Acquiring Key Competencies in Malaysia

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Globalisation has changed the way we live in the ever changing world. We see a sea of global trends be it in economics, technology, culture and consumerism. The environmental alterations and the global warming combined with revolution in ICT are causing new concerns and demand for more skilled manpower to deal with. This mandates the authorities to prepare the emerging young generation with global competence so that they are fully prepared for the eventualities. Competency covers the skills, knowledge and the behaviours needed to perform a given job or role effectively. The individuals as well as organisations success depend on the competence of the individual. Given a job or role to play or a situation to handle, the competencies help to understand what an individual is capable of doing.

The workplace has changed dramatically in response to a new competitive business environment that is marked by flexibility, fast response time and managerial and technological innovations. They continue to stress that the students are ill-prepared for the future workplace and that they need new kinds of skills to perform well. Education and training should mould and prepare young people to think out dynamic competitive world and to develop them to act as a rational independent agent. So this paper investigates the competency level of the students when they come out of the institutes after completing their programmes. The survey results show that not all the competencies that are envisaged to be developed among the students are acquired by the students.

Introduction

There has been growing concern about the competency need for adult at their workplace. Changes in the nature of work raised concern of whether the adult fulfil the require knowledge, skill and abilities to fit the current workplace system (Darr, 2007) and too much demand for talent workers hugely increases (Cortada, 1998). This is due to the emergences of a “new knowledge-based service economy” which differs from the industrial based economy. Walker (1980) stated that in the knowledge based economy, human capital considered to be the most essential resources for any organisation. Employee competency leads to the success of organisation. There is no more lifelong employment, where employees expect to be covenant forever. (Mustapha & Abdullahi, 2000). Employee retention will be based on their competency.

The earlier research has identified that the schools and colleges generate technical and special skills in opposition to what is more needed by the workplaces, be in manufacturing or service industries. It is also recognised that there is demand for more generic skills in the workplaces which are yet to be met by the educational

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system. So there is a requirement to assess the competency level of the employees at the time of exit of their institutes. This paper explores the competency level of the students coming out from institutions of higher learning (IHLs) as they had acquired during their period of study.

Competency explained

Competency consists of knowledge, skill and abilities, or collection of two or more these attributes which are considered building block for work performance. Boyatzis (1982) defined competency as fundamental features of a person, determines his superior performance at a workplace. “Characteristics of someone that leads to effective and outstanding performance” says Boyatzis (2004). Also, Spencer and Spencer (1993) described competency as the mixer of component such as attribute, skills, traits, knowledge and intention of a person which lead to the superior performance in his/her job and the ability of person to employ his/her knowledge, skill, attitudes and values to the ideal job perfection (New Zealand Qualification Authority, 1997). According to Lee (2003) competency characterise as knowledge, skill, and attitude when person, team and organization the successful status. Not only that, it also one of the most important aspects in all economies. We can also describe it as a substitute of knowledge and skill, to be competent meaning that a person has attained knowledge and skill which can be demonstrated at the workplace or in a test.

Knowledge can be best described as awareness, information in other words, to be aware about the facts, concepts, theories, principles and guidelines (Marrelli, 2001; Mirabile, 1997). It may also be specific, concrete, more complex and hard to assess (Lucia & Lepsinger, 1999) cited (Marrelli, Tondora and Hoges, 2005). While on the other hand, skill can be described as the ability to perform either mental or physical tasks with a benefit or specific outcomes (Marrelli, 1998). Competencies are mainly driven from knowledge and skill but the approach of building competency varies based on the field and area. It is considered relevant in many distinct research fields (Barrie, 2006; Spencer & Spencer, 1993, Zegwaard, 2006)

Government interventions

For over three decades, Malaysia is tremendously undergoing structural changes in an attempt to evaluate the education system for meeting the competencies especially in the global arena. The improvements have started yielding results in terms of economic growth, productivity and competitiveness. The structural changes are targeted towards developing generic skills and competencies. However the structural changes in education is not only taking place in Malaysia but also in other developing and underdeveloped countries as well. For example, the Secretary of Labour’s Commission on Achieving Necessary Skills (SCANS, 1991) in USA and AEC/MOVEET (1992) in Australia are some of the example packages focussing on generic skills included in the public policy.

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more generic skills in the workplaces which are yet to be met by the educational system.

In UK administration of the education system in 1970s and 80s were not flexible, adaptable and were not able to produce multi-skills labour force demanded by the competitive economy (Geoff Hayward et al, 2004) which led to youth unemployment. Instead of putting pressure on the workplaces (industries) the government tried to correct the educational and training policies to cover the criticism of not favouring British Capital Markets.

Little research has been done in Malaysian context also to confirm the level of generic skills & competencies required by the industries. The major occupational change shift for the last 30 years is moving from manufacturing economy to knowledge economy i.e from blue collar jobs to white collar jobs.

**Competency development in Malaysia**

Malaysia had pledged to develop world class human capital and incorporated it as an agenda in its ninth plan (2006-2010). The Ministry of Higher Education (MOHE) had set this as a strategic goal to be achieved to make Malaysia as an educational destination for higher education. As a part of implementation of the plan, Malaysian government formed Malaysian Qualifications Agency (MQA) to ensure quality education in both private and public Higher Education Providers (HEPs).

To guide the HEPs in enriching the human capital, MQA had come out with the Malaysian Qualifications Framework (MQF) covering nine perfect areas. MQF is the basis for MQA to assess the programmes and the institutions to ensure their compliance. It came into existence in 2007. The first and the foremost important of the nine ideal areas is to specify the learning outcomes / programme outcomes for each of the programme in the institutions of higher learning (IHLs). MQF emphasis on the learning outcome as expected by the learners to perform their roles and responsibilities in this globalised and competitive society.

Hence MQF directs “The programme must define the competencies that the student should demonstrate on completion of the programme that cover mastery of body of knowledge; practical skills; social skills and responsibilities; values, attitudes and professionalism; problem solving and scientific skills; communication, leadership and team skills; information management and lifelong learning skills and managerial and entrepreneurial skills.” (Code of practice for Programme accreditation, MQA).

To develop the learning outcomes, MQF specified nine domains under which the students should be educated immaterial of the programmes they undergo. This is to ensure that the students when they come of the IHLs, they have the expected competency levels and are employment-ready. The nine domains include (i) Knowledge (ii) practical skills (iii) Social skills and responsibilities (iv) Values, attitudes and professionalism (v) Communication and team skills (vi) Problem solving and scientific skills (vii) Information Management and lifelong learning skills (viii) Managerial and entrepreneurial skills and (ix) Leadership skills.
Since MQA covers both public and private IHLs, it has become mandatory for these institutions to strictly adhere to MQF requirements for all existing as well as new programmes. By this, the government ensures that the students on completion of their programme of study, will have these competencies at different level as that of their programme.

**Earlier studies**

Herman (2011) investigated the role of vocational oriented education with that of national educational institutions in 18 countries and found that the students who come from vocational stream acquire the skills better than the others who do not have the vocational orientation. The vocational stream of students have better chance to get employment as well as higher salary because of the skill set they possess. Female graduates with a higher GPA have a higher chance of getting employment in China. (Tao Li, 2010). Postgraduate education whether it is a MBA degree or any specialised master degree in business or management inculcates better skills and competencies (Yehuda et al, 2005).

The research by Allan et al (2013) has shown that communication skills, problem solving skills and teamwork skill decide the career adaptability of the students. Australian accounting programmes at undergraduate level is not in line with the expectations of the industry, meaning that the competencies expected from the students do not match the market requirements (Peipei et al, 2012). In a study conducted in Malaysian engineering firms, it is understood that basic skills, thinking skills, resource skills, information skills, interpersonal skills, system and technology skills and personal quality are the expectations of the engineering industry (Mohd Yusof Husain et al, 2010). In a study conducted with Romanian university students, it was seen that only 50% students felt that they got the skills and competencies from their curriculum. Ability to be organised, working in a team, communication skills, punctuality and morality are considered as important competencies by the industries (Simona et al, 2012).

Social intelligence, organisational shrewdness, work related competence and personal characteristics are the expectations of health care industries from the graduate health professionals in Australia (Arlene et al, 2013). The industries prefer from the fresh graduates were problem solving skills and ability to apply knowledge to practical solutions in Spain (Mercedes Teijeiro et al, 2013). In a study conducted at South Korea, it was found that communication skills, cooperative nature, teamwork and networking, ICT skills, self-directed learning and problem solving skills are most sought after (Soomyung Jang, et al, 2004).

Key competencies envisaged as relevant in Austria, United Kingdom, Slovenia and Romania include influencing others, teamwork, analytical thinking, time management, leadership, comprehensive look, communication and presentation skills (Ana Azevedo et al 2012). Customer relationship, teamwork, willingness to learn and coordinating are the most expected competencies in UK and Romania (Codrin Chiru et al, 2012).
This study

The objective of the study is to assess the competency levels of the students at the time of exiting the IHLs on completion of their programme of study. The level of the competencies will have to be mapped to the nine domains to really understand the competencies acquired by the learners as against the expectations of the government. The scope of the study included the students who had graduated in engineering, information technology or management disciplines in any of the Malaysian universities.

Methodology

In another part of the exploratory study, the competencies that are being built in Malaysian institutions of higher learning (IHLs) have been identified. There are in all 18 different competencies and they were classified as behavioural and cognitive competencies. The priorities or ranking of the competencies as being built in the IHLs have also been worked out.

In continuation of the study this study proposed to ascertain the competencies the students had acquired at the time of exiting the IHLs. To comply with this requirement, a questionnaire was designed and validated before conducting the pilot study. The questionnaire assessed the confidence level of the respondents on these competencies using a five point Likert scale (1=Not confident, 2=confident, 3=more confident, 4=highly confident and 5= extremely confident). The reliability and validity of the questionnaire was ensured before undertaking full-fledged survey.

Using the questionnaire, the data was collected from Selangor and Kola Teranganor states in Malaysia. Convenient sampling method was employed to collect the data as it was required to contact the respondents who had graduated within one year from the data collection. Also it has to be ensured that the respondents obtained their degrees from one of engineering, information technology or management disciplines. In all, data was collected from 250 respondents. However some of the questionnaire were partly filled and so, they were discarded. The remaining 239 samples were used for further analysis.

Results and Discussion

As stated above, there were in all 239 respondents who were surveyed to ascertain the competency levels when they graduated from their IHLs and before joining any company / firm. The male respondents represent 66 % and the remaining 34% were female respondents. Among the respondents who responded to the questionnaire, 83% had undergraduate degree and the remaining 17 had postgraduate degrees, 65 % of the respondents were surveyed within six months of graduation and around 35 % of the respondents were survey within one year of their graduation. When the survey was administered, 183 out of 239 respondents (77%) were employed and 16% of the respondents were unemployed. The academic achievement of the respondents shows that around 60% of the respondents had a CGPA less than 2.67 and around 22% had a CGPA between 2.67 and 3.00 (Table 1).
Table 1: Descriptive statistics of the respondents

<table>
<thead>
<tr>
<th>SN</th>
<th>Description</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>157</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>82</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>Educational qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>199</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>40</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Duration after graduation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up to 6 months</td>
<td>155</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>More than 6 months</td>
<td>84</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>Current status</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>183</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Self-employed</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Further study</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>39</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>Academic achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CGPA &lt; 2.67</td>
<td>144</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>2.67 – 3.00</td>
<td>53</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>3.01 – 3.66</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>3.67 and above</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2 shows the competencies as acquired and agreed by the respondents. As we can see, the respondents were extremely confident in planning of activities when they left IHLs. This may be due to the multi-various activities planned and performed during their stay in IHLs. This is followed by teamwork and networking with others and communication competencies. This may be acquired during the coursework preparation and presentation. The more they present, they develop communication competencies. ICT Skills and leadership skills are ranked fourth and fifth. Now a days all students use ICT in all walks of their life, be it personal, academic or social. The universities add value to these competencies by making the students to make full use of ICT in classes, libraries and other places in the university.

Self-confidence does not seem to have been acquired by the students during their stay in universities. Also they feel they are not confident to train others. Somehow the student feel that ability to learn was not fully developed at the university level. This may be due to limited number of sample size who have CGPS less than 2.67. Environmental awareness is not taught at university courses and so the students are not confident of this competency. All these issues may be confirmed with higher sample size survey.
The individual competencies are then mapped to the Malaysian Qualifications Framework domains and presented in Table 3. As we can see, the communication and teamwork skill tops the list as the competency acquired by the students when they left the universities. Second one the managerial and entrepreneurial skills. This is a good sign that the students are ready and are confident to be managers. They are also confident of the practical skills that they acquired in universities during their stay. Values, attitudes and professionalism and problem solving and scientific skills are lagging behind with the students when they left the university.
Table 3: Competencies mapped to MQF domains

<table>
<thead>
<tr>
<th>SN</th>
<th>Malaysian domains</th>
<th>Qualifications Framework</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knowledge</td>
<td></td>
<td>3.515</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Practical skills</td>
<td></td>
<td>3.935</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Social skills and responsibilities</td>
<td></td>
<td>3.460</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Values, attitudes and professionalism</td>
<td></td>
<td>3.165</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Communication and team skills</td>
<td></td>
<td>4.200</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Problem solving and scientific skills</td>
<td></td>
<td>3.450</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Information Management and lifelong learning skills</td>
<td></td>
<td>3.930</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Managerial and entrepreneurial skills</td>
<td></td>
<td>3.940</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Leadership skills</td>
<td></td>
<td>3.880</td>
<td>5</td>
</tr>
</tbody>
</table>

Conclusion

This study has provided insights to the competencies as acquired by the management students when they left their studies after completing the courses. Communication and teamwork competencies tops the list of competencies acquired by the students when they left their universities. Values, attitudes and professionalism competency tops the bottom list where the students are not so confident at the time of leaving the universities. These conclusions are arrived at based on the limited data collected in two states of Malaysia. This may be validated with higher sample data spread throughout Malaysia.

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