

Generic Skill Requirements: Between Employer's Aspiration and the Need of Professional Employees

(Keperluan Kemahiran Generik: Antara Aspirasi Majikan dengan Keperluan Pekerja Profesional)

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ABSTRACT

The purpose of this study is to explore the different generic skills (GS) required by employers and the generic skills possessed by professional employees in Malaysia. This study also aims to determine whether there are differences in the GS requirements among employers based upon the size of the organization, type of ownership, and type of organization. A quantitative approach, utilizing questionnaires and interviews, was employed as the main method of collecting data. The sample consists of 141 service-based employers and 167 professional employees. The reliability and validity of the questionnaire items were tested using the Cronbach Alpha and the SEM CFA approaches. The results demonstrate that: (1) 80 percent of the employers lauded on leadership, management, critical thinking, problem solving, social skills and teamwork skills; (2) only 28 percent of the employers require entrepreneurial skills when recruiting new staff; and (3) there is no significant difference in the generic skills required in relation to the size, type, and ownership of the employer. On the other hand, the generic skills rated highly by the employees in the survey are teamwork skills. Entrepreneurship skills received a low rating from both employers and employees during the survey. The implications of this study include a call for further research to determine effective teaching and learning strategies in developing the designated GS, especially for skills that are highly sought after by employers. The originality of this study stems from the lack of literature that directly examines the need for GS among professional employees in the public and private sectors.

Keywords: Generic skills; Jordan Need analysis model; professional employees; higher education institutions; leadership skills; entrepreneurial skills

ABSTRAK

Tujuan utama kajian ini adalah untuk mengenal pasti perbezaan kemahiran generik (KG) yang diperlukan oleh majikan dan yang dikuasai oleh pekerja profesional di Malaysia. Kajian ini juga bertujuan untuk mendapatkan perbandingan dari segi KG yang diperlukan dalam kalangan majikan berdasarkan saiz, jenis organisasi dan jenis pemilikan. Kaedah soal selidik digunakan sebagai kaedah utama mengumpul data dan temu bual digunakan untuk sokongan data kuantitatif. Sampel kajian terdiri dari 141 majikan dari sektor perkhidmatan dan 167 orang pekerja profesional. Kebolehpercayaan dan kesahan instrumen telah dapat dibuktikan melalui nilai Koeffisien Cronbach dan teknik Permodelan Persamaan Berstruktur (SEM) melalui Analisis Faktor Pengesahan (CFA). Hasil kajian menunjukkan: (1) 80 peratus majikan meletakkan aspek kepimpinan, pengurusan, pemikiran kritikal dan penyelesaian masalah, kemahiran sosial dan kerja berpasukan sebagai keperluan utama; (2) hanya 28 peratus majikan meletakkan aspek keusahawanan sebagai kriteria semasa perekrutan pekerja baru; dan (3) tidak wujud perbezaan keperluan aspek KG dalam kalangan majikan yang berbeza saiz, jenis organisasi dan jenis pemilikan. Walau bagaimanapun, aspek KG yang sangat diperlukan bagi pekerja profesional adalah aspek kerja berpasukan. Aspek keusahawanan diletakkan sebagai pilihan terakhir oleh kedua-dua majikan dan juga pekerja profesional. Implikasi kajian ini menunjukkan terdapatnya keperluan bagi kajian lanjutan bagi menentukan strategi yang efektif dalam pengajaran dan pembelajaran KG terutama sekali kemahiran yang telah dikenal pasti sangat diperlukan oleh majikan. Keaslian kajian ini tercetus dari kurangnya kajian lepas yang berkaitan dengan isu keperluan KG dalam kalangan pekerja profesional dalam sektor awam dan swasta.

Kata kunci: Kemahiran generik; model analisis Jordan Need; pekerja profesional, institusi pendidikan tinggi; kemahiran kepimpinan; kemahiran keusahawanan

INTRODUCTION

In the early 1990s, tertiary education in many countries typically contained curricular materials that were far less attuned to the interests of employers in the workplace

(Mason 1992; Sear 1994; Quek 1996; Billet 2001). Furthermore, it is reported that to a certain degree, the scope of education in universities in the USA, the European Community and the Asia-Pacific region, including Malaysia (Mason 1992; Quek 1994; Chew et al. 1995;

Lee 2000; Lee et al. 2001; Minister of Education 2000; Shah 2001) is highly academic, with strong emphasis being placed upon scholastic outcomes of the academic achievements of graduates. Graduate employees in Malaysia have been noted as being handicapped when attempting to apply classroom learning from tertiary education in the workplace, thereby affecting their work performance. The resulting situation has been considered by the Higher Education Ministry of Malaysia as a reason for the lack of generic competencies among individuals possessing undergraduate degrees and, in turn, having significant effects on unemployment (News Straits Times 2004). Such a handicap makes graduates less marketable when seeking employment in the areas of commerce and industry.

Employers prefer workers who have generic competencies that result in better work performance, such as interpersonal skills, leadership skills (Mason 1992; Quek 1996; Lee 2000), teamwork skills (Ball 1989; Kanapathy 2001; Boud & Middleton 2003), and oral and written skills (Schroder 1989; Jacobsen 1993; Lee et al. 2001). Further aspects of generic competencies affecting work performance include cognitive skills, such as numerical skills, innovative skills, problem-solving skills, research skills (Day 1988; Lam 1994; Sear 1994) and computer skills (Cheah & Yu 1996; Lee 2000; Percetakan Nasional Malaysia Berhad 2001; Owen & Bound 2001) also reported to denote generic competencies for work performance.

The Malaysian government has attempted to address issues concerning the quality of domestic employees through the implementation of several policies and master plans at various levels, including Vision 2020, National Education Philosophy (FSK), Long term Malaysia Plans (the latest RMK-9) and the Education Development Master Plan (PIPP 2006-2010). At the same time, beginning in 2005, many employers began to emphasize the importance of generic skills among university graduates. However, it was not until after 2006 that many Malaysian institutions of higher learning began incorporating and inculcating these skills among their students (Mustapha 2006). These skills, which are lacking among today's graduates, pose a challenge for recent undergraduates seeking employment. On the other hand, employers are continuously looking for other attributes or qualities in hiring new recruits or even in keeping existing staff within their organizations.

The mismatch between the qualities of graduates and the needs of industry must be addressed immediately, as employers are dissatisfied with the quality of graduates that are currently available (Cox & King 2006). The grouse stems from the lack of generic skills amongst current graduates – both among the local and overseas graduates (Economics Planning Unit 2003, 2005; Fong 2001; New Straits Times 2004; Malaysian Employers Federation 2005; Ungku Harun 2004; Quek 2005). While the public sector is reducing the number of new staff in all of its sectors, private companies are doing the opposite. The latter, however, is taking in new staff from a relatively

small pool of competent graduates. The training of new staff is time-consuming, requiring approximately two years to enable new staff to grasp necessary skills relevant to their fields and employers are not keen to invest in the time and money to train these graduates (Malaysian Employers Federation 2005).

MALAYSIAN EXPERIENCE

What are the generic skills required by employers in this country that are not possessed by most current graduates and the existing workforce? The conclusion that can be drawn from the numerous studies is that the generic skills that are required by the employers in this country vary. According to Lee et al. (2001), Singh (2001) and Quek (2003), the contemporary demand among employers is for employees that possess generic skills that meet the needs of the current complexities within the job market, including numerical skills, decision making, problem solving and innovation. Furthermore, employers also tend to seek employees that are flexible and adaptive to the current needs of the industry, which enables organizations to increase competitiveness and progressiveness in relation to marketing, structure and products (Singh 2001; Quek 2004).

On the other hand, the study conducted by Mohd. Izham et al. (2007) argues that each graduate should have the skills that will enable him/her to do the job and to have the ability to adapt to changing needs in the employment situation. According to the Malaysian National Computer Association, employers from IT organizations tend to recruit employees that possess experience, communication skills, team work skills, and problem solving skills (New Straits Times 2004). However, the Federation of Malaysian Manufacturers feels that Institutions of Higher Learning should equip graduates with the skills of adaptability, dependability, diligence and sensitivity to global needs (New Sunday Times 2004). This opinion is shared by the Malaysian Furniture Industry Council, which has stated that generic skills should be further developed among prospective graduates and emphasizes that employers in the furniture industry see these skills as necessary for innovation; the ability to respond to competition and global change; and the ability to function as members of a team (New Straits Times 2004).

In *Facing the Realities of the World of Work* by the Malaysian Employers Federation (2005), it is noted that in addition to academic excellence, other criteria that are considered by the employers during the hiring of new staff include communication skills, critical thinking, Information and Communication Technology (ICT), strategic planning and management. However, studies conducted by the Malaysian Development Corporation (MDC) found that other generic skills, such as writing and communication skills, among ICT graduates are either weak or non-existent. This finding is disappointing to employers (Ungku Harun 2004).

Based on these studies and findings, public policy in Malaysia continues to emphasize that Institutions of Higher Learning should continue to develop generic skills such as innovation, computer and knowledge-acquiring skills among their students (Percetakan Nasional Malaysia Berhad 1996; New Straits Times 2003). What are the advantages of these generic skills among the potential graduates and professional staff according to employers? In Malaysia, generic skills currently provide graduates an edge when seeking employment over other candidates that do not possess such skills (Quek 2004). Malaysian employers tend to recognize prospective graduates or workers that possess generic skills that will enable them to meet or exceed work performance expectations, such as integration skills, mobility and adaptability. This recognition of the importance of generic skills is demonstrated in the form of higher monthly salaries in the production and service sectors: RM2,264 in the production sectors and RM2,462 in the service sectors (Percetakan Nasional Malaysia Berhad 1996). Even JobStreet.com acknowledges this fact, reporting that during the time when Malaysia was recovering from the epidemic of the Severe Acute Respiratory Syndrome (SARS), prospective graduates who had acquired skills in computer, innovation, integration skills and were highly mobile could command a high monthly income of about RM2,400, compared to salaries of RM2,100 per month attained by graduates working in sectors that did not emphasize the importance of generic skills (New Straits Times 2003).

The studies performed in Malaysia are parallel to similar studies conducted by Jackson (1999) and Alpern (1997) in Canada, which also place emphasis upon the acquisition of generic skills that are highly sought after for purposes of maintaining employment, career advancement and being able to excel generally in an employment environment. This is due to the fact that workers who do not possess generic skills will be a liability to the organization. Generic skills appear to be an important aspect when developing quality human capital that meets the demands of employers in both the public and private sectors (RMK-9) and can also play a role in personal development and the beginning of a distinguished career for prospective employees.

Based on the literature review and research on the problem above, the objectives of this study are: (1) to examine the elements of generic skills required by the Malaysian employers; (2) to determine the differences in generic skills requirements of employers, (or organizations) which are further distinguished based upon size, type and ownership; and (3) to examine the elements of generic skills needed by Malaysian professional workers to increase work performance and maintain employment.

RESEARCH METHODOLOGY

This research was conducted using the descriptive method, where 400 questionnaires were utilized to compile the

profiles of generic skills needed by the employees of professional organizations to perform their jobs. The questionnaires were mailed to the respective employers and professional employees. The research considers different aspects of generic or soft skills highlighted by the Ministry of Higher Education (2006), including communication skills, critical thinking and problem-solving skills, team work, effective communication and information management, entrepreneurial skills, ethical and professional skills, and leadership qualities. The Generic Skill Module (MOHE 2006) was used as the base line study to obtain the different aspects of the new GS for the needs of the employers. Eleven private and government employers were involved. This base line study is a preliminary study that explores the formation of the actual model for generic skills. From this base line study, the survey questions were modified based on the suggestions of the companies' employers.

Generic skills are comprised of personal skills, general knowledge, values and life skills that are needed in order to obtain employment and, later, maintain employment, receive promotions and be regarded as an important and integral part of the company. In analyzing the different skills required from both the perspective of employers and prospective professional workers, this research utilizes the Jordan Need Analysis Model (JNAM) (1997). The JNAM analyses the skills required to fulfill the requests and goals of the employers from the perspective of the student, lecturer/course planner and employer. The JNAM considers several aspects associated with needs analysis, including situation target analysis, current target analysis, deficiency analysis, strategy analysis, method analysis and language audit. For the present research, the needs analysis was based upon the employers' perspective and working professionals' perspective in current and target aspects. The generic skills (GS) that were finally measured in this research were communication, critical thinking and problem solving, teamwork, continuing education and information management, entrepreneurship, leadership, management, and social skills. All these generic skills were measured using the Likert 5 Point Scale (1 = really not necessary to 5 = really needed) on the eight main constructs. From the pilot test a reliability of all the generic skill construct was tested where the Cronbach Alpha values of between .788 and .961 were obtained. With this value, therefore the survey was accepted.

For the purpose of this study, employers refer to the personnel of both public and private organizations, as well as local and foreign based companies. An 'employer' is an individual that holds a position of manager or a professional position with at least one subordinate. Meanwhile, professional staff is comprised of employees from both public and private organizations, as well as local and foreign based companies at the executive level. The final respondents consist of 167 working professionals and 141 employers or organizations. Working professional respondents consisted of 41.6% males and 58.4% females, 35% are in technical fields, while 65% are in non-technical

fields; 47.8% working professionals are in the public sector, while 52.2% are in the private sector, and 80.1% of working professionals are in local companies, while 19.9% are in foreign based companies.

The background of the employers, or organizations, are further distinguished based on the size, types, and type of ownership. Based on the definition of the Malaysia Small Medium Enterprise (SME), organizations are categorized into four scales: (i) 5-50 staff (small scale), (2) 51-150 staff (medium scale); (3) > 150 staff (large scale) and (4) <5 (mini scale). In this study, mini, small and medium scales are group together to form the small scale category. The organizations, when distinguished based upon size, which is measured by the number of permanent employees, consisted of 31 (22.0%) small and medium-scale organizations contribute and 110 (78.0%) large-scale organizations of 110 (78.0%). The distribution of the sample organizations consisted of 71 (50.4%) public and statutory type organizations and 70 (49.6%) from the private sector. Finally, 111 (78.7%) of the organizations are locally owned enterprises, while 30 (21.3%) are foreign owned enterprises.

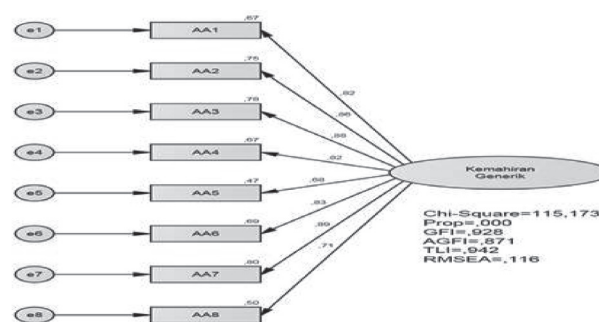
FINDINGS

Table 1 shows the reliability measures for the eight constructs of GS. This research also uses structured interviews as a mean of gathering supporting information. Five employers were chosen for this method.

TABLE 1. Value of Cronbach Alpha Reliability Coefficient

No	Construct	α value
1	Communication	.788
2	Critical Thinking & Problem Solving	.954
3	Teamwork	.961
4	Continuing education & Information management	.918
5	Entrepreneurship	.920
6	Leadership	.958
7	Management	.930
8	Social	.865

This study adopts the Structural Equation Modelling (SEM) to validate the accuracy of the items or subconstruct of the generic skills construct. Figure 1 shows the findings of measurement model of the variables to present the constant variables (aspects/GS construct). Another measure of fit that is taken into account is the Tucker-Lewis Index (TLI) = .942 and Goodness of Fit Index (GFI) = .928 from the Baseline Comparisons Table. This criteria shows that the match value is higher that 0.9. It indicates that the regression model suggested by the researcher fits with the findings. Since other fit values, such as Adjusted Goodness of Fit (AGFI) (.871) is less than the fit value (0.9), thus through Standardized Regression Weight and Regression Weight



Notes:

- AA1: Communication skill
- AA2: Critical thinking & Problem solving skill
- AA3: Teamwork skill
- AA4: Continuing education & Information management skill
- AA5: Entrepreneurship skill
- AA6: Leadership skill
- AA7: Management skill
- AA8: Social skill

FIGURE 1. Generic Skill Measurement Model

through Critical Ratio (CR) value could show that all of the variables can represent and predict for constant variables significantly. A CR value that is over ±1.96 is considered significant in <.05 and p value regression coefficient (β) for every aspect of generic skills (from .684 to .894) indicates all variables are significantly fit with the research findings or represent constant variables (GS aspect). Table 2 shows a CR value that is over ±1.96. and p value regression coefficient (β).

TABLE 2. Regression Weights

Item	Estimation	S.E.	C.R	P
AA7 Management skill	1.341	.082	16.435	***
AA6 Leadership skill	1.210	.079	15.315	***
AA5 Entrepreneurship skill	1.771	.141	12.581	***
AA4 Continuing education & Information management skill	0.945	.063	15.058	***
AA3 Teamwork skill	1.330	.082	16.254	***
AA2 Critical thinking & Problem solving skill	1.416	.089	15.906	***
AA1 Communication skill	1.031	.068	15.098	***
AA8 Social skill	1.000			

Table 3 shows the standard regression coefficient (β) of all variables positively correlate to the constant variables. All the eight variables indicate a loading factor of > 0.5 and this fits the convergent validity. Table 4 shows the detailed findings of factor loading and square multiple correlations for 8 perception constructs or indicators that measure GS. The Squared Multiple Correlations (SMC) Index on Table 4 shows variant of a construct for constant variable. The highest SMC is the management construct (0.80) and it shows 80% variant of GS. Meanwhile, the entrepreneurship construct shows the lowest index (0.47) and the variant for entrepreneurship construct is 47% of GS. In conclusion, these findings prove that the GS model fits the Confirmatory Factor Analysis (CFA) measurement model.

TABLE 3. Standardized Regression Weights

Item	Estimation
AA7 Management skill	.894
AA6 Leadership skill	.832
AA5 Entrepreneurship skill	.684
AA4 Continuing education & Information management skills	.818
AA3 Teamwork skill	.884
AA2 Critical thinking & Problem solving skill	.865
AA1 Communication skill	.821
AA8 Social skill	.710

TABLE 4. Standardized Loading and Squared Multiple Correlations (SMC) – Generic Skill Measurement Model

No	GS Construct	Loading	SMC
1.	Communication	0.82	0.67
2.	Critical thinking & Problem solving	0.86	0.75
3.	Teamwork	0.88	0.78
4.	Continuing education & Information management	0.82	0.67
5.	Entrepreneurship	0.68	0.47
6.	Leadership	0.83	0.69
7.	Management	0.89	0.80
8.	Social	0.71	0.50

GENERIC SKILL REQUIREMENTS OF MALAYSIAN EMPLOYERS

Based on the mean scores (Mohd. Izham et al. 2011), the results demonstrate that the generic skills which were needed by employers from the public sector/statutory and private sectors were leadership (4.60) and management (4.59), followed by aspects of critical thinking and problem solving (4.55), social skills (4.54), teamwork (4.53), continuing education (4.41), and communication skills (4.35). Compared with other aspects of generic skills, employers consider entrepreneurial skills as the least required skill, although the mean score was still quite high (3.94).

TABLE 5. Generics Skills Required by Employers

Generic Skills Aspects	Mean	SD	Interpretation
Leadership	4.60	.54	Very High
Management	4.59	.56	Very High
Critical Thinking & Problem Solving	4.55	.56	Very High
Social	4.54	.56	Very High
Teamwork	4.53	.54	Very High
Continuing education & Information management	4.41	.62	Very High
Communication	4.35	.65	Very High
Entrepreneurship	3.94	.87	High
Overall GS Requirement	4.44	.61	Very High

Source: Survey Questionnaires

In general, employers' requirement for generic skills is very high, based upon the overall mean value of 4.44. This conclusion is consistent with Mohd Izham et al. (2011), Cox and King (2006), Sutton (2002), and Hager et al. (2002), whose studies demonstrate the importance of generic skills to employers, particularly due to the emergence of the knowledge-based economy (k-economy), and perceive the mastery of generic skills to be the benchmark for job seekers in all industries. Apart from meeting the issue of employability, GS is critical for personal and individual career development, personality, optimizes personal productivity, improves moral wisdom, and uncertainties facing the future (Ranjit 2009). Employers usually evaluate potential employees based on few criteria. According to Nik Othman (2003), among the criteria evaluated by employers during recruitment are interpersonal skills, problem solving, communication, flexibility, adaptability and proactiveness. This is in line with the research performed by Zalizan Mohd Jelas et al. (2007), who explains that all of the aforementioned interactive attributes are qualities emphasized by various employers. Similarly, the Malaysian Employers Federation (2005) concludes that employers value excellent academic achievement alongside additional criteria, such as communication skill, critical thinking, information and computer technology, strategic planning and management.

To gauge the needs of the generic skills needs by the employers, the results are supported by interviews conducted with the employers. All respondents emphasize the importance generic skills. For example, when the question, "Are generic skills important for future graduates of higher learning institutes?" is given, one of the employers responded that:

I need these things very much (Employer 1)

The previous statement is supported by the following response from another employer:

Right .. to get or easy to get a job at the airport. Of course, such as communication skills, language and writing are compulsory and then you should have confidence level. He must have that skill, we just polish it up (Employer 2)

The findings in Table 5 also indicate that the generic skill of leadership is needed by employers both in the public sector and the private sectors, supporting previous studies conducted by Mohd Izham et al. (2011), Mason (1992), Quek (1996) and Lee (2000). There is no doubt that an organization is more likely to fail within a short period of operation without effective and efficient leadership (Sheppard 1996). In fact, strong leadership is needed by all organizations to achieve optimal effectiveness (Robbins & Judge 2007). Such leadership is required by all organizations to change the status quo, create vision and inspire the members of the organizations to achieve the vision. The study performed by Cameron and Quinn (2006) finds that effective leaders were competent in managing teams, relationships and the development of the skills of others. In addition, employers require prospective

employees who have effective leadership skills to manage future innovations and improvements (Cameron & Quinn 2006). The demand and requirements for leadership skills among employers is further examined in Table 6.

The most important element of leadership skill emphasized by employers is the ability of the job candidate (future graduate) to play a role as a leader (highest mean value of 4.65). Other aspects are also in high demand, as indicated by their respective mean values including task delegation and responsibility to subordinate (4.63), consensus decision making (4.62), the ability to effectively lead a project (4.60), the ability to guide other team members (4.57), and influence other members in doing tasks (4.53). The high scores indicate that the leadership construct is highly required by the employers. A closer look at the questionnaires show that around 67.4 percent of employers choose all of the leadership aspects as qualities that successful job candidates should possess.

TABLE 6. Characteristic of Leadership Skill Needs of an Employer

Sub-construct	Mean	SD	Interpretation
Main role as a leader	4.65	.53	High
Task delegation & responsibility to subordinate	4.63	.56	High
Consensus decision making	4.62	.51	High
Effectively lead a project	4.60	.53	High
Bring subordinate into agreement	4.60	.55	High
Motivate team members	4.60	.54	High
Guide other team members	4.57	.56	High
Influence other members in doing tasks	4.53	.56	High
Overall leadership requirement	4.60	.54	High

Next, we use the t-test to statistically compare the difference between organizations of different characteristics based on the mean difference. The results of the t-test reported in Table 7 show that there is no difference in the generic skills required by employers in either the public or private sectors. Similarly, Table 8 also shows that there is no significant difference in generic skill needs between locally-owned companies and foreign-based companies, except communication skills ($p < 0.1$). This finding makes a lot of sense because foreign-owned companies are more likely to be run by managers from the country of the company's origin. In most cases where the language of the country is different from the language of the locals, the managers would tend to favor employees who can communicate with them in a more effective manner. The t-test in Table 9 also shows no significant difference in generic skills requirement between small/medium organizations and large size companies. The only element of generic skills that might have a slight difference ($p < 0.1$) is entrepreneurship, which is higher for small and medium organizations compared to that of large organizations.

GENERIC SKILLS OF MALAYSIAN PROFESSIONAL WORKFORCE

This study also collected data about the generic skills of 167 Malaysian professionals who are currently in the workforce. Table 10 reports the GS aspects that were perceived as helping them in performing their tasks with respect to their position in the organization. The results show that 74% to 81% of the professional workers possess high teamwork skills. With only slightly lower mean values, it may be said that these professionals must also possess high skills in leadership, critical thinking and

TABLE 7. Differences in Required Generic Skills between Private and Public/Statutory Sector

Construct	Org. Type	Mean	SD	df	t	p
Communication	Private	4.3732	.50599	139	.540	.590
	Public/Statutory	4.3321	.39177			
Critical thinking & Prob. solving	Private	4.5535	.44780	139	-.088	.930
	Public/Statutory	4.5600	.42474			
Teamwork	Private	4.5603	.39326	139	.591	.555
	Public/Statutory	4.5175	.46371			
Continuing education & Info. Management	Private	4.3662	.53109	139	-1.282	.202
	Public/Statutory	4.4714	.43870			
Entrepreneurship	Private	4.0258	.73011	139	1.181	.183
	Public/Statutory	3.8595	.74678			
Leadership	Private	4.5757	.47738	139	-.621	.536
	Public/Statutory	4.6232	.42960			
Management	Private	4.5618	.44201	139	-.921	.358
	Public/Statutory	4.6302	.43866			
Social	Private	4.5299	.46602	139	-.423	.673
	Public/Statutory	4.5625	.44830			

TABLE 8. Differences in Required Generic Skills between Local-Owned and Foreign-Owned Organization

Construct	Ownership	Mean	SD	df	t	p
Communication	Local	4.3153	.43980	139	-1.915	.058
	Foreign	4.4917	.47563			
Critical thinking & Prob. solving	Local	4.5279	.44028	139	-1.520	.131
	Foreign	4.6633	.40385			
Teamwork	Local	4.5305	.43903	139	-.450	.653
	Foreign	4.5704	.39336			
Continuing education & Info. Management	Local	4.4157	.49132	139	-1.28	.899
	Foreign	4.4286	.48626			
Entrepreneurship	Local	3.9444	.76980	139	.312	.971
	Foreign	3.9389	.63198			
Leadership	Local	4.6014	.46323	139	.103	.918
	Foreign	4.5917	.43518			
Management	Local	4.5856	.45343	139	-.526	.600
	Foreign	4.6333	.39164			
Social	Local	4.5417	.46323	139	-.221	.825
	Foreign	4.5625	.43518			

TABLE 9. Differences of Required Generic Skills Between Big Scaled and Small/Medium Scaled Organization

Construct	Size	Mean	SD	df	t	p
Communication	Large	4.3481	.42727	139	.028	.889
	Small / medium	4.3589	.48464			
Critical thinking & Prob. solving	Large	4.5532	.43760	139	-.494	.913
	Small / medium	4.5613	.43508			
Teamwork	Large	4.5077	.43932	139	.664	.330
	Small / medium	4.5789	.41483			
Continuing education & Info. Management	Large	4.4123	.47874	139	-.700	.867
	Small / medium	4.4263	.50457			
Entrepreneurship	Large	3.8460	.72145	139	1.928	.078
	Small / medium	4.0672	.75172			
Leadership	Large	4.5807	.46986	139	.300	.584
	Small / medium	4.6230	.53389			
Management	Large	4.5724	.44979	139	-.369	.480
	Small / medium	4.6254	.42926			
Social	Large	4.5237	.44984	139	-.302	.513
	Small / medium	4.5746	.46576			

problem solving, and management. Meanwhile, 52 of the respondents (31%) possess entrepreneurship skills which could be helpful in their professions.

TABLE 10. Generics Skills Required by Professional Employees

Construct	Mean	SD	Interpretation
Teamwork	4.50	0.56	High
Leadership	4.45	0.60	High
Critical Thinking & Problem Solving	4.43	0.59	High
Management	4.43	0.60	High
Social	4.41	0.62	High
Continuing education & Information management	4.30	0.61	High
Communication	4.24	0.73	High
Entrepreneurship	3.83	0.83	High
Overall GS Requirement	4.32	0.64	High

From Table 10, it was found that teamwork is the construct that is most highly looked upon by employees. They indicate that within the teamwork construct, it gives other characteristics such as responsibility, esprit de corp, planning, respecting ideas and others contribution, and compromise. All these characteristics are shown in Figure 2 below:

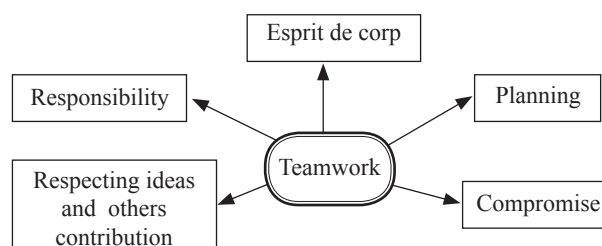


FIGURE 2. Characteristics of Teamwork

With respect to communication skills, the mean score for professional workers is high but their needs for foreign languages (third language) are relatively moderate. This finding supports a study done by Mohd Izham et al. (2011) which indicates that the mean score of the third language is 3.9 which is moderate. This is probably because the employers from both government and private sectors do not place enough emphasis on the importance of this skill or that the employees are not aware of the importance and benefits of mastering a foreign language. Based on the interview with employers from the private sector, ROHM-Wako Manufacturing Company, an international organization, to maintain such a demand for foreign language skills they have created a policy whereby any employee who can master the Japanese Language will receive a monetary reward. Interviews with most of the local companies indicate that they do not require this aspect of communication skills. The results of this study are less consistent with previous studies that demonstrate that employers place considerable emphasis on the need for communication skills (MEF-2005; Ortiz Jr 2005).

REQUIREMENT OF ENTREPRENEURSHIP SKILL AMONG EMPLOYERS AND PROFESSIONAL WORKERS

The results of this study show that the entrepreneurship skills are relatively lowly rated by both professional employees and employers. The mean scores for this skill, as perceived by employers and employees, are 3.9 and 3.83, respectively. What could be the explanation for the relatively low scores? A slight difference in mean for entrepreneurship skill between employees and employers was discovered (0.02). According to Ab Aziz Yusof (2000), the subject of entrepreneurship, which is supposed to be introduced at the university-level, covers only internal entrepreneurship. Pinchot (1985) explains that internal entrepreneur is the individual who has a high quality of entrepreneurship in a "dreamer" organization and who is ready to take a greater responsibility to create a new invention. They are the inventors and form the group of employees that will passionately find ways to convert ideas into reality and bring more profit to the organization.

In addition, this study also indicates a negative perception of entrepreneurship among employers and employees, where an entrepreneur is being portrayed as someone who holds no future. The results of this research have important implications on the relationship between future employers and Higher Education Institutions (HEIs), an issue that must be examined further in order for the Ministry to reformulate its training and development modules. The results also concur with the findings of Ab Aziz Yusof (2000) and Pinchot (1985). The results of the survey, however, are contradicted by the views held by an employer that was interviewed. This employer views entrepreneurial skills of professional employees as a positive quality in a professional employee;

Most employers do not see ...an entrepreneurial skill is a skill that should be possessed for future graduates or current employees because they will be more practical and more creative individual person. Employers will respect this kind of worker

(Employer 5)

The view presented by this employer supports the argument by Wan Mohd. Zahid (2003) that the possession of entrepreneurship skills will produce individuals with professional attributes in the truest sense. These employees are careful in planning, which indirectly suggests that they are willing to take risks by preparing themselves for uncertainties such as workers retaining their jobs (Roslan 2003). They are also more concerned with and strive to achieve the objectives of the organization and are goal oriented (Hutt 1994), have high confidence (Norasmah & Hariyaty 2006; Nawawi 1992; Chek 1996; Timmons 1997), and possess a high level of competency in problem solving and decision making (Abd. Rashid 2004). These characteristics, however, are not particularly favored by most employers. In general, employers perceive an individual with entrepreneurial mindset tends to be a dictatorial person (Abd. Aziz 2000). The characteristics of an entrepreneurial mindset includes culturally competitive, a risk-taker, creative, and aggressive. A person who possesses entrepreneurial traits will continuously strive to ensure success in their attempts to boost their power. For future graduates and professional workers, the entrepreneurial aspect is a criterion that would benefit through profit-oriented businesses (Cole 1969) and thus, it does not seem to be an important attribute for those who do not intend and/or interested to start a business.

CONCLUSION

With rising global competition and a changing socio-political landscape, there is a call for strong individuals to face this increasingly demanding world. The world labor market is expected to change rapidly and employers have expressed concern for graduates to demonstrate adaptability and flexibility in order to cope with the future changes in employment needs. To ensure that Malaysian businesses keep abreast with the global competitive market, higher education institutions (HEIs) in Malaysia must play a vital role in producing graduates or job candidates who can contribute optimally to the socio-economic development of the country. The GSA module developed by the Ministry of Education (The Star 29 May 2010), implemented recently in HEIs throughout the country, constitutes seven important elements – communication skills, critical thinking and problem-solving skills, team work, effective communication and information management, entrepreneurial skills, ethical and profession skills, and leadership quality. The GSA module marks an attempt by the Malaysian higher education system to work towards strengthening the learning and teaching processes that take place in HEIs

through the continuous upgrading of curriculum and intervention programs, while reflecting the Ministry's sensitivity to the needs of the industry by preparing the graduates for the requirements of the job market.

The high emphasis that employers place on the GS constructs confirms that industry needs must be attended to in ensuring the marketability of the graduates. Gradually, but certainly, the effort must be made to restructure the curriculum at lower levels of education from primary school up to the tertiary level. If the Malaysian HEIs are to play a full role in raising the level of generic skills among their students, then a continuous professional training and development for the academics will also be required. It is proposed that a Center of Learning and Teaching in HEIs provide a real stimulus for change reflecting such efforts.

This study has identified several issues which suggest a need for further research. For instance, the result shows that aspects of entrepreneurship are the last option in terms of its requirements by employers. Further research needs to be conducted to explain the stigma of entrepreneurship to the employers. Future studies should also identify the entrepreneurial characteristics that are required for employees to carry out their duties in the workplace, from the employers' perspective.

REFERENCES

- Ab. Aziz Yusof. 2000. *Usahawan dan Keusahawanan: Satu Penilaian*. Selangor: Prentice Hall.
- Abd. Rashid Sarti. 2004. Persepsi guru terhadap kompetensi pengetua dalam pengurusan disiplin pelajar dan iklim sekolah di negeri Selangor. Tesis Sarjana tidak terbit. Universiti Kebangsaan Malaysia
- Alpern, M. 1997. Critical workplace competencies: Essential? Generic? Core? Employability? Non-technical? What's in a name. *Canadian Vocational Journal* 32(4): 6-16.
- Ball, C. 1989. *Towards an Entreprising Culture*. Paris: OECD/CERI.
- Boud, D., Middleton, H. 2003. Learning from others at work: Communities of practice and informal learning. *Journal of Workplace Learning: Employeee Counselling Today* 15(5): 194-202.
- Cameron, K. S. & Quinn, R. E. 2006. *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. San Francisco: Jossey Bass Inc.
- Cheah, H. B. & Yu, T. F. L. 1996, Adaptive response: entrepreneurship and competitiveness in the economic development of Hong Kong. *Journal of Enterprising Culture* 4(3): 241-66.
- Chek Mat. 1996. *Pengurusan Berkualiti dalam Perkhidmatan*. Kuala Lumpur: Utusan Publications & Distributors Sdn Bhd.
- Chew, S. B., Lee, K. H. & Quek, A. H. 1995. *Education and Work: Aspiration of Malaysia Secondary School Students*. Kuala Lumpur: University of Malaya Press.
- Cole, A. 1969. Definition of entrepreneurship. In *Bostrum Seminar in the Study of Enterprise*, edited by J. Komives & A. Karl, 10-22.
- Cox, S. & King, D. 2006. Skill sets: an approach to embed employability in course design. *Education Training* 48(4): 262-274
- Day, M. 1988. Managing competence and the charter initiative. *Personnel Management Journal* 20(7): 30-40.
- Fong Chan Onn. 2001. *Ucapan di majlis perasmian skim latihan pekerja yang dihentikan dan pengangguran serta Skim Latihan Graduan*. 21 Disember 2001. Shah Alam
- Hager, P., Holland, S. & Beckett, D. 2002. *Enhancing the Learning and Employability of Graduates: The Role of Generic Skills*. Melbourne: Business/ Higher Education Round Table.
- Hutt, R. 1994. *Entrepreneurship: Starting your Own Business*. Ohio: South Western.
- Jackson, P. 1999. What are soft skills? www.enterprisefoundation.org/modeldocuments/118.htm.
- Jacobsen, R. L. 1993. Shaking up the MBA. *Chronicle of Higher Education* 40: 18-19.
- Jordan, R. R. 1997. *English for Academic Purposes*. Cambridge University Press.
- Kamaruzaman Moidunny. 2009. Keberkesanan program kelayakan profesional kepengetuaan kebangsaan (NPQH). Tesis Phd tidak terbit. Universiti Kebangsaan Malaysia, Selangor, Malaysia
- Kanapathy, V. 2001. Building Malaysia's IT societ. *Raffless Review* 5(1): 1-14.
- Kementerian Pendidikan Tinggi Malaysia. 2000. Kokurikulum. *Kementerian Pendidikan Tinggi Malaysia*. <http://myschoolnet.ppk.kpm.my/>.
- Kementerian Pengajian Tinggi. 2006. *Langkah-langkah ke Arah Kecemerlangan*. Laporan jawatankuasa mengkaji, menyemak dan membuat perakuan tentang perkembangan dan hala tuju pendidikan tinggi Malaysia.
- Kementerian Pengajian Tinggi. 2006. *Modul Pembangunan Kemahiran Insaniah (Soft Skills) untuk Institusi Pengajian Tinggi Malaysia*. Serdang: UPM.
- Lam, A. 1994. The utilisation of human resources; a comparative study of British and Japanese engineers in the electronic industries. *Human Resource Management Journal* 4(3): 22-40.
- Lee, S.K.V. 2000. The demand for business and management education in Hong Kong beyond 1997. In *Managed in Hong Kong: Adaptive Systems, Entrepreneurship and Human resources*, eds C. Rowley & R. Fitzgerald, London: Frank Cass.
- Lee, K.H., Quek, A.H. & Chew, S.B. 2001. *Education and Work: The State of Transition*. Kuala Lumpur: University of Malaya Press.
- Majlis Tindakan Ekonomi Negara. 2003, 2005.
- Malaysian Employers Federation. 2005. Facing the realities of the world of work. Available at <http://www.epu.jpm.my/new%20folder/seminar/stm.pdf>
- Mason, J.C. 1992. Business schools: striving to meet customer demand. *Management Review* 81(9): 10-14.
- Mohd. Izham, Roselena & Zullaili. 2007. Modal insan berkualiti: Adakah kemahiran insaniah penyelesaiannya? *Prosiding Seminar Kebangsaan Isu-Isu Pendidikan Negara Ketiga: Dasar dan Perlaksanaan*. Universiti Kebangsaan Malaysia.
- Mohd Izham Mohd Hamzah, Juriah Long, Khalid Abdullah, Zaini Mahbar, Hamidah Yamat, Zarin Ismail, Jamalul Lail Abdul Wahab, Nor Foniza & Rosima Alias. 2011. Analisis keperluan majikan terhadap kemahiran generik bagi pembangunan modal insan. In *Transformasi dan Inovasi dalam Penyelidikan* edited by Zamri Mahamod, Jamalul Lail Abdul Wahab & Mohammed Sani Ibrahim. Bangi: Penerbit UKM.

- Mustapha Muhammed. 2006. 100000 jalani penilaian kemahiran insaniah. Available at <http://web.utm.my/index.php?option=content&task=view&id=191&Itemid=1>
- Nawawi Mohd Jan. 1992. *Kompetensi Keusahawanan. Asas Keusahawanan*. Shah Alam: Pusat Pembangunan Malaysia (MEDEC), Institut Teknologi Mara.
- New Straits Times. 2004c. Nation. *New Straits Times*, June 24.
- Nik Othman Daud. 2003. *Peranan institusi latihan dalam menghasilkan k-workers yang berdaya saing untuk menghadapi cabaran globalisasi*. Kertas persidangan dalam Persidangan Kebangsaan Pendidikan dan Latihan Teknik dan Vokasional 2003, Kolej Universiti Tun Hussein Onn, Batu Pahat.
- Norasmah Othman & Hariyaty Ab. Wahid. 2006. Ciri-ciri keusahawanan dan gaya pemikiran keusahawanan pengetua. *Jurnal Pengurusan dan Kepimpinan Pendidikan* 16: 13-38.
- Ortiz Jr, S. 2005. Soft skills deliver hard results. <http://www.budapest.com/jobs/softskills.htm>
- Owen, C. & Bound, H. 2001. *Contractor Alliances and the New World of Work*. Adelaide: NCVER
- Percetakan Nasional Berhad. 1996. *Seventh Malaysia Plan, 1996-2000*. Kuala Lumpur: Percetakan Nasional Berhad.
- Percetakan Nasional Berhad. 2001. *Eighth Malaysia Plan, 1996-2000*. Kuala Lumpur: Percetakan Nasional Berhad.
- Pinchot, G. 1985. *Intrapreneuring*. New York: Harper & Row.
- Quek, A. H. 1996. *World Culture and Values: A Process Perspective*. Paper presented at the Seminar on European Business, Baden- Wuttemberg.
- Quek, A. H. 2003. *Social Psychology of Career*. Kuala Lumpur: Lingua.
- Quek, A. 2005. Learning for the workplace: A case study in graduate employees' generic competencies. *Journal of Workplace Learning* 17(4): 231-242.
- Rancangan Malaysia Ke-9. 2006- 2010.
- Ranjit, S. M. 2009. *Make Yourself Employable: How Graduates can Hit the Ground Running!* Kuala Lumpur: TQM Consultants Sdn. Bhd.
- Robbins, S. P. & Judge, T.A. 2007. *Organizational Behavior*. 12th edition. New Jersey: Pearson Education Inc.
- Roslan Hussin. 2003. Kecenderungan keusahawanan di kalangan pelajar-pelajar Sekolah Menengah Agama Rakyat di negeri Perak. Tesis Sarjana tidak terbit. Universiti Kebangsaan Malaysia.
- Schroder, H. M. 1989. *Managerial Competences: The Key to Excellence*. Dubuque, IA: Kendall-Hunt Publishing.
- Shah, H. 2001. Thinking skills: A catalyst in all your achievements. *Raffles Review* 5(1): 31-35.
- Sheppard, B. 1996. Exploring the transformational nature of instructional leadership. *Alberta Journal of Educational Research* 42: 325-344.
- Singh, V. 2001. Making the transition to a knowledge-based economy. *Raffles Review* 5(1): 25-30.
- Sutton, N. 2002. Why can't we all just get along? Available at <http://www.itbusiness.ca/it/client/en/home/Newsasp?id=20941>.
- Ungku Harun Al'Rashid Ahmad. 2004. Meeting the demand of global firms. <http://www.epu.jpm.my/new%20folder/seminar/stm/slide-ungku%20harun.pdf>
- Wan Mohd Zahid Mohd Nordin. 2003. Guru cemerlang: Suatu perspektif. *Konvensyen Pendidikan Guru Kebangsaan* 2003, 155-169.
- Zalizan Mohd Jelas, Norzaini Azman, Norazah Mohd Nordin, Manisah Mohd Ali & Ab. Halim Tamuri. 2007. *Developing core competencies of graduates: A study of effective of higher education practices in Malaysian universities*. Universiti Kebangsaan Malaysia.

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