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## The Acquisition of Soft Skills in Real Estate Program via Industrial Training

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### Abstract

The issues that have received wide coverage that graduates of Malaysian public universities are deficient in soft skills. Notwithstanding, there is no extensive attempt to study the acquisition of soft skills in the real estate program. Thus, the paper examines the acquisition of the soft skills embedded in real estate program via industrial training. A survey method was employed for the study, and structured questionnaires were distributed to graduates of the real estate program. The data was analysed using Exploratory Factor Analysis. Key finding reveals that, moral and professional ethic skills, and teamwork skills have been well imparted via industrial training.

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## 1. Introduction

Today's challenging economic situation means that it is no longer sufficient for new graduates to have knowledge of an academic subject and it is necessary for student to gain the skills which will enhance their prospect of employment (Pant and Baroudi, 2008).

The nature higher education in modern universities is changing rapidly as institutions take account of a number of major external factors. The increase of student passing higher education system means that competition for established positions in professions is intense, as consequence, the range and variety of jobs becoming progressively diverse. It is minority of graduates who are able to gain employment which directly utilises the academic content of their higher education curriculum. The academic curriculum is indeed a vehicle through which other significant features are delivered. These features are largely constant regardless of the subject studied. The prospect of employment is also changing rapidly. Traditional career paths have disappeared, entire industries have relocated to other areas of the world, and new technologies have made established practice and experience irrelevant (Wilson et al., 2011).

The issue that has received wide coverage in the Malaysian context is the marketability or employability of graduates from public universities and many other countries have also acknowledged that higher education has not met the expectations of employers (Leckey and McGuigan, 1997; Bennett et al., 1999; Kember, 2006; Koo et al., 2009; Wilson et al., 2011).

The rationales cited for the depleted unemployment prospects of public university graduates are that they are deficient in linguistic such English proficiency in both oral and written and technical skills, poorly prepared for the job market, plus cognitive abilities such as problem solving and analytical thinking (Wilson et al., 2011).

## 2. Framework: Malaysian Model of The Implementation of Soft Skills in Higher Education

The research refers to the Malaysian model on implementation soft skills in higher education. The study concentrates primarily on the acquisition of soft skills in the process of teaching and learning provided the initial evidence of the 'Embedded Model' that the best skills are transferred through integrated skills interdisciplinary courses rather than stand-alone subject to university students (Bennett et al., 1999; Tsui 1999; Kember et al., 2006; Devadason et al., 2010).

In the Malaysian context, the soft skills specifically designated by the Ministry of Higher Education, to be included in the degree programs, comprise seven skills as follows: Communication Skills in English; Critical Thinking and Problem-Solving Skills; Team-Working Skills; Lifelong Learning and Information Management Skills; Entrepreneurial Skills; Moral and Professional Ethics; and Leadership Skills. The aim is that students are expected to develop soft skills throughout the duration of their course and should be equipped with all seven skills upon completion of their degree program. The study adopts these seven skills, and the expected competencies of each skill in the questionnaire design.

A survey method was employed for the study, and structured questionnaires were distributed to graduates of real estate programme of public universities to obtain their feedback on the integration of soft skills in industrial training. Graduates' perceptions are significant as they are regarded as 'accurate credible reporters of their activities and how much they have benefited from higher education experience' (Smith and Bath, 2006). The survey was carried out during the period October-November 2010 and sample size was 200.

Based on the descriptive statistic generated, 35 per cent of total respondents are male and the other 65 percent of total respondents are females and bigger proportions of the respondents are Malays that formed 69 per cent of total respondents. It is followed by Chinese with 21 per cent, and Indian covers at least a proportion with 7 per cent. From the descriptive statistic generated, the bigger proportions of the

respondents are gained employment related to real estate that forms 64 per cent of total respondents. The proportion for graduates who gained employment related to real estate which significant to the fact that the competition for the positions in professions is intense, as consequence, the range and variety of jobs becoming progressively diverse (Wilson et al.,2011). The results show, 36 per cent of graduates are not able to gain employment, which directly utilizes the academic content of their higher education.

### 3. Soft Skills Embedded in Coursework

The respondents were required to indicate their levels of concurrence or disagreement with assertions concerning the items designated for each soft skill as explained in the methodology. Table 1 present the summary of means for the various items related to skill embedment in coursework components.

**Table 1.** Descriptive statistics of industrial training component

Items for training component	Mean	S D
<b>I. Communication skills</b>		
Communication at workplace was mainly in English	2.21	.754
I wrote reports at work mainly in English	2.73	1.120
I had opportunities for making oral presentations/teaching in schools	2.29	.466
I had opportunities to deal with customers/clients/students (e.g.: initiating contact, conduction or having a discussion on phone)	2.78	.865
I had opportunities to observe presentations made by management/head teachers	2.82	1.079
I expressed my thoughts in meetings/discussions at the organization	2.50	.987
<b>II. Critical thinking and problem solving</b>		
Tasks given were problem-centred	2.84	.974
Training provides opportunities to relate theory with practice	3.30	.849
I was given critical feedback on tasks by the organization supervisor/school leader	3.43	1.073
I was adequately exposed to and engaged in discussions that promoted innovative and creative ideas	3.08	.849
<b>III. Team working skills</b>		
I had opportunities to be directly involved in teamwork	3.38	.677
I had opportunities to be an observant in team discussions	2.50	.501
I was able to interact freely to achieve given tasks	2.70	.585
I acquired skills on work coordination and work management within teams	2.52	.575
<b>IV. Life long learning and information management skills</b>		
My work involved regular use of computers	2.54	.574
I was directly involved in data input/analysis/management of databases	2.53	.557
I was able to use my computer skills at the organization	3.19	.932
I acquired new skills on information management at the organization	3.34	.830
The tasks required me to actively seek information through research to enhance my work output	2.36	.512
I am able to identify/apply the new knowledge acquired through training to my current study	3.01	.743
<b>V. Entrepreneurial skills</b>		
I was directly involved in specific projects	2.60	.988
I participated in project discussions	2.63	.963
I acquired specific industrial knowledge on project development, maintenance and promotion	2.42	.947
I am now able to identify new business opportunities	2.28	.758

Items for training component	Mean	S D
<b>VI. Moral and professional ethic skills</b>		
Punctuality to work was strictly monitored by the organization supervisor/school leadership	3.34	.798
My tasks were monitored closely by my organization supervisor/school leader through regular exchange	3.10	1.003
The organization supervisor/peers/school leadership guided me well on general ethical practices at work	2.94	.758
I was exposed to other aspects of good work ethics (e.g.: honesty, integrity) at the organization	2.98	.746
The organization supervisor/school leader upheld good professional ethics to be followed by the staff	3.21	.799
<b>VII. Leadership skills</b>		
I had opportunities to manage tasks independently	2.60	.522
I had opportunities to be involved in decision-making/finding solutions	2.70	.489
I participated actively in the organization of events/meetings	2.72	.485
I had to meet job demands under stressful conditions	3.25	.831
I have provided input for the improvisation of work systems at the organization	2.28	.493

Notes: The ranking is based on a 5-point Likert scale of 1 (not relevant), 2 (strongly disagree), 3 (disagree), 4 (agree) to 5 (strongly agree)

From the mean scores reported in Table 1, the infusion of soft skills in training is also revealed to be inadequate. Most items have mean scores below 3, indicating that respondents at large disagreed on the adequacy of skills embedded in training programmes. Items listed under the moral and professional ethics skills in particular have mean scores above 3, indicating that, on average, most respondents agree that this skill has been well imparted and acquired via training.

#### 4. Acquisition of Soft Skills

The Kolmogorov–Smirnov test is performed to validate the assumption of normality in the data. As the test proves the absence of normality in the dataset, the non parametric test is a preferred choice. Exploratory factor analysis is conducted to remove items that have low factor loadings. Hair et al. (1998) suggested that, with new factor loadings, a Cronbach's alpha of at least 0.60 is fulfilled by all factors.

Subsequently, to measure the sampling adequacy, the Kaiser-Meyer-Olkin (Kaiser 1970, 1974) and the Bartlett's test of sphericity (Bartlett, 1954) to assess the factorability of the data are employed. The factor analysis is considered appropriate given that the Bartlett's test of sphericity is significant at 1 per cent for datasets, coursework and training. Further, the Kaiser-Meyer-Olkin indices range from 0.507 to 0.717 for all datasets, surpassing the minimum of 0.5, indicate that the sampling is adequate and good enough.

The principal components analysis with varimax rotation is used for the extraction of the factor dimensions from the underlying dimensions of 34 items for training datasets. According to Hair et al. (1998), items were removed if factor loadings were less than 0.4.

The non-standardized Cronbach's (1951) alpha determined the scale for reliabilities that is widely used (Aron and Aron 1994) and preferred (Morgan and Griego 1998). Values of between 0.5 and 0.9 for the seven factors for the datasets is considered sufficient (Nunnally 1978) for exploratory research since they exceed the 0.5 threshold. Of the dimensions for training components, six scales had Cronbach's Alpha values above 0.7.

The naming of the factor loading matrix in this study is relatively straightforward since the items clustered reflect closely the seven soft skills. The seven-factor dimensions are thus communication skills, critical thinking and problem- solving skills, team-working skills, lifelong learning and information

management skills, entrepreneurship skills, moral and professional ethics and leadership skills. Based on the analyses, all seven factors explain 69.707 per cent of the total variance of the acquisition of soft skills by training. Moral and professional ethics ranks first, explaining 26.048 per cent of the total variance. This is followed by team working skills, and information management skills that explain 10.934 per cent and 9.214 per cent of the total variance, respectively. This is not surprising since the study by Koo et al. (2009) indicates that employers are willing to assist students better able to manage information. As such, many students do acquire information management skills throughout their industrial training.

The analysis is further extended based on gender to obtain unique clusters of graduates' perceptions. In the case of skills embedded in the training component, the male gender perceived team-working, lifelong learning and information management, and moral and professional ethics skills as more important, and they are ranked as the top two factors. As for the female gender, moral and professional ethics remains as the most important skills acquired by them through training.

Malays perceived moral and professional ethics as most importantly infused and acquired, as that which is obtained for the overall sample. For the Malays, moral and professional ethic, including leadership skills ranked first that explain 24.154 per cent of the total variance. Factor two appeared to measure team working skills, lifelong learning and information management, and critical thinking and problem-solving skills with a total variance explained of 11.906 per cent.

In the case of skills embedded in the training component, the non-Malays perceived team-working, lifelong learning and information management as more important, and they are ranked first, with a total variance explained of 29.345 per cent. Factor two appeared to measure moral and professional ethics skills consisting of five important skills with a total variance explained of 9.388 per cent.

As for training, the item clustered in the seventh factor is communication in English, represented only 4.524 per cent of the total variance explained. The lack of integration of communication skills in training as perceived by graduates must be given due to attention since this is also a skill that is not sufficiently infused. As general, when training is considered, both Malays and non-Malays perceived moral and professional ethics as most importantly infused and acquired, as that which is obtained for the overall sample.

## **5. Conclusion**

The findings suggest that the acquisition of skills via industrial training are not only highly concentrated on specific skills, but that they also complement each other once the type of skill is considered. As such, industrial training is an equally imperative component of degree programs to ensure that students are well equipped with the designated skills.

In general, the précis of the analyses signified that, soft skills infused industrial training has not met the needs of the graduates, with the exemption for a few skills competencies such moral and professional skills, lifelong learning and information management skills, and teamwork skills. The lack of infusion and acquisition of communication skills, leadership skills, and critical thinking and problem solving deserve attention as it is also a skill that is perceived as a critical weakness of real estate graduates. The lack of communication opportunities in English is governed inherently by the type of organizations for placements. Students attached to government institutions for industrial training are more likely to communicate in the Malay language. This signifies that these skills are not adequately infused or acquired by training. It is thus more appropriate for the coursework component to ensure adequate infusion and acquisition of these skills since students engaged in training are unlikely to acquire them sufficiently.

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