having the attributes that make a good employee and addressing education deficiencies being a major step forward towards employability, these measures are insufficient on their own. Also, needing attention is the social environment within which students function and interact with their peers and other stakeholders. The 'culture' that employers refer to is likely synonymous with this environment. In the West – the United States, United Kingdom, Europe and Australia – this environment is one that encourages openness to different views, and debates on issues considered important by citizens as much as by those who hold the reins of power. It is this openness, and not just the education system itself which is of course a mirror of the environment, that expands the mind and spurs creativity. The ability to 'think outside the box' is not enhanced by telling students what they can or cannot do, can or cannot think, and who they can or cannot interact with. Reforming the education system must therefore go beyond getting good teachers, fixing curricula and/or pedagogy.

There is an area that both the questionnaire findings surfaced and that was corroborated by interviews. And that is that the current system of education has led even public (government and government-linked) companies to hire substantial numbers of foreigners when they may be

expected to provide employment opportunities for local graduates. Even more telling was an interviewee's remark that among the local graduates, non-Bumiputera excelled because they represented the best of the best. There is no question that a by-product of this system of quotas is greater asymmetry of achievement within the education system that, far from levelling the playing field for those disadvantaged for whom the NEP is meant to benefit, has sharpened the advantage that those discriminated against have come to enjoy. Companies, even if linked to the government, have to watch their bottom lines, and hence recruit graduate talent and reward employee performance. It should not be surprising that Lee and Mohammad (2013) found empirical evidence of preference for non-Bumiputera hires in the private sector.

7.3 Limitations of the study

One obvious limitation of this study is that it is targeted at a single group of stakeholders – the employers of graduates. The perspectives and diagnoses arising therefrom are therefore derived from this group of stakeholders. Although they decide the fates of those graduates seeking employment, it will be interesting to see the extent to which their perspectives, especially regarding employee attributes, agree or disagree with those of graduate employees themselves. Despite differing views, it is only fair to learn of the motives of and constraints faced by providers of education. Hopefully, these issues will be dealt with in a subsequent phase of this research, funding permitting.

A second limitation relates to the focus on academic education. In part, this reflects the traditional view of Malaysian education. Vocational education, TVET, potentially no less important as a source of deepening human capital has received scant mention. That this sector is small relative to academic education is no excuse for its neglect, given the potential role it can play in driving economic development. Also, the fact that this was never raised as an issue during interviews or in questionnaire responses does not constitute sufficient grounds to ignore the importance of TVET provided by local and foreign education providers, and the employability of their graduates. It remains a topic for future investigation.

NOTES

1. Although Becker's *Human Capital*, published in 1964, was a standard reference for many years, the concept could be traced to earlier works on economic development, including the one by Arthur Lewis, in his paper, 'Economic Development With Unlimited Supplies of Labour', *The Manchester School*, v.22, no.2, May 1954, p. 139-191.
2. Malaysia was ranked 24th out of 148 countries in the World Economic Forum's Global Competitiveness Index 2013-2014, one place higher than the rank it held a year ago. The country rose to 6th among the 189 countries covered in the World Bank's Doing Business Report 2014, up 6 places over the previous year.
3. The report was commissioned by the National Committee of Inquiry into Higher Education (NCIHE) to make recommendations on how higher education in the United Kingdom could meet the needs of the learning society of the future.
4. These are MDG2: achievement of universal primary education by 2015 whereby every child will complete a full course of primary education, and MDG3: promotion of gender equality and the empowerment of women with, specifically, the elimination of gender disparities at primary and secondary school levels by 2005 and across all education levels by 2015 (UNESCO 2010).
5. The major areas of focus of the Human Development Network are education, health, social protection and labour.
6. Using the World Bank Atlas method, the 2012 Gross National Income (GNI) per capita of upper middle-income economies is from US\$4,086 to US\$12,615.
7. The term 'middle-income trap' was used by Gill and Kharas (2007) to describe a situation of a middle-income country losing its competitiveness of low labour cost but, at the same time, unable to move the value chain through technology to compete with countries at the next income level.
8. An argument may be made that Malaysia can still compete through higher labour productivity but a World Bank study (2013) found migrant labour to be at least as

productive as Malaysian labour.

9. The index is made up of four pillars – education, health and wellness, workforce and employment, and environment (World Economic Forum 2013:4).
10. TIMSS, developed by the International Association for the Evaluation of Educational Achievement (IEA), assesses mathematics and science achievement of students in the US fourth and eighth grades (or their equivalents) in participating countries (<http://nces.edu.gov/timss/>). The OECD's PISA's objective is to 'evaluate education systems worldwide every three years by assessing 15-year-olds' competencies in the key subjects: reading, mathematics and science' (www.oecd.org/pisa).
11. Jomo and Lee (2000) noted the absence of funds for retraining workers retrenched during the Asian Financial Crisis. The number of workers benefiting from HRDF was a meager 572 in 1998 and 426 in 1999.
12. These attributes are: (a) Academic attributes: academic performance, good degree classification, college experiences and job knowledge of discipline of study (b) Personality management attributes: positive attitude, responsibility, adaptability, leadership and altruism, and (c) Exploration attributes: imaginative, innovative, and critical and creative thinking. (MOHE 2012: 21).
13. Other methods of mixing data are connecting and embedding. Connecting data requires sequential data collection with insights gained from the data first collected to construct the instrument for the second round of data collection. Embedding implies the use of one data set (the embedded data set) to support the other data set.
14. Public sector companies include both state-owned enterprises and government-linked companies
15. China has been Malaysia's top trading partner since 2008, and Malaysia is China's largest trading partner in ASEAN, accounting for 25.0 % of the latter's trade with China (Bao and Huang 2011).

16. The Star provides a pull-out section entitled MyStarJob.com every Saturday. The 139 job advertisements covered both public (including public listed and unlisted) (34) and private companies (105) in all the types of businesses covered in the questionnaire survey of this study.
17. In the Malaysian context, students registered in a '3+0' programme can complete the undergraduate study totally in Malaysia.
18. The quota system for admission to local public universities has been replaced by one based on merit in 2003. However, the proportion of *Bumiputera* students in local public universities remains high. Admission is garnered via matriculation centres in public universities and colleges where enrolment maintains a quota of 90.0 % *Bumiputera* and 10.0 % *non-Bumiputera*. Furthermore, the curriculum and assessments in these matriculation centres and colleges are internal in operation. These are the very students that others completing the centrally-conducted *Sijil Tinggi Pelajaran Malaysia* (STPM) examination have to compete with for admission to local public universities.

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Appendix 1: Survey Questionnaire on Graduate Employment

Graduate Employment Study

Introduction

We are conducting a survey on graduate employment in Malaysia under the sponsorship of the British Council, United Kingdom. The study focuses on the perception of employers in hiring graduates with qualifications in various disciplines and from local and overseas institutions of higher learning. Apart from employability of graduates, we are exploring ways and means of enhancing the relevance of curriculum content to market needs, and to develop the necessary values, and communication and technological skills in graduate employees for a knowledge economy.

Your identity will remain anonymous and no personal information is sought from you. There are no right or wrong answers. We hope you will answer all questions with a tick (✓) where applicable before submitting your response to us.

This survey has a total of 32 questions and will take approximately 15-20 minutes to complete.

Graduate Employment Study

A. Background Data of Company

1. Which of the following best describes your company?

- ☐ Private
- ☐ Public
- ☐ Others (please specify)

2. What is the main business of your company? (You may tick more than one business activity)

- ☐ Construction
- ☐ Consumer products
- ☐ Finance
- ☐ Hotels
- ☐ Industrial products
- ☐ Infrastructure projects
- ☐ Plantations
- ☐ Properties
- ☐ Trading Services
- ☐ Others (please specify)

3. How many employees are there in your company? Please indicate the number below.

4. If your understanding is the same as the following please tick the corresponding boxes. If not please indicate in the space provided below.

- ☐ (a) National qualifications are awards obtained from a Malaysian Institution of higher learning.
- ☐ (b) Foreign qualifications are awards obtained wholly overseas – where the student spends the full duration of the study in the country where the awarding university is located, e.g. Australia or United Kingdom
- ☐ (c) Transnational education qualifications are foreign awards obtained by the student who has either wholly or partially studied the programme in Malaysia either in a local higher education institution or a foreign branch campus, for example, 4+0, 3+0, 2+2 or 2+1 programmes.
- ☐ If your understanding is different, please indicate

Graduate Employment Study

B. Employers' Knowledge of National, Foreign and Transnational Tertiary Qua...

5. In relation to a comparison of transnational education (TNE) with higher education provided locally, please indicate your perception by selecting a response for each of the statements below.

	Very Confident	Reasonably Confident	Confident	Not So Confident	Not Confident At All
The awarding body oversees the quality of programmes offered in Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduates from TNE programmes have the same academic competency as graduates with foreign qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduates from TNE programmes have the same attributes as graduates with foreign qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduates from TNE programmes have the same language competency as graduates with foreign qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduates from TNE programmes have the same academic competency as graduates with local qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduates from TNE programmes have the same attributes as graduates with local qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduates from TNE programmes have the same language competency as graduates with local qualifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of teaching and learning in a local higher education institution is comparative to that of a foreign higher education institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Graduate Employment Study

C. Graduates Employed and Their Background

6. Of the employees in your organisation, what percentage of them are bachelor degree holders (graduates)?

- ☐ 100%
- ☐ 75 – 99%
- ☐ 50 – 74%
- ☐ 25 – 49%
- ☐ 10 – 24%
- ☐ 0 – 9%

7. Of the employees in your organisation, what percentage of them are Master degree holders (postgraduates)?

- ☐ 100%
- ☐ 75 – 99%
- ☐ 50 – 74%
- ☐ 25 – 49%
- ☐ 10 – 24%
- ☐ 0 – 9%

8. Of the employees in your organisation, what percentage of them are doctoral degree holders (postgraduates)?

- ☐ 100%
- ☐ 75 – 99%
- ☐ 50 – 74%
- ☐ 25 – 49%
- ☐ 10 – 24%
- ☐ 0 – 9%

Graduate Employment Study

C. Graduates Employed and Their Background

9. Of the employees in your organisation, what percentage of them are professional qualification (ACCA, ICAEW, CPA) holders?

- ☐ 100%
- ☐ 75 – 99%
- ☐ 50 – 74%
- ☐ 25 – 49%
- ☐ 10 – 24%
- ☐ 0 – 9%

10. What percentage of your employed graduates are from the institutions of higher learning shown below?

	Local Public Universities*	Private Universities & University Colleges*	Branch Campuses of Universities Overseas*	Overseas Universities [†]	Others
100.0	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
75.0 – 99.9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50.0 – 74.9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.0 – 49.9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.0 – 24.9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0.0 – 9.9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Examples of institutions of higher learning are given below.

- * - Universiti Malaya, Universiti Kebangsaan, Universiti Sains Malaysia, Universiti Teknologi Malaysia.
 * - Universiti Multimedia Malaysia, Universiti Petronas, Universiti Tunku Abdul Rahman, HELP University, KDU University College.
 † - Monash Universiti Malaysia, University of Nottingham Malaysia Campus, Curtin University Malaysia.
 † - Oxford University, Cambridge University, Princeton University, University of New South Wales.

11. What percentage of your graduate employees completed their studies at private universities, university colleges and colleges via transnational education (TNE), for example, 4+0, 3+0, 2+2 or 2+1 programmes?

- ☐ 100%
- ☐ 75 – 99%
- ☐ 50 – 74%
- ☐ 25 – 49%
- ☐ 10 – 24%
- ☐ 0 – 9%

Graduate Employment Study

C. Graduates Employed and Their Background

12. Of the graduate employees who completed their studies at private universities, university colleges and colleges via transnational education (TNE), please indicate the percentage by country where the parent institutions are located.

	United Kingdom	United States	Australia	Europe	India	Others (Asia*)
100.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75.0 – 99.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50.0 – 74.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.0 – 49.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.0 – 24.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0.0 – 9.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Countries in Asia include Japan, Hong Kong, South Korea, Singapore, Philippines and Indonesia.

13. What field(s) of study or discipline(s) did your employees graduate in? (You may tick multiple categories)

- ☐ Accounting
- ☐ Actuarial Science
- ☐ Agriculture
- ☐ Arts
- ☐ Business
- ☐ Computer science/Information sciences
- ☐ Economics
- ☐ Engineering
- ☐ Finance
- ☐ Humanities/Social sciences
- ☐ Languages
- ☐ Law
- ☐ Physical or Pure Sciences
- ☐ Others (please specify)

Graduate Employment Study

C. Graduates Employed and Their Background

14. How important is it for graduate employees to have language competencies, as shown below.

	Very Important(1)	Important(2)	Fairly Important(3)	Not Important (4)	Not Important At All(5)
Bahasa Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mandarin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other European Languages (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Asian Languages (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the European and Asian languages here

15. How important is it for graduate employees to have information technology competencies, as shown below.

	Very Important	Important	Fairly Important	Not Important	Not Important At All
Word Processing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spread sheet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the Information technology competencies here

16. Overall, to what extent are you satisfied with the oral skills of graduate employees in your organization in the languages shown below?

	Very Satisfied	Satisfied	Fairly Satisfied	Not Satisfied	Not Satisfied At All
Bahasa Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mandarin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other European Languages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Asian Languages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the European and Asian languages here

Graduate Employment Study

C. Graduates Employed and Their Background

17. Overall, to what extent are you satisfied with the written skills of graduate employees in your organization in the languages shown below?

	Very Satisfied	Satisfied	Fairly Satisfied	Not Satisfied	Not Satisfied At All
Bahasa Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mandarin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other European Languages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Asian Languages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the European and Asian languages here

18. Please indicate the extent of your satisfaction with graduates from the different categories of education providers indicated.

	Very Satisfied	Satisfied	Fairly Satisfied	Not Satisfied	Not Satisfied At All
Local public universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local private universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local university colleges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private Colleges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foreign branch campus located in Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foreign providers outside Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Of your business operations, what percentage deals with people from other countries or overseas?

- ☐ 100.0
- ☐ 75.0 – 99.9
- ☐ 50.0 – 74.9
- ☐ 25.0 – 49.9
- ☐ 10.0 – 24.9
- ☐ 0.0 – 9.9

20. Do you recruit non-resident (foreign nationals) graduates?

- ☐ Yes
- ☐ No

Graduate Employment Study

D. Employers and Their Preferences

21. If you recruit non-resident (foreign nationals) graduates, please indicate why. You may select multiple reasons.

- ☐ Graduates from overseas have strong work ethics
- ☐ Insufficient local candidates with the right skills in this country
- ☐ Need to have an international workforce due to existing international partners
- ☐ Recruit the very best talent available
- ☐ Recruiting IT graduates from India and China may be cheaper
- ☐ Other (please specify)

Graduate Employment Study

D. Employers and Their Preferences

22. If you do not recruit non-resident (foreign nationals) graduates, please indicate why. You may select multiple reasons.

- ☐ We do not have any need to hire non-residents
- ☐ It is difficult to find suitable non-residents employees
- ☐ It is difficult to obtain work permits for non-residents employees
- ☐ Non-resident employees cost more
- ☐ Removing non-performing non-resident employees is more complicated
- ☐ Communication with non-resident employees can be a challenge
- ☐ Non-resident employees are not familiar with national and cultural requirements.
- ☐ Other (please specify)

Graduate Employment Study

D. Employers and Their Preferences

23. In ascertaining the relevance of obtaining a qualification via transnational education (TNE), please select below one response only.

- ☐ How the qualification was obtained i.e. on campus, off-campus or transnational education is irrelevant as long as the applicant has the qualification.
- ☐ How the qualification was obtained is relevant

24. If the manner in which the qualification was obtained is relevant, please select THREE (3) reasons why it is so.

- ☐ Branch campus graduates are more confident than TNE graduates of local higher education institutions.
- ☐ Branch campus graduates have better command of English than TNE graduates of local higher education institutions.
- ☐ Local higher education institutions TNE graduates are more willing to learn.
- ☐ Branch campus graduates are more international in their outlook than TNE graduates at local higher education institutions.
- ☐ Local higher education institution's TNE graduates are less independent than branch campus graduates.
- ☐ Other (please specify)

25. Select one or more of the following statements that you believe are relevant to your recruitment process.

- ☐ The field of study e.g. arts or sciences is relevant to the needs of the firm.
- ☐ Language skills from the country where the institution has issued the qualification is located. (Example: If Kyoto University issues a degree, it is assumed that the person attaining the degree speaks fluent Japanese)
- ☐ The culture of the country where the institution which issued the qualification is located. (Example: If the University of London has offered the degree, it is assumed that the person obtaining the degree knows about life in the UK.)
- ☐ These issues have not previously been considered.

Graduate Employment Study

D. Employers and Their Preferences

26. To what extent is it important for graduates to have knowledge/skills that are specific to your company?

	Very Important	Important	Fairly Important	Not Important	Not Important At All
Knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Which of these attributes should be the responsibility of the higher education system within which the graduates have been educated? You may select multiple attributes.

- ☐ Skills
- ☐ Knowledge
- ☐ Personality
- ☐ Values
- ☐ Internship experience
- ☐ Exposure to different environments, including international

28. Does your company provide training for your employees?

- ☐ Yes
- ☐ No

Graduate Employment Study

D. Employers and Their Preferences

29. If you provide training for your employees please indicate in which areas. You may select multiple areas.

- ☐ Industry-specific knowledge or skills
- ☐ Communication (oral)
- ☐ Language competency (writing)
- ☐ Team work
- ☐ Image and projection
- ☐ Leadership
- ☐ Other (please specify)

Graduate Employment Study

D. Employers and Their Preferences

30. If you do not provide training to your employees please indicate the reason/s.

- ☐ They do not need additional training
- ☐ They are not interested
- ☐ They do not stay long with us
- ☐ Training is expensive
- ☐ It is not worth investing in employee training
- ☐ We do not feel that the investment brings any return
- ☐ Other (please specify)

Graduate Employment Study

D. Employers and Their Preferences

31. Identify FIVE (5) most important strengths present in your graduate employees.

- ☐ A sense of humour
- ☐ Ambition
- ☐ Creativity
- ☐ Excellent verbal communication skills
- ☐ Excellent written communication skills
- ☐ Flexibility
- ☐ Hard work ethics
- ☐ Industry-specific knowledge/skills
- ☐ Loyalty
- ☐ Persuasiveness
- ☐ Strong interpersonal skills
- ☐ Tech-savvy
- ☐ Thinking outside the box

32. In relation to industry-specific knowledge/skills, select FIVE (5) most important attributes graduate employees need to improve in

- ☐ Ability to ask the right questions
- ☐ Ability to reason and analyse
- ☐ Ability to undertake research
- ☐ Ability to apply theory to practice
- ☐ Knowledge/skill of subject matter
- ☐ Knowledge beyond industry-specific matters
- ☐ Ability to explain industry-specific matters to peers

Graduate Employment Study

D. Employers and Their Preferences

33. In the area of work ethics, identify THREE (3) key attributes that graduate employees need to improve in.

- ☐ Gratitude
- ☐ Initiative
- ☐ Integrity
- ☐ Positive attitude
- ☐ Professionalism
- ☐ Reliability
- ☐ Respect

34. In the area of critical thinking, identify FIVE (5) key attributes that graduate employees need to improve in.

- ☐ Acknowledge lack of understanding, knowledge or information
- ☐ Decide based on facts gathered and considered
- ☐ Examine problems closely
- ☐ Have a sense of curiosity
- ☐ Listen carefully to others
- ☐ Look for evidence to support decision
- ☐ Reject information that is incorrect/irrelevant
- ☐ Seek new ways to solve a problem
- ☐ Understand that critical thinking is a lifelong process of self-evaluation/assessment
- ☐ Weigh beliefs, assumptions, and opinions against facts

Graduate Employment Study

Acknowledgment

Thank you for filling in the questionnaire and returning it to us electronically.

Appendix 2: Interview Schedule

Interview Schedule

1. Are you able to distinguish between the three categories of graduates, namely, transnational education graduates (TNEGs) and local university graduates (LUGs) and foreign graduates (FGs)?
2. What are your views on national and transnational qualifications in relation to the kind of graduates produced?
3. Does the quality of graduates differ according to the institutions/countries attended, namely, local institutions offering foreign degrees, local institutions offering home grown degrees and foreign universities?
4. Are there any significant variations between graduates of different fields of studies such as accountancy as opposed to marketing for example in relation to capability and capacity for work, personality, communication skills and IT skills?
5. What makes a graduate employable in your organisation?
6. What actions can the following stakeholders take to enhance graduate mobility and narrow the gap in work-skill mismatch of graduates and industry needs?
 - a. Government/Policy makers
 - b. Education institutions/universities
 - c. Parents
 - d. Students
 - e. Society
 - f. Any others
7. If you employ foreign graduates (foreigners), how do they perform in comparison to Malaysian graduates? If better, how, if weaker how?
8. What will be your advice to a student seeking to enter higher education with respect to choice of institutions (public or private), programmes (local or international) and location of studies (domestic, regional or international)?