

**CHANGING SKILLS REQUIRED BY THE INDUSTRIES:
PERCEPTIONS OF WHAT MAKES BUSINESS GRADUATES EMPLOYABLE.**

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i

1

ABSTRACT

This study relates to the employers' assessment of graduates' skills as deemed required by the industries. The business need for accelerated performance levels induces a responding desire for rapid changes in the skills required by universities' graduates. A changing environment with resultant organizational restructuring means graduates now find jobs are more demanding as the needs of business to be more competitive. Whereas in the past, managerial competence went hand in hand with the possession of specific skills and abilities, it now seems to involve more.

Empirical evidence from the research suggests that respondents share a basic commitment to the development of common skills within the context of a business and management studies programme. Clearly the employers participating in this study placed greater emphasis on major subjects of management and business (53.5%) and less on elective subjects (18.4%). Interestingly, the Quality Assurance Unit in Ministry of Higher Education in Malaysia also made a guideline of 50-60% of major subjects in Management and Business programme for undergraduate programme. On the other hand, this study confirmed that the industry also have the same views on programme composition in Management and Business programme in Malaysia.

In-term of key skills in management and business programme, verbal and written communication skill were ranked higher and less on innumeracy skill. This finding also supported findings in the programme structure, where is the communication subject must play an important role in designing management and business syllabus. In academic and intellectual skills, be independence and ability to solve business problem placed most important skills by the employers. In line with that result, the employers also expected that the graduates will be able to carry out responsibilities assigned and always on time or can keep appointments. From this finding, it is imperative that higher learning institutions gave greater emphasis in developing soft skills of the students as well as preparing them with good attitude for employment.

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CONTENTS

Abstract	ii
Contents	iii
List of Figures	v
List of Tables	vi
List of Appendices	vii

CHAPTER I

<i>INTRODUCTION</i>	<i>1</i>
1.1 Problem Statement	2
1.2 Research Objectives	2
1.3 Scope of the Study	4

CHAPTER II

<i>LITERATURE REVIEW</i>	
2.0 Higher Education Institutions' role in graduate career development	5
2.1 New module development	10
2.2 Transferable skills and qualities	11
2.3 Who values transferable skills and qualities?	16
2.4 A three-way classification of skills	18

CHAPTER III**RESEARCH DESIGN AND METHODOLOGY**

3.0 Research method adopted	20
3.1 The questionnaire design	22

CHAPTER IV**SURVEY RESULTS AND INTERPRETATION**

4.0 Introduction	25
4.1 Descriptive Analysis	26
4.2 Distribution Differences	35
4.3 Conclusion	38

CHAPTER V**SUMMARY AND IMPLICATIONS**

5.1 Introduction	40
5.2 Implication for graduates and training	40
5.3 Implication for higher learning institutions	42
5.4 Future research	43
5.5 Conclusion	44

REFERENCES	45-47
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APPENDIX 1(The Questionnaire)	48
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LIST OF FIGURES

No.	TITLE	PAGE
Figure 2.1:	A three-way classification of skills	12
Figure 2.2:	Transferable skills and qualities	13

LIST OF TABLES

No.	TITLE	PAGE
Table 1:	Respondents Profiles	26
Table 2:	Summary of key required skills by ranking	28
Table 3:	Academic and/or Intellectual skills	29
Table 4:	Summary of Set of Personal skills	30
Table 5:	Summary of possessed skills by graduates	32
Table 6:	Program Structure	34
Table 7:	Program structure by Gender	35
Table 8:	Program structure by Income	36
Table 9:	Program characteristics by Gender and Income	37

LIST OF APPENDIX

No.	TITLE	PAGE
Appendix 1	Questionnaire	48

Chapter 1

Introduction

In today's world, industries are experiencing changes more rapidly. Various factors are propelling these changes such as globalization, internationalization, rapid changes in technologies and intense competition. These changes have profound impact on the higher education institutions, as education is the foundation on which a competitive workforce is built. Despite some impressive improvements in performance in the higher education institutions, many students still emerge from the education system ill-equipped to meet the challenges of life and employment. In the era of a new revolution in which knowledge and applied intelligence is rapidly becoming the key to national survival and success, "knowledge" workers are needed to help their organizations gain competitive advantage through the application of skills in technology, innovation, production and service (Gregory, 1996).

Industries are in constant need for a consistent and reliable supply of educated and skilled business graduates. On the other hand, universities have the responsibility to produce graduates that will meet the requirements of the industries. However, universities are lagging behind in meeting the needs of the industries (Hernaut, 2002). In addition to that, there is a gap between the knowledge, skills and qualities possessed by the universities' graduates and the knowledge, skills and qualities required by the graduates' prospective employers. The gap between the perceptions of industry leaders and academicians is clearly mentioned in the study conducted by Nicholson and Cushman (2000). The study found a distinct gap in the perceptions of industry respondents versus

the academics included in the study. While industry believes that strong affective skills such as “leadership” and “decision making” were the most desirable characteristics for future executives, the academics favors more interpersonal affective competencies and overall ranked the cognitive skills higher than the other group. Further, the study found academicians believed that their opinions would mirror those of the industry. However, this was clearly not supported.

1.1 Problem Statement

The changing environment

Demand does not match supply in the graduate marketplace as companies continue to restructure and downsize in the 1990s and economic performance inhibits the expansion of employment. The resulting increased levels of competition between graduates for available jobs and the changing nature of skills needed for today’s competitive marketplace means that qualitative considerations play an increasing role in the selection of graduates.

The purpose of this study is to identify what are the knowledge, skills and qualities that business graduates should possess from the perspective of the prospective employers. Thus the objectives of this research are outlined as follow:

1.2 Research Objectives

- i) To identify the required key skills for business graduates from the perspective of the employers.
- ii) To identify the required academic/intellectual skills for business graduates from the perspective of the employers.

- iii) To identify the required personal skills for business graduates from the perspective of the employers.
- iv) To identify the skills possessed by business graduates from the perspective of the employers.
- v) To identify the appropriate structure of business programme from the perspective of the employers.

Adopting an empirical approach, the authors' research questions were, therefore, defined as follows:

- i) What are the key skills do employers seek from business graduates?
- ii) What are the academic/intellectual skills do employers seek from business graduates?
- iii) What are the personal skills do employers seek from business graduates?
- iv) What are the skills possessed by business graduates from the perspective of the employers?
- v) What is the appropriate structure of business programme from the perspective of the employers?

The above questions are addressed via comparing the results from primary research conducted among prospective business graduates employers, with the findings from the secondary research data.

1.3 Scope of the study

- i) The study will analyze key academic/intellectual and personal skills perceived important by business graduates' employers.
- ii) The study will identify the current skills and qualities possessed by the business graduates as perceived by business graduates' employers.
- iii) The study will identify the appropriate structure of business programme as perceived by business graduates' employers.
- iv) This study will focus on firms that employed our students as their employees and focusing the Klang Valley and Johor Bahru region.

Chapter 2

Literature Review

2.0 Higher Education Institutions' role in graduate career development

An individual's career development will have been influenced by a range of previous life experiences; for example, the society in which the individual lives, educational experiences and parental influences. These life experiences will have already influenced the individual's self and opportunity awareness. This awareness will have been exercised, to some extent, for the individual to have made a career choice and continue their formal education by entering higher education institutions (HEIs).

Therefore, HEIs having a role to play in the continued development of self and opportunity awareness in relation to the notion of transferable skills and qualities and in alerting students to the relevant labour market trends. In this respect, Nabi and Bagley (1998) argue that ``the development of career plans in the early stages of an undergraduate's course is likely to help the student clarify what skills he/she lacks and to devise ways to develop these skills and competencies over the course of their undergraduate programme''. They also refer to Lancaster Business School's Career Development Unit supporting an academic input relating to such areas as the graduate labour market and theories of occupational choice.

Hence we argue that HEIs also has a role to play in alerting students to the full range of employment opportunities that exist on graduation. HEIs can work at developing partnerships with such organisations to assist in the process of enabling both students and businesses to realize the benefits that each can offer. Williams and Owen (1997)

recommend that a better flow of information to students might encourage more of them to consider their careers. The notion of opportunity awareness, therefore, does not rest solely in the hands of the students. Academics need to keep pace with the changes that have, and are, occurring in the graduate labour market.

The AGR report (1995) highlights graduate criticisms of academics, who considered ‘‘most educators were in a time capsule, five or ten years out of date’’.

The reasons for students choosing to continue their formal education are no doubt wide and varied, but common to all must be the expectation that their degree and development during their courses will enhance employability in the future. The authors argue, therefore, that students have a vested interest in gaining an insight into the reality of the graduate labour market and understanding that their degree is not the sole means of securing employment. This is reinforced by the secondary and empirical research findings that many employers, both large and small, are seeking a ‘‘well rounded graduate’’ who has achieved a reasonable degree and is equipped with, and aware of, the range of skills and qualities that can be transferred to the workplace. It is argued, therefore, that curriculum development which addresses the importance of both self and opportunity awareness not only assists students to face the realities of the world of work but also similarly requires academics to do the same.

From these findings, it is clear that HEIs do have a role to play in a graduate’s career development. This illustrates the authors’ views of how curriculum development within this area could, more formally, deliver the outcomes advocated by Dearing report (1997, p. 4), namely ‘‘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 fulfillment”.

Therefore, this literature review will focus on presenting and discussing examples of responses to the issue of HEIs curriculum development to facilitate the notion of developing student skills, self and opportunity awareness.

Some examples of curriculum development aimed at facilitating graduate employability and career management The review of curriculum development aimed at facilitating graduate employability and career management will focus on three specific secondary sources, namely the research undertaken by Nabi and Bagley (1998), Stephenson et al. (1998), and Hand et al. (2000).

In establishing students’ views on transferable skills and career preparation in higher education, Nabi and Bagley (1998) question how HEIs should respond to the challenge of preparing graduates for the world of work and thereby tackle accusations made by graduate recruiters that students entering the labour market lack personal transferable skills such as team working, decision making and general commercial awareness. They refer to the “ever growing demands to expand the curriculum” coupled with the increasing number of students entering HEIs as the means of providing the specific challenge “to identify which skills should be integral to the teaching process and which should be facilitated outside the academic curriculum” (AGR, 1995, p. 26 in Nabi and Bagley, 1998).

The research undertaken by Nabi and Bagley (1998) aimed to assess “the extent to which graduates perceive individual skills to be important for the future, and the quality of those skills”. They suggest that their research findings provide useful

information to both HEIs for the integration of skills development into the curriculum and to employers for developing training programmes aimed at addressing the specific skills gap in the graduate population.

Their research findings highlighted three key issues in relation to skills development, namely:

1. Graduates tended to rate the importance of particular skills more highly than their own ability in those skills.
2. Graduates rated their level of ability lowest in IT skills and highest in their ability to work without supervision.
3. Gender differences seemed to be apparent in terms of the views cited (Nabi and Bagley, 1998).

Students did not consider academic staff to be the prime source of advice on career planning and Nabi and Bagley (1998) argue that "it would be unrealistic to expect academic staff to fulfill all students' career management needs and requirements". As such, they advocate the important role of career advisers in universities. While emphasizing the notion of self-reliance they do suggest the development of career plans (Jim Stewart and Vanessa Knowles, 1997)

In the early stages of undergraduate programmes, HEIs should take approaches that will assist students in developing self and opportunity awareness and thereby establish ways in which to develop weaker skills and competencies over the duration of the degree programme.

From an organisational perspective, past research concludes that work placements, vacation work and career seminars run by employers can only assist in

helping students to recognize the importance of transferable skills and their practical application in the world of work. This concurs with Levels 4 and 5 of the Hawkins and Jackson model of effective learning (in AGR, 1995). At Level 4 students are able to make links between their learning and skills in one context and are able to identify applications to different learning situations or potential careers. At Level 5, the opportunity of work placements actually facilitates the application of skills and knowledge to new situations thereby facilitating practical experience and a means of further reflection for self-awareness development. Nabi and Bagley (1998) also suggest benefits for the employers as liaising with students allows them to increase their profile in the graduate labour market and invest in the future success of the company by attracting “new talent”. Such claims also suggest a means for SMEs to raise their profile in the graduate labour market.

From their research findings, Nabi and Bagley conclude that it is, indeed, advantageous for HEIs to offer optional skills development courses or modules, and view such courses of action as a means of enhancing graduate employability. They refer to two universities, namely Lancashire Business School and the University of Manchester Institute of Science and Technology (UMIST), which have both launched initiatives that address the issue of transferable skills development and career management. With the QAA in the UK process having a specific performance measure aimed at assessing the ways in which universities’ prepare students for future employability, such initiatives may soon become more widespread.

2.1 New module development

A specific example of the kind of initiative advocated by Nabi and Bagley is that described by Stephenson et al. (1998). This is an innovative module, ‘‘Exploring business skills’’ (EBS), designed for the HND Business Studies/Administration courses at Nottingham Business School. The module has an explicit focus on skills development and the module learning outcomes were structured to emphasize both lifelong learning values and transferable skills. Finally, non-standard approaches to and methods of teaching and learning and student involvement in assessment are highlighted by both students and staff as successful elements of the module’s delivery.

Stephenson et al. (1998) considered that curriculum development such as the EBS module represented a philosophy that needed to reflect contemporary influences, both internal and external to the Business School, and provided a conceptual framework that would guide ‘‘course development towards producing graduates prepared for the world of work’’. They also acknowledge that one of the driving forces that led to the module being developed and implemented was the resource squeeze in HE that had resulted in modularity, lower contact time and more varied entrance requirements. The emphasis therefore had begun to shift for students to be more independent in their learning, but there was, however, a concern that students needed support in developing the learning skills associated with more independent approaches and the feeling that ‘‘the underlying philosophy and associated issues would be best served through dedicated skills modules that provide students with the opportunity to practice and reflect on their skills development (Jim Stewart and Vanessa Knowles, 1997).

2.2 Transferable skills and qualities

The discussion will now turn to the issue of transferable skills and address two questions. First, what are transferable skills and qualities? Second, and of particular interest to any graduate entering the labor market, who values them?

In 1991, The Business and Technology Education Council (BTEC) introduced common skills to be adopted by all higher education centers in the UK. The seven common skills identified and prescribed were – managing and developing self; working with and relating to others; communicating; managing tasks and solving problems; applying numeracy; applying technology and applying design and creativity. The role of common skills could make a difference when potential employers interview candidates with either the same or similar qualifications. For example, communication skills and IT skills could give the impression of such added capability or an extra “edge” for a candidate over the others (Laughton and Montanheiro, 1996).

The results showed that the “soft skills”(managing and developing self, working with others, and communicating) are ranked higher by the respondents (students) compared to some of the “hard skills”(applying numeracy, applying technology).

From the review of a wide range of secondary reported data, it is clear that different labels are used to describe the term skills and qualities. The Association of Graduate Recruiters refer to transferable skills and qualities (AGR,1995,p.4) and the Dearing Report (1997) emphasizes the importance of key skills, which AGR now recognize as replacing the previously used term of core skills, whereas Harvey *et al.* (1997) refer to a “profile of attributes”. The use of different labels can be confusing.

Thus, it is imperative to give definitions of what is meant by the term transferable skills and qualities in the context of this research. The Department for Education & Employment (DfEE) (1997) provides a framework to assist in this process, which they refer to as a three-way classification of skills: key (or core) skills, vocational skills and job specific skills. Figure 2.1 illustrates what is meant by each of these skills.

Figure 2.1
A three-way classification of skills

Skill Heading	Definition
Key (or Core) Skills	Very general skills needed in almost any job. They include basic literacy and numeracy and range of personal transferable skills such as the ability to work well with others, communication skills, self-motivation, the ability to organize one's work, and often, a basic capability to use information technology.
Vocational Skills	Needed in particular occupations or groups of occupations, but are less useful outside of these areas. While they are less general than key skills, they are nonetheless highly transferable between jobs in a given field. A simple example may be the ability to use a common computer package.
Job Specific Skills	The usefulness of these is limited to a much narrower field of employment. They are forms of knowledge rather than skills as traditionally defined and could be specific to individual firms.

Source: DfEE, Labour Market Skills & Trends, 1997/98 (p34-35)

The Nottingham Trent University's Careers Advice and Employment Service (CAES) (1997) similarly refers to transferable skills being within the context of employment. Drawing upon findings within AGR reports and from experience of graduate recruitment activities undertaken within the university, CAES (1997 p. 18) defines individual transferable skills more extensively than the DfEE, as illustrated in Figure 2.2.

Figure 2.2
Transferable skills and qualities

Transferable Skills and Qualities	Definition
Motivation	Drive and determination to achieve results and the tenacity and perseverance to attain goals in difficult circumstances.
Initiative	Ability to see difficulties and act upon them. Willingness to make things happen and to take an independent stance when necessary.
Creativity	Ability to generate ideas and options and to initiate new ideas when necessary.
Organizational Ability	Ability to establish appropriate course of action, to achieve goals, anticipate needs and set priorities.
Communication Skills	Ability to communicate clearly and persuasively, both verbally and in writing.
Teamwork	Willingness to work as an effective member of a team, involving others to forward your own ideas and solve problems, utilizing the skills of team members and being open to ideas and suggestions of others.
Interpersonal/Social Skills	The capacity to establish good working relationships with customers, clients and colleagues is important for most work roles.
Problem Solving	Identifying problems, recognizing important data and making logical decisions.
Leadership	Having self-confidence, impact, the ability to influence others, willingness to take an independent line and the ability to earn the respect of others.

Source: Careers Advice and Employment Service (CAES) (1997 p18).

Nabi and Bagley (1998) similarly provide a useful framework for classifying transferable skills. Their research classified three groups, namely personal, communication and problem-solving attributes. Applying their framework to Figure 2.2, the skills and qualities identified by CAES can be sub grouped as follows:

- *Personal attributes* – motivation, organizational ability, teamwork, interpersonal/social skills, leadership.
- *Communication* – written, verbal and non-verbal skills.
- *Problem solving* – initiative, creativity and decision-making.

According to Stewart and Knowles (1999), employers expect students to demonstrate these skills and qualities. This statement implies that these skills and qualities are valued or deemed as important by the industries. Various studies have produced useful indicators of the kind of skills and abilities that graduates need in addition to knowledge and subscribe to a set of transferable skills such as communication, team working, problem solving, leadership, numeric, self-confidence, willingness to learn, flexibility, ability to learn, intelligence, ideas and imagination (Harvey and Green 1994, Flanders 1995, Dee 1996, Harvey et al. 1997, Williams and Owens 1997). However the employers alone do not only value these skills and qualities. Other stakeholders such as higher education institutions, government as well as the students themselves regard these skills and qualities as important in order for the graduates to be more marketable.

Few studies attempted to identify the need of industries in terms of the skills possessed by the graduates. Laughton and Montanheiro (1996) conducted a study of the core skills required in higher education from the perspective of the students in the UK. Major findings were the complexity of common skills strategy, difficulties in the area of assessment, the different value placed by the students and the fact that the development of skills was not undertaken with sufficient reference to probable context where they could be utilized.

Dench (1997) conducted a study to find out the changing skills required by the industries. Major findings were employers are becoming more demanding in the skills they require of their employees. It is recognized that the content of jobs is changing and that different combinations of skills and abilities are required. The evidence suggests that

up-skilling and reskilling is more widespread than any reduction in the level of skill required.

Wood and Lange (2000), examines the experiences of Germany and Sweden in their attempts to develop core skills and key competencies among trainees and young employees. The study highlights the importance of employer enthusiasm in the development and delivery of core skills.

Yen, Lee and Koh (2001), classifies the critical knowledge / skill set according to content or domain of knowledge by means of a survey. This is conducted in accordance with what the practitioners and educators in the IS industry can easily relate.

What are the general management skills required by employers? The British Retail Consortium (BRC) defines the skills that are considered by employers from the retail industry to be important to successful performance in the industry as “management competences”, listed below:

- self-confidence and personal strength (assertiveness, decisiveness, flexibility, judgment, initiative, stress tolerance);
- leadership and teamwork;
- planning and organization;
- analytical and problem solving;
- human relations and influencing.

2.3 Who values transferable skills and qualities?

Graduate employers seek a range of transferable skills and qualities that students need to be able to demonstrate in selection processes (CAES, 1997; Harvey et al., 1997; Williams and Owen, 1997). The fact that employers expect students to demonstrate these skills implies that they are valued in some way. The value of transferable skills and qualities, however, is not solely pertinent to employers. Other stakeholders exist: HEIs, the Government and students all appear to recognize that transferable skills and qualities play an important role in the context of a managed career.

Harvey et al. (1997) conducted research which focused mainly on large organizations, but also encompassed SMEs, to establish the values placed on skills in the world of work and concluded that ‘‘There are large number of graduates looking for jobs and employers, as we have seen, no longer recruit simply on the basis of degree status. A degree might be necessary or desirable but employers are looking for a range of other attributes when employing and retaining graduates’’.

Similarly Williams and Owen (1997) state that within SMEs recruiting graduates, the most common perceived graduate qualities are an ability to learn, intelligence, ideas and imagination, and good communication skills.

Definitions of ‘‘competence’’ vary between emphasizing proficiency in technical skills alone, to a statement relating solely to personal traits and behavioural skills. A definition of competence which encompasses the ‘‘what’’ of the job as well as the personal skills of the person doing the job is now more widely accepted: ‘‘Aspects of the job at which the person is competent and aspects of the person that enable

him to be competent”. If we relate this continuum to the list of skills and attributes compiled by the BRC it is clear that retailers emphasize exclusively behavioural abilities. This is illustrated in the following quote:

“The majority of employers are not concerned with academic excellence but with communication skills, organizational skills, team skills, leadership skills... Students should not be deterred from applying to companies because they do not anticipate gaining a 1st or 2:1 but should emphasize their skills” (Kate Orebi-Gann, Chairman of the AGR and Recruitment Manager for Marks & Spencer).

Evidence from Quality in Higher Education (QHE), shows that employers generally express little interest in cognitive skills; instead they seek someone who can make an “early impression” on the organization. This emphasizes that skills required to meet the short-term needs of the business are Graduates into the retail industry (Gush 1996).

Industry is currently occupying a high profile as a stakeholder of higher education, and much current research has been undertaken to examine the levels and nature of satisfaction within the employment relationship, in order to ensure a better match between the needs of industry and its educational suppliers.

However, most of the studies are broad based, and if any focus exists it is within the manufacturing sector, for example Spurling(1992) examined science and engineering graduates, while Nicholson and Arnold (2000) studied graduates at BP.

Little research has been carried out on the skills and qualities of business graduates especially the local business graduates. Needs and expectations may differ. In

addition, the new emphasis on industry as the customer has underscored the need to identify what are the employers' expectations of local business graduates. Unfortunately there is lack of studies conducted in Malaysia in the context of the core skills required by the industries from the business graduates. This can pose problem in the sense that universities are in danger of producing students who lack the skills required by the industries. It is very important that the need of the industries be ascertained in terms of skills they expected of university graduates. This is due to the fact that many organizations in exercising their recruitment process and internal appraisal systems are taking into account the abilities of the new recruits in terms of these generic or common skills (Dench, 1997).

2.4 A three-way classification of skills

Skill heading Definition

Key (or core) skills are very general skills needed in almost any job. They include basic literacy and numeracy skills and a range of personal transferable skills, such as verbal communication; written communication; teamwork; leadership and information technology

Academic/Intellectual Skills is limited to a much narrower field of employment. They are forms of knowledge rather than skills. The skills classified as the academic/intellectual skills are namely independence; business problem solving; autonomous learning; critical analysis; application; research for decision-making; research methods and reflection.

Personal Skills are skills needed to manage and organize one self. The most critically required in personal skills are planning; time management; initiative; self-awareness; listening; adaptability and negotiating.

These keys, academic and personal skills are considered important in partly ensuring the quality and competitiveness of graduates. The DfEE argues that “employers frequently emphasize the importance of key skills in preparing people to be part of a flexible and adaptable workforce. These skills are critical to the employability of individuals throughout their working lives”.

From HEIs and student perspective, the Dearing Report (1997) argues that there is much evidence to support further development of a range of skills during higher education and sees key skills as vital outcomes of all higher education programmes. Such claims seem supported by one unemployed graduate cited within the AGR’s (1995) Report on Skills for Graduates in the 21st Century which captures the reflective value that a graduate places on transferable skills and self and opportunity awareness. The reflection from graduates are illustrated from the following quotation:

“ I expected everything to be handed to me on a plate. I now realized that while I graduated with a decent degree (2i), I had no real awareness of the skills I had to offer. I had no idea at all of career opportunities within small businesses and no relevant experience. Thinking about it now, I couldn’t manage myself out of a paper bag, let alone manage my career”. (AGR, 1995, p. 24).

Chapter 3

Methodology

3.0 Research method adopted

Using a sample from the employers who employed our students as their employees and focusing the Klang Valley and Johor Bahru region, the research was concerned with addressing the following questions:

- i) What are the key skills do employers seek from business graduates?
- ii) What are the academic/intellectual skills do employers seek from business graduates?
- iii) What are the personal skills do employers seek from business graduates?
- iv) What are the skills possessed by business graduates from the perspective of the employers?
- v) What is the appropriate structure of business programme from the perspective of the employers?

The method chosen to address these question areas was a questionnaire. Using a database which had been compiled for the purpose of previous research undertaken by one of the authors, the population was defined as ``employed our students as their employees and focusing in the Klang Valley and Johor Bahru region.'

The next stage was to draw a random sample, against which Gill and Johnson (1991) state that any subsequent findings can be generalized or extrapolated. The random sample size used for the primary research was 200 companies, which were chosen from the database. Such a method was deemed an appropriate technique for composing a random sample, as the method complies with the definition proposed by Gill and Johnson (1991, p. 6) as being "a sample in which all members of the specific population from which the sample is drawn have an equal chance of selection". Considerations surrounding the issues of response rates and time scales influenced the decision of electing to work with the random sample size of 200 companies. Jankowicz (1995, p. 246) refers to researchers assuming "a 10% baseline as a useful rule of thumb" for a postal survey response rate.

Having obtained the population and random sample for the purpose of the first phase, the issue of the questionnaire design needed to be addressed. Stewart (1997, p. 1) states that "the most common mistake when setting out to collect information is to 'dive in' without thinking through first what is required".

In designing the questionnaire, a cumulative three-staged approach proposed by Stewart (1997) was, therefore, adopted. This approach requires three vital questions, one at each stage of the process, to be satisfied prior to designing a research tool. Stage 1 requires the question "What information do I want?" to be considered.

Stage 2 requires the researcher to contemplate "Why do I want this information?" and the third stage encourages deliberation to be devoted to the question of "How will I use this information?" The resulting questionnaire was piloted with a non-random sample of 10 companies.

3.1 The questionnaire design

The questionnaire was designed using a combination of quantitative and qualitative questions and comprised three distinct sections.

Section A was designed to obtain specific details about the graduate skills required for the job markets. Employers are required to rank from 1 to 7 the relative importance of the graduate skills according to their own preferences. This section is subdivided into three categories of skills namely key skills; academic/intellectual skills and personal skills.

There are seven items under the key skills variable namely (1)verbal communication; (2)written communication; (3)team work;(4) leadership;(5) information technology; (6)reading skills and (7) numeracy.

There are eight items listed under the academic/intellectual skills namely

(1)independence;(2) business problem solving;(3) autonomous learning;(4) critical analysis;(5) application;(6) research for decision making;(7) research methods and (8)reflection.

The seven items most critically required in personal skills are (1), planning (2), time management (3), initiative (4), self-awareness (5), listening (6), adaptability and negotiating (7).

The skills listed and their definitions were taken from secondary data research findings, namely the AGR report (1995), Harvey et al. (1997) and TNTU Careers and Employment Service.

Section B was designed to assess the perception of employers toward the skills possessed by the local/IPTA graduate . The employers are asked to give their assessment based on their experience in working with the graduates in their organizations. The assessment by the employers will be based on a five point Likert-Scale ranging from 1 (Strongly disagree) to 5 (Strongly Agree). The employers are ask to assess 14 items skills namely bring something new; possess mental strength; adapt to changing work; supervise subordinates; abides to the rule of time in carrying out tasks; depth knowledge in IT; carry out duties commensurate with position held; able to fit into new work environment; able to write in English; upgrade work achievement after receiving training; able to communicate in English; inclination to improve knowledge; always on time/keeps appointment and able to carry out responsibilities assigned.

Section C was designed to obtain opinion from the employers regarding the appropriate structure of the academic programme in terms of the percentage deem appropriate for major and minor within the business curriculum as well as the subjects that are considered to be important to strengthen the existing curriculum.

Section D was designed to obtain specific details about the respondents/employers. The variables listed in this section are (1) age group (2) gender (3) level of education (4)level of income (5) years of experience with current organization and (6) years in current designation.

The study employs the scientific method of using questionnaires to solicit data from the respondents. The respondents will be selected based on the random sampling method. Respondents will be asked to complete the mailed questionnaires. Descriptive and inferential statistics will be applied on the data obtained. Possible statistical tests used are independent sample t-tests, correlation analyses and Multiple ANOVA.

After an initial period the questionnaire will be distributed again to employers who had not responded. Personal interview was suggested as a good contacted method to bring immediate and more reliable data to the survey. In total, questionnaires were sent to 200 employers and 83 completed the questionnaires.

Chapter 4

Survey Results and Interpretation

Introduction

The questionnaire was distributed to employers who employed our students as their employees. After an initial period the questionnaire was distributed again to former employers who had not responded. Personal interview was suggested as a good contacted method to bring immediate and more reliable data to the survey. In total, questionnaires were sent to 200 employers and 83 completed the questionnaires. The data were gathered during the university term break season from 1st July up to 10th September 2004. This chapter presents the data analysis and able to achieve the research objectives. The data collected in this survey are very informative and useful to practitioners and educators. In the first section of this chapter, the discussion will be on the socio-demographic profile of respondents, and the analysis of the descriptive data. In the second section, the discussion is on the analysis of the graduate skills and on which factors that are most important. The third section determined the role of academic program and suggested curriculum design by the employers. The detailed finding can be obtained from the sections discussed below.

Descriptive statistics

The majority of employers represented in the sample were from the service industry. Based on the methodology, respondents were asked to answer 36-item questions to indicate their opinions and perceptions on the graduate skills. For the analysis of control variables (mostly demographics), all the respondents were asked to indicate their demographic profiles. The summaries of the variables are shown in Table 1.

Table 1
Respondents Profiles

Variables	Frequency	Percentage
Age groups:		
Below 40 years	55	88.7
Between 41-50 years	6	9.7
Above 51 years	1	1.6
Gender:		
Male	32	51.5
Female	30	48.4
Level of education:		
Postgraduate	17	27.9
Undergraduate	38	62.3
Pre-university	4	6.6
A-level	2	3.3
Level of income:		
Above RM50K	3	4.9
Between 30K-50K	17	27.9
Below 30K	41	67.2
Experience with current organization:		
Up to 5 years	36	57.1
Between 6 to 10 years	19	30.2
11 years and above	8	12.7
Years in current designation:		
Up to 5 years	47	74.6
Between 6 to 10 years	12	19.0
11 years and above	4	6.4

From the Table 1, the vast majority of the respondents (55 or 88.7 per cent) were in the category of age group of below 40 years old. This finding indicates that majority of them were still in the middle management level and the trend in the other variables (in Table 1) also showed similar pattern. From the respondents' profiles, education level played an important role in the background of the respondents. Almost 90 per cent have higher education qualification and have experienced being in the high education system.

Next, the further analysis was carried out by performing the analysis of ranking all the factors in the data results collected from the questionnaires. As a result, the readers can clearly learn the different importance of all the factors in terms of the aforementioned three areas, "key graduate skills required for the job market", "academic and/or intellectual skills", and "personal skills".

As shown at Table 2, of the key skills that graduate must possess, the top three required skills in ascending ranked order are "verbal communication", "written communication" and "team work". This findings supported by the findings of Yen, Lee and Koh (2001), they also found that "interpersonal communication skills" as being more important skills for the graduates.

Table 2

Summary of key required skills by ranking (n=63)

Variables	mean	STD	ranking
Verbal communication	2.29	1.57	1
Written communication	2.71	1.49	2
Team work	3.49	1.84	3
Leadership	3.76	2.05	4
Information technology	3.90	1.68	5
Reading skills	4.49	1.84	6
Numeracy	5.48	2.05	7

These findings clearly match with the current trends in educational and curriculum design. From the industries' point of view, employees or graduates whom with strong interpersonal skills such as verbal and written communication capabilities are always chosen by the industries. Interestingly, strong knowledge in IT is not the major requirement, although the current trend is moving toward computer-mediated environment.

By further examining the ranking for academic and intellectual skills presented in Table 3, the top three possessed academic and intellectual skills listed in sequence include the following, "independence", "business problem solving", and "autonomous learning". This finding not only reinforces the findings presented in Table 2, but also provides

additional information, which deserves more attention. This finding does not show the technical skills or academic are unimportant. However it was finding people with the combination between personal and educational background, which was often the problem.

Further more any categorization of skill needs especially in Table 3, will include elements of overlap. For example, the highest skill is independence, with needed both personal and technical skills. In retailing, employee need to understand the need and want from the customer and in the same time can provide the service supported by the used of computer for inventory and sale.

Table 3

Academic and/or Intellectual skills (n=63)

Variables	mean	STD	ranking
Independence	3.25	2.41	1
Business problem solving	3.29	2.04	2
Autonomous learning	3.38	1.93	3
Critical analysis	3.92	2.12	4
Application	4.29	2.11	5
Research for decision making	4.59	2.27	6
Research methods	5.24	2.33	7
Reflection	5.30	2.30	8

Further attention will be placed on the data set of personal skills, as presented in Table 4. The seven most critically required in personal skills are (1), planning (2), time management (3), initiative (4), self-awareness (5), listening (6), adaptability and negotiating (7). Clearly, the most important personal skills in today's environment are those tools in the "strategic management" category and "communication" category. In general, the personal skills are required to enhance better communication and coordination in the organization environment and culture.

Table 4

Summary of Set of Personal skills

(1 = Strongly Disagree, 5 = strongly agree)

<i>Variables</i>	<i>mean</i>	<i>STD</i>	<i>ranking</i>
Planning	2.32	1.79	1
Time Management	2.35	1.45	2
Initiative	3.37	1.76	3
Self awareness	4.21	1.96	4
Listening	4.25	1.76	5
Adaptability	4.52	2.00	6
Neegotiating	4.94	2.08	7

Finally, the researchers asked respondent's experiences working with the local university graduate who presently worked with them or in their organization especially graduates from local universities.

Table 5 summarized the findings for the analysis. By further examining the agreement of the respondents for the skills possessed by the graduates that are working with their companies, the top four listed in sequence include the following, "able to carry out responsibilities assigned", "always on time and keeps appointments as required by clients and higher management", "has the inclination to improve knowledge" and "able to communicate and write in English and able to upgrade work achievement after receiving in service training".

The results showed a very interesting feature: what could be described as "managing and developing self" and knowledge of general operating business and management are still receiving sufficient attention in the field compared with other functional disciplines such as computer related fields. As mentioned by Laughton and Montanheiro (1996), the crucial issue provided from this finding is the "soft skills" such as management and business should be thought separately or integrate in curriculum design or/and across program and the extent to which all the "soft skills" should be developed across all years of a program.

Table 5

Summary of possessed skills by graduate

(1 = Strongly Disagree, 5 = strongly agree)

Variables	mean	STD	ranking
Bring something new	3.40	0.89	12
Possess mental strength	3.54	0.88	11
Adapt changing work	3.56	0.93	10
Supervise subordinates	3.60	0.96	9
Abides to the rule of time in carrying out tasks	3.61	0.88	8
Depth knowledge in IT	3.63	0.92	7
Carry out duties commensurate with position held	3.66	0.94	6
Able to fit into new work environment	3.67	1.00	5
Able to write in English	3.71	1.08	=4
Upgrade work achievement after receiving training	3.71	1.01	=4
Able to communicate in English	3.71	1.01	=4
Inclination to improve knowledge	3.75	0.88	3
Always on time/keeps appointments	3.79	0.99	2
Able to carry out responsibilities assigned	3.98	0.79	1

Now, the discussion will be on the data set of program characteristics. Table 6 summarizes the percentages that the respondents perceived to be appropriate for the program structure of a business and management program. The mean percentages for the basic program structure were 53.5 per cent major, 28.1 per cent minor and 18.4 per cent elective. Ranking suggested subjects to be included in the program structure based on the percentage assigned to them by the respondents, resulted in communication topping the list with 77.8 per cent, followed by knowledge management (69.8%), critical thinking (66.7%), project management (63.5%), foreign language (46.0%), safety and health (41.3%), intellectual property and law (39.7%), entrepreneurship (36.5%) and lastly ethic with 22.2 per cent.

This finding also reinforces the earliest findings presented in Table 2, the interpersonal communication skills are still receiving sufficient attention from the industry. This finding is also consistent with the findings in the past researches conducted by Laughton and Montanheiro (1996) and Yen et al (2001).

Table 6
Program Structure

n = 63

Variables	Minimum	Maximum	Mean
Elective subjects	5	60	18.4
Minor subjects	10	50	28.1
Major subjects	20	60	53.5
<hr/>			
Suggestion subjects:	Frequency	Percentage	Ranking
Communication	49	77.8	1
Knowledge management	44	69.8	2
Critical thinking	42	66.7	3
Project management	40	63.5	4
Foreign language	29	46.0	5
Safety and health	26	41.3	6
Intellectual property and law	25	39.7	7
Entrepreneurship	23	36.5	8
Ethic	14	22.2	9

Distribution Differences

A few significant differences were noted between some of the demographic variables with regard to program characteristics. According to Maholta (1999), Mann-Whitney can be used for two independent samples with non-metric data. In particular, results of a two tailed Mann-Whitney U test indicated that no significant difference between gender, which perceived program structure of business and management, although there is a sign for significant difference in major subject between male and female (Table 7).

Table 7
Program structure by Gender

Variables	Male = 32 mean	Female = 29 mean	Sign.
Major subjects	28.14	34.16	0.178
Minor subjects	32.45	29.40	0.490
Elective subjects	32.48	29.36	0.476

While most program structures were similar between genders, only one significant gender differences were found in the responses to the suggestion subject to be included in the structure. Males' preferences for communication subject were greater than they were for female.

Table 8
Program structure by Income

Variables	Income > RM50K	Income < RM50K	Sign.
Major subjects	36.47	27.51	0.056*
Minor subjects	24.70	33.40	0.061*
Elective subjects	26.23	32.64	0.164

Note: * Significant at level 0.10

Level of income was shown to have a significant effect on the structure of the program. In particular those whose level of income is greater than RM50000 per year seem to prefer to have more major subjects in the structure than those whose level of income were less than RM50000 per year, who had greater preference for minor subjects. One significant difference was found in the responses to the subjects can be offered or thought. Those whose level of income less than RM50000 has greater preference for projects management subject than their counterpart. Lastly experience in the current company was shown to have no significant effect on both structure and subjects of business and management program.

Table 9
Program characteristics by Gender and Income

Subjects	Male	Female	Sign.
Communication	22	27	0.039*
Knowledge management	23	21	0.546
Critical thinking	19	23	0.118
Project management	22	18	0.325
Foreign language	13	16	0.228
Safety and health	13	13	0.516
Intellectual property and law	11	14	0.234
Entrepreneurship	12	11	0.578
Ethic	7	7	0.565

Note: * Significant level at 0.05

Subjects	Income >50K	Income <50K	Sign.
Communication	14	34	0.329
Knowledge management	15	28	0.714
Critical thinking	14	28	0.126
Project management	17	23	0.015*
Foreign language	8	21	0.295
Safety and health	10	15	0.588
Intellectual property and law	6	19	0.239
Entrepreneurship	7	16	0.527
Ethic	4	9	0.621

Note: * Significant level at 0.05

A few significant differences were noted between gender and income level with regard to programme characteristics. In particular, results of two-tailed Mann-Whitney U test indicated significant differences between male and female perceived importance of communication (at 5% level) within the business and management components. On the other hand, the test also indicated significant differences between high and low-income level on project management subject at 5 % level.

Conclusion

The results of this survey tend to suggest that respondents share a basic commitment to the development of common skills within the context of a business and management studies programme. Clearly the employers participating in this study placed greater emphasis on major subjects of management and business (53.5%) and less on elective subjects (18.4%). Interestingly, the Quality Assurance Unit in Ministry of Higher Education in Malaysia also made a guideline of 50-60% of major subjects in Management and Business programme for undergraduate programme. On the other hand, this study confirmed that the industry also have the same views on programme composition in Management and Business programme in Malaysia.

In-term of key skills in management and business programme, verbal and written communication skill were ranking higher and less on innumeracy skill. This finding also supported findings in the programme structure, where is the communication subject must

place important role in designing management and business syllabus. In academic and intellectual skills, be independence and ability to solved business problem placed most important skills by the employers. In line with that result, the employers also hoping that the graduate also can be able to carry out responsibilities assigned and always on time or can keep appointments. From this finding, it is imperative that higher learning institutions gave greater emphasis in developing soft skills of the students as well as preparing them with good attitude for employment.

Chapter 5

Summary and Implications

5.1 Introduction

The aims of this study were to analyze the perceived and possessed knowledge and skills of business graduates from the perspective of the employers. As organizations and economic environments become increasingly uncertain and competitive, the demands on employees also become increasingly complex. The key findings suggested that attitude of graduate when entering the job market must be change. Employers gave greater emphasized on ability to fulfill their responsibility and keep the appointment on time. On the other hand, from the employers experience with graduates, they are lacking this positive attitude.

5.2 Implication for graduates and training

The present findings indicate that undergraduates reported a relatively lower performance in fulfill responsibility, time management and unable to improve knowledge after graduation. This suggests that skill development opportunities during their study in the university as key issues.

The implication of these findings for graduates and training providers are:

- The opportunity to use and develop a range of skills by graduate to remain more competitive in labour market. This can be done by industry attachment during their study or by negotiate job enlargement and enrichment with industry's managers via staff appraisal. This may not necessarily to the multinational companies, but may also include small and medium sized enterprises, which became the backbone for many developed and developing countries.
- The present findings suggest that the most significant gaps between graduate skills and employer expectation were in terms of two skills: communication both in verbal and written and management skills such as team works and leaderships. This suggest that graduates should focus more on the development of a mix of key, intellectual and soft skills in order that they are able to compete in labour market (Nabi, 2003).
- Graduates also should used the opportunities by use existing skills or develop new ones to help them to meet industry or corporation levels of career success. Any programme involved the industry should be attended by the graduates so that expectation such as challenge, development and self-actualization can be expose to the graduates as early as possible.

5.3 Implication for higher learning institutions

The implications of research findings for higher learning are:

- The quality of graduate is increasingly becoming an important issue to higher learning institutions because of scrutiny and accountability of government through quality assurance unit and Ministry of higher learning. The findings in this research can provide some evidence of quality output from higher learning institutions.
- However with limited resources such as grants, physical facilities, human resources, higher learning institutions cannot possibly be expected to equip graduates with every conceivable employability skill to the industry. According to researchers, a sensible balance between the two needs should be achieved. Given the differences between the activity systems of university and industry in terms of subjects, objects, mediational means, rules, division of labour, and community, it seems impossible that two systems could ever be mapped on each other (Maistre and Pare, 2004). Employers also have a key role to play in supporting the skill development of graduates.
- Furthermore, university experience is intensely stressful (Collins, Hannon and Smith, 2004) to the graduates. Demands from the industry and academic works from the higher learning institutions intensify the stress they experience in their graduate career. However there is a need to help graduates move from the general

(book knowledge, theories, abstractions) to particular (real clients, customers, patients) as they move from the university to actual practice situations, but there is also related need to help new practitioners move from the specifics of practice to the generalities and abstraction that will inform their continuing, principled practice (Maistre and Pare, 2004).

5.4 Future research

There are some limitations of the present study. First, the sample population inevitably limits the conclusion that can be drawn from the present findings, for example, graduates from one higher learning institute in Malaysia. Further research is required to incorporate a wider range of graduates and from the different higher learning institute. Future research may apply conjoint analysis to different attributes, such as limited to certain factors. Researchers also can consider whether other sources of data such as feedback from current students and employers from other industries such as manufacturing, banking, telecommunications or significant others.

However, despite the weakness found in this research, the present research can be seen as a preliminary investigation of the opportunity for increase value-added materials to strengthen the syllabus in the university's program.

5.5 Conclusion

The findings from this study indicate that the communication skills are vital in working environment among the industries and employers in Malaysia. For intelligent and academic skills, attributes such as independent, decision making and self-learning are more important aspects for graduates. However this research draws attentions to the fact that the issues involved are more complicated than simply relying on the market for a solution. While recognizing the importance of market orientation in designing university's program, from the researchers argued that the market cannot be the sole arbiter in this matter for two reasons. First, the market is not perfect and can also be biased towards its own opinion or type of industry. Second, there are some terms or methodology used by research may convey different meanings to the industry such as knowledge management and life long learning.

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APPENDIX 1
The Questionnaire



GRADUATE SKILLS

Dear Sir/Madam:

Thank you for your interest on this questionnaire. You have been selected to participate in an important research project. The Research Management Centre, Universiti Teknologi Malaysia, Skudai, Johor have sponsored this project.

The objectives of this study are:

- i) To analyze the perceived and possessed knowledge/skills of business graduates from the perspective of the employers.
- ii) To develop the profile of core skills of business graduates required by the employers.

All the result will be used for research purpose only.

Your participation in this research is completely voluntary. All your answer is confidential. You can withdraw from this research project at any time prior to turning in your completed survey.

Last but not least, we would like to thank you for spending your time to fill up this questionnaire. Your participation will certainly make a significant contribution to our research and our understanding of work behavior in academic settings. We hope that you will respond as honestly and sincerely to each of the questions based on your true feelings and experiences. Thank you.

SECTION A

THESE ARE GRADUATE SKILLS REQUIRED FOR THE JOB MARKET

INSTRUCTION: (Please rank 1 – 7 according your preferences)

ARAHAN: (Sila susun 1 –78 mengikut keutamaan anda)

1 – most preferred 7 – least preferred

1 – paling diperlukan 7 – paling tidak diperlukan

KEY SKILLS

1. **Written Communication**

Ability to present information and express ideas clearly, effectively and confidently in written.

2. **Verbal Communication**

Ability to make clear and confident presentation appropriate to audience.

3. **Literacy**

The ability to make and communicate meaning from and by the use of variety of socially contextual symbols.

4. **Information Technology (IT)**

Using technology to share & disseminate information to enhance human productivity, efficiency & communication and support a business/organization.

5. **Team work**

Always listens to, shares with, supports the effort of others and able to work as an effective member of a team.

6. **Leadership**

Having self-confidence, impact, and the ability to influence others, willingness to take an independent line and the ability to earn the respect of others.

7. **Numeracy**

The ability to understand and use mathematics as a means of communications; to interpret a situation given in mathematical terms or to employ mathematics to represent a situation and, if necessary, use mathematical symbols to obtain further information.

THESE ARE GRADUATE SKILLS REQUIRED FOR THE JOB MARKET

INSTRUCTION: (Please rank 1 – 8 according your preferences)

ARAHAN: (Sila susun 1 – 8 mengikut keutamaan anda)

1 – most preferred

8 – least preferred

1 – paling diperlukan

8 – paling tidak diperlukan

ACADEMIC/INTELLECTUAL SKILLS

1. Autonomous learning

Able to have degree of control over the learning process, which involves active participation, problems solving & making choices.

2. Independence

Ability to control one's own affairs and freedom from control or influence of another or others.

3. Critical Analysis

Ability to make an appraisal based on careful analytical evaluation.

4. Business problem solving

Actively looks for and suggests solutions to problems

5. Application

The act of bringing something to bear, using it for a particular purpose.

6. Research Methods

An orderly procedure or process, regular manner of doing anything.

7. Research for Decision Making

Systematic investigation to establish facts & attempts to find out in a systematically & scientific manner.

8. Reflection

The capacity for judging rationally, especially in view of a moral rule/standard.

THESE ARE GRADUATE SKILLS REQUIRED FOR THE JOB MARKET

INSTRUCTION: (Please rank 1 – 7 according your preferences)

ARAHAN: (Sila susun 1 – 7 mengikut keutamaan anda)

1 – most preferred

7 – least preferred

1 – paling diminati

7 – paling tidak diminati

PERSONAL SKILLS

1. Time management

Ability to use well to get job done and group members do not have to adjust deadlines or work responsibilities due to procrastination.

2. Planning

Ability to establish goals and a suitable course of action for achieving those goals.

3. Initiative

Ability to see difficulties & act upon them. Willingness to make things happen & to take an independent stance when necessary.

4. Self Awareness

Awareness of one's own individuality

5. Adaptability

Ability to comprehend and adapt to culture of a new community and change in the work environment.

6. Listening

Ability to actively listen and respond to ideas of other people.

7. Negotiating

The ability to use communication skills and bargaining to manage conflict and reach mutually satisfying outcome.

SECTION B

Based on your experiences in your present job, please mark (✓) your answer and assessment of the IPTA graduate based on the following scale.

1
Strongly Disagree

2
Disagree

3
Not Sure

4
Agree

5
Strongly Agree

1 2 3 4 5

1. Able to communicate in English language effectively.

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2. Able to write in English language effectively.

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3. Possess in depth knowledge in IT.

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4. Able to carry out duties commensurate with position held.

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5. Has the capacity to bring something new to the organization.

--	--	--	--	--

6. Able to supervise subordinates.

--	--	--	--	--

7. Able to carry out responsibilities assigned.

--	--	--	--	--

8. Always abides to the rule of time in carrying out tasks.

--	--	--	--	--

9. Able to adapt to changing work situation without loss of work quality.

--	--	--	--	--

10. Able to fit into new work environment.

--	--	--	--	--

11. Able to upgrade work achievement after receiving in service training.

--	--	--	--	--

12. Possess mental strength in carrying out duties.

--	--	--	--	--

13. Always on time and keeps appointments as required clients/higher management.

--	--	--	--	--

14. Has the inclination to improve knowledge.

--	--	--	--	--

SECTION C PROGRAMME CHARACTERISTICS

Instruction: Please complete items 1-2 by writing what you are considered to be appropriate.

1 Management Programs Structure

- | | |
|---|------|
| a. The proportion of management & business subjects within the program.(Major subjects) | % |
| b. The proportion of technology (IT, MIS) subjects with the program. (Minor subjects) | % |
| c. The proportion of the other subjects with the program. (Elective subjects) | % |
| Total a + b + c | 100% |

2 Beside management & technology subjects what other subjects should include; Please mark (✓) in the program.

- | | |
|------------------------------|--|
| a. Foreign language | |
| b. Communication | |
| c. Critical Thinking | |
| d. Intellectual Property/Law | |
| e. Entrepreneurship | |
| f. Projects Management | |
| g. Safety & Health | |
| h. Knowledge Management | |
| i. Ethnic | |
| j. Other: _____(specify) | |

SECTION D: Demographic Background

Institution: Finally some information about you and your company. These details are strictly confidential and will be used solely for the purposes of this research.

1. Your age: < 40years 41-50 years > 50 years
2. Gender: Male: Female:
3. Your Present Designation: _____
4. How long have you worked for your current organization: _____ years
5. How long have you been in the present designation: _____ years
6. Your highest level of formal education: Postgraduate
 Undergraduate
 STPM/ Pre-U
 < STPM/Pre-U
7. Level of Income: > RM50,000 per year
 RM30,000 – RM50,000 per year
 < RM30,000 per year