

Students' Perception on the Developed Generic Skills in Universiti Teknologi Malaysia

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Abstract

The increasing rate of unemployed graduates in this country is worth worrying. One of the major reasons for this is due to the graduates' inability in various aspects such as generic skills as demanded by the industries, despite the excellence of academic achievement. The current plight causes the industries preferences of employing the experienced candidates, rather than the fresh graduates. As generic skills can be acquired through students' involvement in extra-curricular activities, the compatibility of the obtained skills during undergraduates' activities and the demanded skills in industry is dubious. This paper investigates upon students' perception on the type of generic skills that have able to develop during their previous learning processes in university. It also seeks for the understanding of which type of generic skills that students' perceived as important for them for professional development.

Keywords: Unemployment; generic skills.

1. Introduction

Surviving the emerging global economy world is indeed, requires struggles. Getting employed is the utmost important goal of all graduates. As the years passes by, the issue of unemployed graduates remains crucial.

2. Background of Problem

The Principal Statistics of Labour Force, Malaysia reports on the unemployment rate in February 2010 and figures that the rate remained at 3.6 percent which indicated an increment as compared to last December 2009 (3.4 percent) [1]. The figure is worth worrying as Malaysia has never experienced such percentage [2]. The economic downturn has also forces the companies to terminate workers and the chances of getting hired are very stiff unless the candidate is superior, with experiences [3] and eligible skills specifically soft skills [4,5].

It was indicated that the urgent need of workers with eligible skills are due to the changed of economy structure (particularly in Malaysia) where manufacturing sector has been gradually replaced by the services sector. Thus, people with soft skills and technically knowledgeable are currently demanded [4].

People from the industries reported that health and safety skills, self-management skills and team work skills are among the generic skills of the highest

importance for employability [6]. It is very transparent that graduating with flying colours can no longer guarantees future career success [4]. However, graduates are entitled for jobs if they met the skills demanded by the industries.

Several efforts are made to reduce the rate of unemployment such as providing graduates retraining scheme or on-the-job-skills training [5]. However, it is believed that the learning institution itself; is responsible to equip the students with the necessary generic competencies as demanded by the industries. Woo indicated in his research that there are several possible causes of degrading quality of education that leads to unemployment which are; falling standards of delivery, implementation of fast-track degrees, shortening of programmes and semesters, inexperienced lecturers, elimination of electives and closet-size libraries [5].

In Universiti Teknologi Malaysia (UTM), aligned with the effort of enhancing generic skills among the students, the university underlies seven types of graduate attributes and generic skills [7]. There are:

- a) Communication skills
- b) Critical thinking and problem solving skills,
- c) Team working skills,
- d) Information management and life-long learning skills,
- e) Entrepreneurship skills,
- f) Leadership skills and proactiveness, and
- g) Ethics and integrity.

Woo [5], mentioned that it is critical to find the factors of this issue from various resources including considering students' opinion. Within these attributes, this research seeks for the understanding of the students' perception on whether they are able to develop these skills during their university years.

The information obtained in this research will be useful to illustrate the reality of the problems related to generic skills among UTM graduates and either UTM has been able to provide the students with the listed generic competencies.

Objectives of this study are:

- a) To investigate students' perception on the most important generic skills for professional development,
- b) To investigate students' perception on the generic skills developed by UTM
- c) To identify the relationship between the importance of generic skills for professional development and the levels of generic skill developed by UTM.

3. Research Methodology

A survey was administered to collect data from 50 UTM leavers using a questionnaire being developed by Tuning Educational Structures in Europe. It is an institution that has conducted survey to over 16 European countries by means of questionnaires to investigate both generic and subject-specific skills and competencies [8].

There are 30 Likert scale questions that have been categorized to 7 domains of generic skills listed by UTM. The questions are developed to gather information about the skills and competences that may be important for success in career. It is also developed to retrieve information on the levels of skills and competencies that the graduate obtained upon finishing their university degree. Items in the questionnaire are categorized in respected domains as in Table 3.1.

Table 3.1: The distribution of items according to domains

Subscale Domains	Item
1) Communication skills	Item 6, 7, 18, 21
2) Critical thinking and problem solving skills	Item 1, 2, 14, 15
3) Team working skills	Item 13, 17, 20
4) Information management and life-long learning skills	Item 3, 4, 5, 8, 9, 10, 11, 26
5) Entrepreneurship skills	Item 27
6) Leadership skills and	Item 12, 16, 19, 25,

proactiveness	30
7) Ethics and integrity.	Item 22, 23, 24, 28, 29
Total	30

4. Data Analysis

The data gathered was analyzed using *Statistical Package for the Social Sciences* (SPSS) to obtain the mean, frequencies and to calculate Pearson correlation value upon the obtained data. For research objectives (a) and (b), the research uses the table of mean level of agreement (Table 3.2) adapted from Mohd Najib [9] to measure the scores obtained from the respondents. For objective (c), the research applies the Pearson correlation. The Rowntree scale [10] is used to interpret the 'r' value as in Table 4.2.

Table 4.1: Table of mean level of agreement

Mean Level of Agreement	Degree of Mean Agreement
1.00 – 2.33	Low (L)
2.34 – 3.67	Moderate (M)
3.68 – 5.00	High (H)

Table 4.2: The Rowntree (1981) scale

Value of correlation coefficient 'r'	Power Relations
0.9 to 1.0	Very high, very strong
0.7 to 0.89	High, strong
0.4 to 0.69	Moderate
0.2 to 0.39	Weak, low
0.0 to 0.19	Very weak

5. Results and Discussions

The followings are the findings of the present research.

5.1. Students' perception on the most important generic skills for professional development

The university leavers happen to realise that critical thinking and problem solving skills as well as the team working skills are essential to survive the working field. Both domains are viewed as equally important for professional development (M=3.7). This finding is aligned with UTM's effort on empowering the students' creativity and problem solving skills while working in group simultaneously [11]. It is also supported by the findings by Suarta [6] that team working skill is among the most important skills for employability.

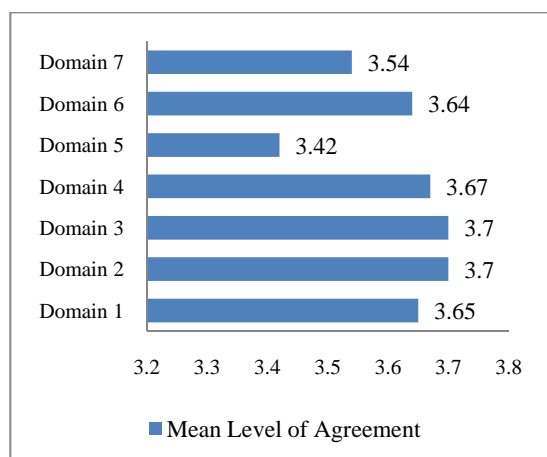


Figure 5.1: Students' perception on the most important generic skills for professional development.

5.2. Students' perception on the generic skills developed by UTM

Upon gathering the information on which types of generic skills that they developed while studying in UTM, the below results are obtained (see Figure 5.2).

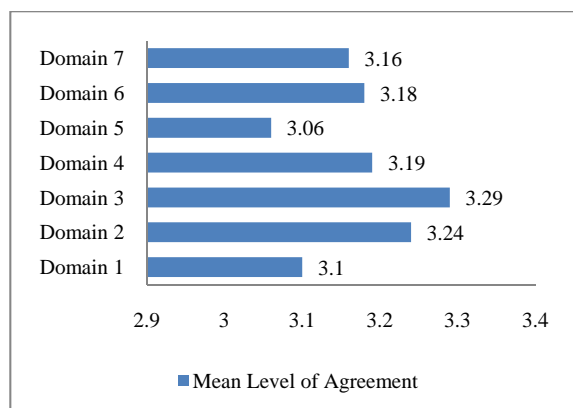


Figure 5.2: Students perception on the generic skills that have been developed by UTM.

Results indicated that UTM leavers belief that each of the generic skills are developed moderately. More effort should be done to empower generic skills among the students either through co-curricular activities or even during the teaching and learning processes. Kamsah mentioned in his research that developing generic skills among students is possible by explicit teaching and that it should be included among instructional goal [11]. He further mentions that the idea may sound absurd, however, with respect to the current situation, it has to be done with specific guidelines.

5.3. The relationship between the importance of generic skills for professional development and the levels of generic skill developed by UTM.

A strong relationship has been proven to establish between students' perception on the importance of the domains of generic skills (*QE*) and the levels of generic skills (*QL*) that have been developed by UTM ($r = 0.734$).

		MeanQE	MeanQL
MeanQE	Pearson Correlation	1	.734(**)
	Sig. (2-tailed)		.000
	N	30	30
MeanQL	Pearson Correlation	.734(**)	1
	Sig. (2-tailed)	.000	
	N	30	30

** Correlation is significant at the 0.01 level (2-tailed).

Figure 5.3: The Pearson correlation between *QE* and *QL*.

The value $r=0.734$ has tell us that it is important to consider the generic skills that the students value as important before UTM coming up with the appropriate plan of instilling generic skills in the learning process. It also implies that, other than the students, university has to get the industries and other stakeholders to participate in designing the course delivery. This is relevant so that the students can fully benefit and able to acquire the instilled generic competencies ultimately.

6. Limitations

The fact that this survey is conducted in a small cohort, it is unfeasible for generalization. However, findings from this research are beneficial to provide the idea on the current scenario regarding generic skills developed in UTM.

7. Conclusion

Developing generic skills is indeed time consuming and surely becomes a big deal for almost all learning institutions. Nevertheless, there are spaces for opportunity if continuous effort were made on enhancing generic competencies among the students involving stakeholders as well as considering the students' opinion on how it should be done.

References

1. Principal Statistics of Labour Force, Malaysia, February 2010. 8 (4), 2010.
2. The Star, Malaysia's Unemployment rate may rise to 4.5% by year-end, Aug, 14 2009.
3. N.H. Saari, Unemployed Graduates: How can we address this situation?, Institut Kefahaman Islam Malaysia, 2007.
4. A. Aminah & N. Munian, A Study of Unemployment Rate: Evidence from Malaysia, 2010 Second international Conference on Computer Engineering and Applications, 2010, pp. 374-378.
5. K.Y. Woo, Malaysian private higher education: A need to study the different interpretations of quality, JASA, July 2006, pp. 17-21.
6. I.M. Suarta, Supervisors' Perceptions of the Employability Skills Needed by Higher Vocational Education Graduates to be Successful in the Workplace, 14th UNESCO-APEID International Conference Education for Human Resource Development, Thailand, 2010.
7. UTM Graduate Attributes and Generic Skills, Retrived from http://www.citl.utm.my/online/index.php?option=com_content&view=article&id=237&Itemid=296 on Nov 11, 2010.
8. What is Tuning?, Retrieved from <http://tuning.unideusto.org> on Sept 2, 2010.
9. A.G. Mohd Najib, Rekabentuk Tinjauan Soal Selidik Pendidikan, Penerbit Universiti Teknologi Malaysia, Johor, 2003.
10. D. Rowntree, Statistics Without Tears: A Primer for non-Mathematicians, Penguin, London, 1981.
11. M.Z. Kamsah, Developing Generic Skills in Classroom Environment: Engineering Students Perspective, International Conference on Engineering Education, K.L. 14-15 Dec 2004.