

Employers' Feedback on Business Graduates and Curtin Graduate Attributes: An Exploratory Study in Curtin Sarawak

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This paper describes a study of employers' feedback on Curtin Sarawak business graduates. It was conducted using mail questionnaire, with a 17% response rate (N=42). Based on the nine Curtin Graduate Attributes: Applying discipline knowledge, Thinking skills, Information skills, Communication skills, Technology skills, Learning how to learn, International perspective, Cultural understanding and Professional skills, this study found that Curtin Sarawak business graduates have demonstrated these attributes in the workforce (mean above 3.5). Attributes that highly satisfied is technology skills while the least satisfied is international perspectives from the graduates. Business graduates are considered to be team players as well as good communicators. However, skills like critical skills, problem-solving skills, and ability to apply discipline knowledge and concepts in the workplace are seen as the critical area that needs attention. The findings are useful as reflective tools on curriculum design and delivery for the first Australian offshore campus in Malaysia.

Field of research: business education, employers feedback

Introduction

The need to have skilled worker and not just knowledge is a factor that is highly demanded for any job requirement. As reported by the Australian Industry Group report (2006), the demand for higher levels of skills, frequent updating of skills and excellent 'soft skills' as well as technical skills. The survey showed that over 90 per cent of the employers look for people who are flexible and adaptive, willing to learn on the job, team players, technically competent and committed to excellence (Thompson et al, 2008). The Higher Education Institutions (Universities and Colleges) are putting emphasis on higher education programmes that will encourage and foster skills and qualities in

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addition to ensuring a sound understanding of subject matter. There has been concern raised by the employers that they are not able to find graduates with the required skills (Hesketh 2000).

In a survey conducted in 2004 by the Central Bank of Malaysia, involving 312 companies, 77.6% of the respondents were of the view that Malaysian graduates lack the required skills to function effectively at the workplace. This issue has been one of the debated issues discussed among the academia in Malaysia, and other regions. Malaysia needs an education system that is market-driven in order to produce 'work-ready graduates'. The focus towards producing a 'work-ready graduates' should be on graduate attributes geared towards empowering graduates to thrive in the 21st century workplace and to function as productive and responsible citizens. In a knowledge-based economy, graduates must bring more than technical knowledge to the job. According to the Dearing Report (NCIHE, 1997) the primary purpose of higher education is to prepare students for the world of work. Graduates need to be given opportunities to develop generic attributes besides disciplinary knowledge. Generic attributes include communication skills, problem-solving skills, computer literacy, information literacy, ability and willingness to learn, and teamwork.

A degree alone is not enough to succeed in today's competitive job market. In a survey reported by the BBC, four out of 10 large employers in the United Kingdom struggled to fill graduate vacancies because of a shortage of applicants with the right skills. Another study done by Monash University in Australia, showed that more than one-third of foreign students graduated from Australian universities had very poor English skills (*The Malay Mail*, 2007). According to the study, all graduates tested had enough command of the language to cope with most situations but were still not capable of conducting a sophisticated discourse at a professional level. The study reported that 23.5% of students from Malaysia did not meet the required English standard.

Many universities nowadays, have adopted an outward-looking approach, and work closely with industries and employers. The Australia-based universities (Griffith University, University of Canberra, University of South Australia, and Curtin University of Technology) and the UK based such as, University of Leeds, University of Leicester and in the United States, for example, University of Texas and University of Pittsburg have identified specific generic competencies that graduates should develop to enhance their employability. The Kellogg Graduate School of Management (Northwestern University) treated students as "partners". The university worked closely with the industries and has introduced 50 new courses since 1995 to keep pace with the changes in the business world. Similarly, National University of Singapore's Business School is also providing a rigorous, relevant and rewarding business education that develops leaders for the global marketplace. Graduate employability is no doubt a central concern of contemporary higher education (Treleaven & Voola 2008). Research has proved that employability

requires the development of graduates attributes (Alexander 2006; Hoban et al 2004; Kember & Leung 2005, cited in Treleaven & Voola 2008)

Literature Review

Graduate Attributes and Industry Perspectives

Graduate employability is an important aspect of higher education industry. It evaluates the success and ability of the particular institution in producing work ready graduates. Employability has been used as a performance indicator for higher education institutions (Smith et al, 2000). Harvey (2001) has defined employability in various ways from individual and institutional perspectives. Individual employability is defined as graduates being able to demonstrate the attributes to obtain jobs. Commonly, institutional employability relates to the employment rates of the university graduates. Prior to this, Harvey and Howard (1999) cited in Treleaven and Voola (2008) suggested that graduates' success in their jobs depends more on graduates attributes than on narrow discipline specific degrees. Furthermore, Barrie (2004) indicates that the generic graduate attributes will directly relate the graduate outcomes to the employability. Graduate attributes as defined by the higher Education Council Australia (1992) report *Achieving Quality* as "the skills, personal attributes and values which should be acquired by all graduates, regardless of their discipline or field of study. In other words, they should represent the central achievement of higher education as a process".

In the previous research on graduate attributes based on employers perspectives, Knoblauch and German (1989) outlined few most highly sought after attributes for Cornell University Applied Economics and Business Management graduates. The attributes were enthusiasm, self-starting ability, general ability, working with others, oral communication and preparedness for the job. Sparks and Bradley (1994) also discovered that employers from hospitality industry places greater emphasis upon the graduates' practical skills, level of commitment and ability to deliver high levels of service. They have conducted survey on 197 hotels managers working in hotels comprising 75 rooms or more in Australia. Nevertheless, in Clarke's (1997) study based on 40 chief executives or managing directors from manufacturing and services industries under the Industry and Parliament Trust's Study Group on Employability, United Kingdom, concluded that employers are actually looking for the graduates who possess attributes of long life learning, flexibility and adaptability to changes as well as some generic skills of communication, teamwork, initiative, problem solving and decision making.

After Clarke's finding, employers in the retail industry rated affective skills, such as leadership and decision making as most important based on Nicholson & Cushman (2000). Two years later, Crosling and Ward (2002) carried out an extensive survey of employers of Monash University business graduates confirmed that the significant role of oral communication in the workplace. They further pointed that emphasis in university primarily on formal presentation is not an adequate preparation for workplace oral communication. The most often used forms of oral communication are informal work-

related discussions, listening and following instructions and informal conversations. In a recent research conducted at University Technology of Sydney, Nettleton et al (2007) interviewed the professional accrediting societies of Business and Information Technology to find out on work-ready graduate attributes. The nine professional accrediting societies highlighted five most important attributes: application of knowledge, communication skills, critical thinking and creative problem-solving, global perspectives and teamwork.

Besides studies from overseas supported that graduates generic attributes are required in the job market, the local studies also conclude that the local graduates must have generic attributes to acquire job in Malaysia. This is proven by an earlier press release by the Malaysian manufacturing and service sectors expressing the view that most employers were unfavourably inclined to employing graduates who did not have generic attributes (New Straits Time, 1998, cited in Quek 2005). In another study (Quek 2005) conducted on a group of employer (n=35) in Malaysia, it was reported that the employers expressed the importance of interpersonal skills, knowledge-acquiring skills, flexibility, value-improving skill, practical orientation abilities and cognitive skills as major contributors toward success in work performance. With all these attributes, Malaysian graduates will be more able to transfer learning from the classrooms to the workplace for success in work performance.

Curtin Graduate Attributes

Universities must initiate to integrate basic generic attributes which are required by the employers and incorporate effectively in the course work to produce work-ready graduates. For example, Curtin University of Technology, Curtin Business School (CBS) undertook a Professional skills Project to compile feedback from representatives from 7 disciplines, employers, students, the Centre for Educational Advancement (CEA), and the library to identify seven professional skills and develop them in the form of learning outcome objectives :communication (divided into writing, presenting and speaking out), computer literacy, information literacy, team working, decision making, critical thinking including problem-solving, and ethical and inter-cultural dimensions (Harpe et al 2000). Students, employers and government bodies expect that undergraduate university degrees will equip students, not only with the specific knowledge, skills and attributes of their field, but also with the professional and personal attributes relevant to their field of study (Scoufis, 2000). Therefore, Curtin University of Technology has developed nine Curtin Graduates Attributes shown in Figure 1.

Curtin's graduate attributes	Brief description
1. Apply discipline knowledge, principles and concepts	Apply discipline knowledge, understand its theoretical underpinnings, and ways of thinking; Extend the boundaries of knowledge through research.
2. Think critically, creatively and reflectively	Apply logical and rational processes to analyse the components of an issue; Think creatively to generate innovative solutions.
3. Access, evaluate and synthesise information;	Decide what information is needed and where it might be found using appropriate technologies; Make valid judgements and synthesise information from a range of sources.
4. Communicate effectively	Communicate in ways appropriate to the discipline, audience and purpose
5. Use technologies appropriately	Use appropriate and emerging technologies recognising their advantages and limitations.
6. Use lifelong learning skills	Use a range of learning strategies; Take responsibility for one's own learning and development; Sustain intellectual curiosity; know how to continue to learn as a graduate.
7. Recognise and apply international perspectives	Think globally and consider issues from a variety of perspectives; Apply international standards and practices within a discipline or professional area.
8. Demonstrate cultural awareness and understanding	Respect individual human rights; Recognise the importance of cultural diversity particularly the perspective of indigenous Australians; Value diversity of language.
9. Apply professional skills	Work independently and in teams; Demonstrate leadership, professional behaviour and ethical practices

Figure 1: Curtin Graduates Attributes

According to Graduates Attributes Policy at Curtin University of Technology, students are expected to develop these nine attributes while studying at Curtin. Graduates Attributes can be defined as “the qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include, but go beyond, the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents for social good in an unknown future” (Bowden et al 2000). The purpose of this policy is to ensure that graduates produced by Curtin University are able to fulfil the needs of industry. It is hope that what is been taught in class will have to be at par (if not the same) with what the industry are looking. Industry as one of the education stakeholders will have to be involved in the curriculum design. This will then help to ‘match’ what is being produce and the consumers (employers) need.

It was also reported in one of the researches (Bennett et al 1999) that employers were looking for work force that has the ability to think, learn and adapt. All these are

attributes that form the generic core competencies. If higher education is to meet the needs of the economy and the individual, it must seek actively to develop these generic core competencies. At the same time, Robert Gordon University, Aberdeen has developed a set of generic level learning outcomes templates which specify the levels that students should attain in the four areas identified by Lord Dearing which are knowledge and understanding, key skills, cognitive skills and subject-specific skills (Ellington, 1999). Furthermore, Barrie (2001) indicates that the generic graduate attributes will directly relate the graduate outcomes to the employability. In short, there have been many literatures done on designing course curriculum, generic attributes requirements and outcomes assessment. However, there are very few empirical studies discuss on measuring the graduates attributes demonstrated in the Malaysian workforce. Therefore, this study will serve as an exploratory research for an Australian offshore campus graduate attributes in meeting the local industry needs.

Methodology

The population of this study is all employers of Curtin Sarawak Campus Business Graduates since 2001. The sample of this study will be taken from employers, whom their employees are Curtin Sarawak Campus Business graduates who have graduated between the years 2001 to 2007. The first batch of graduates from Curtin University, Sarawak Campus was in the year 2001. The researchers sent questionnaires to all employers who have offered and are still offering employment opportunities to Curtin Sarawak Business graduates. Therefore, the sample for this study comprised of employers whom Curtin Graduates are currently working for. A self-administered specific study designed questionnaire is used in this study. A questionnaire is used for this study mainly because most of the questions asked are in the form of 5-point response format and close ended questions. Therefore, no close interaction such as interview is needed. The questionnaire consists of 23 items, which are derived from the nine Curtin Graduates Attributes. The first two questions are to collect company background where the Business Graduates are currently working at. The rest of the items are designed to measure how well the competencies of the students in the working environment match the graduate attributes constructed by Curtin University. The graduate attributes included in the questionnaire are thinking critically, evaluating information, communicating effectively, using technology appropriately, and utilizing lifelong learning, recognizing international perspective and demonstrating cultural awareness and understanding. The questionnaire also includes two open-ended questions. The first question seeks employers' opinions on the aspects that make a university program more relevant to industry needs, while the second question seeks employers' opinion on producing graduates who are competent and employable. All data collected from the questionnaires are analyzed using SPSS statistical software. Descriptive statistics are used to analyze the data.

Discussion Of Results

There were 250 companies approached for the survey from March-July 2008. As this is a mail survey, the response was slow and the team of researchers have to follow up by phone calls. Some companies found in the university database do not have Curtin business graduates working with them during the survey period. There were 42 completed questionnaire received by faxed and mailed, 3 incomplete questionnaires are not used for the analysis purpose. The response rate is about 17%, which is considered reasonable for a mail survey. Based on the collected questionnaires, the results are discussed in this section. Table 1 presents the mean score of each attributes rated by the employers of Curtin business graduates on their work performance. Overall, Curtin business graduate demonstrated satisfactory performance at their workplace. The average overall score on the twenty attributes was 3.52. Taking a score above 3.50 as positive, the outcomes of the study are discussed below.

Table 1: Work Performance of Curtin Business Graduates (n = 42)

Rankin	Attributes	Mean
1	Ability to adapt to new technologies.	3.90
2	Ability to use technology effectively in the work place to enhance his/her job output.	3.88
3	Ability to work in team.	3.67
4	Ability to communicate effectively.	3.64
5	Ability to work independently.	3.62
6	Ability to access information by using appropriate technologies, channels and resources.	3.60
7	Ability to demonstrate ethical practices.	3.60
8	Ability to sustain intellectual curiosity.	3.51
9	Ability to deliver ideas/solutions to the colleagues.	3.50
10	Ability to appreciate and understand individual differences in gender, cultures and languages.	3.50
11	Ability to demonstrate professional behaviour.	3.48
12	Ability to take responsibility for one's own learning and development.	3.43
13	Ability to think creatively to generate solutions.	3.38
14	Ability to synthesize and evaluate information gathered.	3.36
15	Ability in applying knowledge, principles and concepts in the work place.	3.31
16	Ability to apply logical and rational processes to analyze the problems.	3.24
17	Ability to understand and apply a range of learning strategies.	3.24
18	Ability to demonstrate leadership skills.	3.19
19	Ability to think globally and consider issues from a variety of perspectives.	3.07
20	Ability to apply international standards and practices within a discipline or professional area.	3.05

Overall, to what extent has Curtin Business Graduate **3.52** demonstrated the above attributes in your organization?

Attributes that highly satisfied is technology skills. Graduates are able to adapt to new technology (3.90), use technology effectively at the work place to enhance their job output (3.88) and use appropriate technologies, channels and resources to access information (3.60). Curtin learning environment being technology oriented, use of online resources such as Blackboard, WebCT, Moodles and others in teaching and learning, allows students to incorporate and use technology in their study. Three to four years in the University has helped to develop their technology skills further. The results also indicated that the graduates are to be able to work in team (3.67) or independently (3.62), and many graduates are able to demonstrate ethical practices (3.60). In addition, attribute associated with communication skills (3.64) also have mean score of above 3.50 in value. All these skills are highly valued by many industries and employers, and Curtin business graduates have these competencies.

Despite being an international campus in Sarawak with 17% of the international student population and staff members come from 25 different countries, yet feedback from the employers pointed invariably to the lack of international perspective of the graduates. Ability to think globally and consider issues from a variety of perspectives (3.07) and ability to apply international standards and practices within a discipline or professional area (3.05) have the lowest mean score. In terms of appreciate and understand individual differences in gender, cultures and languages (3.50) it has satisfactory score. Furthermore, the mean score for ability to take responsibility for one's own learning and development (3.43) and ability to understand and apply a range of learning strategies (3.24) are moderately low. Collectively, this shows that the graduates have not clearly demonstrated life-long learning attitude at the workplace. Many graduates seem to be relatively weak in creative thinking skills and problem solving skills. The mean score on the ability to think creatively to generate solutions (3.38) and ability to apply logical and rational processes to analyze the problems (3.24) are below 3.50 in value. The responses also indicated the graduates are not able to demonstrate leadership skills (3.19) and apply discipline knowledge, principles and concepts in the work place (3.31).

Limitations And Conclusions

One of the major limitations of this study is the number of respondents. The mail questionnaire did not receive well responses. Therefore, the results may not be representative based on the large pools of employers in the market. There is a need to enlarge the number of data by using a better strategy. One of ways that can be used is online questionnaire. Besides that, the self-administered questionnaire that focuses on quantitative data collection method may not represent the overall feedback from employers. This is a limitation under research methodology chosen. A focus group discussion can be proposed to find out in-depth ideas from industry.

The research findings showed that the employers involved in this survey are very much satisfied of the Curtin graduates attached to their organizations. The graduates are much more adaptable to the used of technological skills at the work place. There is enthusiasm that the graduates showed when they used technology in their learning. This is true as most of their learning process is engaged with the use of technology device such as online materials, online journals, blackboard and Moodle in their learning. The engagement that they had with technology at the University has managed to get them to be fast learner at the workplace. The nature of the business curriculum, which put greater emphasis on project-based assessment, has also equipped them with teambuilding skills. This is shown in the survey that the graduates are able to adapt easily working as a team.

However, there are few areas where the graduates are not able to perform to the employers' expectations. Skills like critical skills, problem-solving skills, and ability to apply discipline knowledge and concepts in the workplace are seen as the critical area that needs attention. These areas have to be put forth on the planning of curriculum in the university. It is recommended that the curriculum emphasizes opportunities to engage critical thinking processes and critical reflection in class and online. The range of learning activities and assessment tasks that provide a learning platform for business students should be re-assessed to make sure that the skills are transferable. Skills like critical thinking skills and problem-solving skills, and application skills should be emphasized at the first year level. The curriculum mapping that has been practised in designing the curriculum could be used as a benchmarking to map the learning outcomes and making sure that there is no gap through out the graduates learning process. This will help the graduates to understand what is needed from them and they are able to better present themselves when they enter the workforce.

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