Employability Skills: Enhancing Future Employees Today

Hazril Izwar Ibrahim [1] & Amar Hisham Jaaffar[1]

[1] School of Management, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia.

Abstract

Studies examining employers' perceptions of employability skills acquired by higher education undergraduates' students after their participation in Work-integrated Learning (WIL) programs are limited. Employers' perspective with regard to applicability of WIL programme is important to ensure undergraduates are provided with the relevant skills; to facilitate the transfer of the acquired skills; and to contribute to the of profiling industry-relevant skills and competencies for higher education graduate programmes. This study examines 105 employers' perception of the importance of alignment between university WIL programmes and what is required by employers, undergraduate's employability skills satisfaction rate, and the most important employability skills required in the future. Findings indicate majority of the employers perceived that there is alignment between what is taught in university and workplace environment and majority of the employers indicated to have high satisfaction of the undergraduates' employability skills except for entrepreneurial skills. Employer also opined that undergraduate's communication skills; analytical and problem solving skills; and ability to adapt to and act in new situation matter to them most in next five to ten years. The findings provide insight regarding employers' overall WIL experience and suggestions for improvement.

Keyword: Work-integrated learning, employability skills, employer's perspectives, employability

Introduction

The sweeping changes ushered by the global economic activities has shifted the reliance from industrialization to knowledge-based activities and this has greatly impacted on the employers' expectation of the skills embedded in the graduating university students (Allen & van der Velden, 2012; Voogt & Roblin, 2010). This transformation consequently leads to a heightened demand for both knowledge and socio-communicative skills. Graduates attractiveness to their prospective employers and their survival in the workplace depends on the employability skills.

In other words, the survival of any business is no longer confined to their employees having technical knowledge and skills, but those hard skills must be supported by the attainment of soft skills. The inability to effectuate this requirement has been identified as one of the causes of the skills gap amongst graduates (Bradshaw, 1989; Mayhew & Keep, 1999). In the Malaysian context, the Ministry of Higher Education (MOHE) has stress that all the graduates need to have additional skills to complement their knowledge in order to employable after their graduation to achieve national manpower needs with 75 percent of graduates employed in their relevant fields within six months after graduation (Jainudin, Francis, Tawie, & Matarul, 2015). In fact, recent survey in Malaysia has revealed that 62 percent of business entities in Malaysia faced difficulty in finding workers with the right skills, while 48 percent of the business entities has identified the lack of talent as a constraint for future growth (Thornton, 2013).

In recent years, Work-Integrated Learning (WIL) programs for undergraduate students (e.g. internship/placement/practicum; industry attachment; research assistantship; teaching assistantship; job shadowing; volunteering; and study abroad) continue to gain recognition as an instrument for advancing student hard and soft skills acquisition and enhancing graduate employability (Drysdale et al., 2016). The concept of WIL encompasses a range of activities and experiences that draw mutually from formal coursework with business entities or workplace learning in a meaningful way (Brown, 2010). According to Patrick et al. (2008), WIL can be defined as as "a valid pedagogy and as a means to respond to demands by employers for work-ready graduates, and demands by students for employable knowledge and skills" (p.5). Based on Experiential Learning Theory (ELT), WIL is designed in holistic adaptive learning process that combines experience, conceptualization, cognition and behaviour. WIL involved a three-way partnership between the employer, the student, and the tertiary institution. From the perspective of industries, WIL programmes can enhance employability and contribute to the preparation of graduates that meet the demands of dynamic, complex professions (Oliver, 2015; Smith & Worsfold, 2014). The overwhelming evidence pertaining to the benefits of internship/WIL to improve students' employability has been established worldwide.

The purpose of this study is to explore employers', both from manufacturing and service sector, perceptions of WIL and the employers' satisfaction with the exposure that the

students had experienced during their participation in WIL. The following research questions are proposed for the study:

RQ1. How do the employers perceive the alignment between university WIL programmes and what is required in the industry?
RQ2. How satisfied are the employers with the undergraduate students' employability skills?
RQ3. What is the opinion of the employer regarding the most important skills and competencies for undergraduates in future?

The knowledge gained from this research is useful to a number of stakeholders such as universities/higher education institutions; professional bodies in their curriculum/policy design; students considering on securing WIL placements in the future; and employers contemplating whether to become a WIL industry partner. The remainders of the paper are structured as follows. Next, the literature review is presented. The subsequent section presents research methodology and results. The paper concludes by highlighting discussion and conclusion; explaining the limitations of the study; and providing suggestions for future research.

Literature Review

WIL which is grounded on experiential learning; work-based learning and cooperative learning, exists in various forms including internship; placements; fieldwork; practicum; client-based project and so on (Ferns, Campbell, & Zegwaard, 2014). In Malaysia, the term of WIL generally is closely associated with industrial internship programs. Studies related to WIL programmes usually involved three mains stakeholders including the students; employers; and higher-education providers. Studies concerning WIL from employers perspectives includes Elijido-Ten and Kloot (2015); Jainudin et al. (2015); Khalid et al. (2014); and Maelah et al. (2014); unanimously agree concerning the various benefits that has been obtained by undergraduate students from their internship particularly in term of technical and soft skills required in the workplace. Nevertheless, studies which focused on the perception of the employers operating different business activities is lacking (Jackson, 2013) except for the study conducted by Elijido-Ten and Kloot (2015) which focused on the perception of employers from large firms and SMEs.

Employability Skills

Employability skills are referred to as basic skills that are essential for getting, keeping, and doing well in a job (Robinson, 2000). Employability skills are also described as teachable skills (Dacre Pool & Sewell, 2007) and transferrable (Yorke & Knight, 2006). Furthermore, it can be observed that the definition of employability skills relates to the skills that are not job specific, but are skills which cut horizontally across all industries and vertically across all job levels (Omar et al. 2012). These employability skills are sometimes referred to as generic, key, professional and non-technical skills (Yorke & Knight, 2006). Based on employability skills framework developed by Jackson and Chapman (2012), employability skills among graduates comprises of working effectively with others (e.g. task collaboration, team working, social intelligence, cultural and diversity awareness, influencing others, conflict resolution); communicating effectively (e.g. verbal communication, giving and receiving feedback, public speaking, meeting participation, written communication); self-awareness (e.g. meta-cognition, lifelong learning, career management); thinking critically (e.g. conceptualization, evaluation); analyzing data and using technology (numeracy, technology, information management); problem solving (e.g. reasoning, analyzing and diagnosing, decision making); developing initiative and enterprise (e.g. entrepreneurship-intrapreneurship, lateral thinking-creativity, initiative, change management); self-management (e.g. self-efficacy, stress tolerance, work-life balance, self-regulation); social responsibility and accountability (e.g. social responsibility, accountability, personal ethics, organizational awareness); and developing professionalism (e.g. efficiency, multitasking, autonomy, time management, drive, goal and task management). This framework suggested that the employability skills are generic across countries and academic discipline, further providing evidence for the alignment between this employability skills obtained during WIL and employers' requirement (Jackson & Chapman, 2012).

Research Methodology

A survey was conducted using a structured questionnaire to determine the perception of the employers from manufacturing and services industries in three principal areas: the alignment between what the undergraduate trainees/interns are taught in university and what is required of them during their employment; employers' satisfaction with undergraduate trainees/interns employability skills; and their opinion with regard to three most importance skills and competencies for new higher education undergraduates in the next five to ten years. The

questionnaire used in this study was adapted from the Australian Learning and Teaching Council's (ALTC) Work Integrated Learning Report (2009). The sample for the study is employers based in Peninsular Malaysia based in the manufacturing and service sectors. Employers in the manufacturing sector were selected from the Federation of Malaysian Manufacturers online directory and employers from the service sector were selected from the Malaysia Service Directory available on the MATRADE website. 500 surveys were distributed through mail survey addressed to the Human Resource or Personnel Manager of the respective companies. Only 105 surveys were returned indicating 21.0 per cent rate of return.

The questionnaire consists of four parts:

(1) Background of employer's industries types (Manufacturing Industry and related sectors; and Service Industry and related sectors).

(2) Perception of employer with regard to the alignment between what students are taught in university and what is required of them during employment.

(3) Employer's satisfaction with regard to undergraduate trainees/interns' employability skills acquired during internship/industrial training programmes.

(4) Employer's opinion with regard to three most importance skills and competencies for new higher education undergraduates in the next five to ten years.

Data Analysis

The findings were analysed using statistical analysis using SPSS Version 20 software package. The crosstabs function in descriptive statistic was used to examine the employers' companies characteristics whether manufacturing or services and whether this influenced their perceptions toward the alignment between what students are taught in university and industry's need; and employer's satisfaction regarding to undergraduate trainees/interns employability skills developed during their internship/industrial training programmes. Descriptive analysis was also used to analyze employer's opinion with regard to three most importance skills and competencies for higher education undergraduates in the next five to ten years.

Results and Discussion

Profile of Respondents

The 105 employers responded, 50 (47.6%) were from manufacturing sectors and 55 (52.4%) were from services sectors. Table 1 below indicates the distribution of employer's company

sector based on their main business activities. With respect to manufacturing sector, the highest employers were from electronics and electrical products industries, while with regard to service sectors the highest employer were from “other service” sectors.

Table 1

Respondent Companies: Manufacturing and Services

Description	**Frequency**	**Percentage**
Manufacturing	**50**	**47.6**
Electronics and electrical products	25	23.8
Chemicals and chemical products	1	1.0
Petroleum products	1	1.0
Wood and wood product	2	1.9
Rubber product	1	1.0
Construction-related products	2	1.9
Food products	5	4.8
Beverages	1	1.0
Others	12	11.4
Services	**55**	**52.4**
Finance and insurances	15	14.3
Real estate and business service	3	2.9
Transport and storage	2	1.9
Communication	3	2.9
Wholesale and retail trade	4	3.8
Accommodation and restaurant	1	1.0
Utilities	3	2.9
Government services	6	5.7
Other Services	18	17.1

Employer’s Perception on the Undergraduate Trainees/Interns

Based on Table 2, 52.8 percent of employers from service sectors and 52 percent from manufacturing sectors perceived that there were alignments (moderately and extremely)

between what undergraduate trainees/interns are taught in university and what is requiredby the employers; while around 20 percent of employers from services and manufacturing sectors viewed neither aligned nor non-aligned; and around 30 percent of employers from services and manufacturing sectors perceived less aligned. In general, there were no significant difference between the perception of employer from service and manufacturing sectors with regard to the alignment between what undergraduate trainees/interns are taught in university and what is required of them in employment. The results support the findings of Jackson (2013) which revealed the degree of alignment among the employer and higher education providers regarding the provision of employability skills in undergraduate programmes. This result also counters the report by CIMA and Talent Corp (2014) in their survey of landscape of Malaysian employability skills which found that there was a mismatch between higher education providers and employers expectation.

Table 2

Cross tabular analysis of employer's company main activity with respect to the perception on the alignment between what students are taught in university and what required of them in employment.

Company Main Activity	**G1 (%)**	**G2 (%)**	**G3 (%)**	**G4 (%)**	**G5 (%)**	**p value**
Services	0 (.0)	15 (27.3)	11 (20.0)	25 (45.5)	4 (7.3)	0.885
Manufacturing	0 (.0)	15 (30.0)	9 (18.0)	24 (48.0)	2 (4.0)	

Note: G1 = Not aligned at all; G2 = Less aligned; G3 = Neither aligned nor non-aligned; G4 = Rather aligned; and G5 = Extremely aligned; $p < 0.05$; **$p < 0.001$.

Based on Table 3, majority of employer from service and manufacturing sectors have almost similar perceptions on the undergraduate's employability skills such as interpersonal; entrepreneurial; communication; thinking and management. Nevertheless there is significant differences between the employer from manufacturing and services sectors with respect to their degree of satisfaction on computing skill ($p<0.05$). In general, majority of the skills except entrepreneurial skills recorded more than 70 percent of respondents who are satisfied and very satisfied. In contrast, entrepreneurial skills recorded only 40 percent of respondent's satisfaction. This results is consistent with study Jackson and Chapman (2012) which found that there was strong support for employability skills improvement in after internship

programmes and the employers are in agreement concerning their satisfaction with interpersonal, communication, thinking, management, and computing skills. This result also demonstrates that the undergraduate who participated in WIL programmes are able to work effectively with others; communicating effectively; thinking critically; developing professionalism; and analyzing data and using technology. In relation to the low perception to entrepreneurial skills, this may occur due to issues with ambiguity in the precise meaning of entrepreneurial skills to employers (Jackson, 2013). With regard to the differences between the perception of employers from manufacturing and services sector on undergraduates' computing skills, the nature of industries itself may influence the perceived importance of computing skills (Torkzadeh & Lee, 2003).

Table 3

Cross tabular analysis of employer's company main activity with respect to the employer's satisfaction regarding to undergraduate trainees/interns employability skills developed through internship/industrial training programmes.

Skills	**Company's Main Activity**	**G1 (%)**	**G2 (%)**	**G3 (%)**	**G4 (%)**	**G5 (%)**	**p value**
Interpersonal Skills	Services	0 (.0)	3 (5.5)	9 (16.4)	30 (54.5)	13 (23.6)	0.908
	Manufacturing	0 (.0)	3 (6.0)	8 (16.0)	30 (60.0)	9 (18.0)	
Computing Skills	Services	0 (.0)	1 (1.8)	6 (10.9)	30 (54.5)	18 (32.7)	0.079 *
	Manufacturing	0 (.0)	1 (2.0)	3 (6.0)	39 (78.0)	7 (14.0)	
Entrepreneurial Skills	Services	0 (.0)	6 (10.9)	21 (38.2)	22 (40.0)	6 (10.9)	0.412
	Manufacturing	2 (4.0)	5 (10.0)	21 (42.0)	20 (40.0)	2 (4.0)	

Communication Skills	Services	0 (.0)	7 (12.7)	6 (10.9)	26 (47.3)	16 (29.1)	0.453
	Manufacturing	1 (2.0)	5 (10.0)	9 (18.0)	26 (52.0)	9 (18.0)	
Thinking Skills	Services	1 (1.8)	5 (9.1)	6 (10.9)	27 (49.1)	16 (29.1)	0.520
	Manufacturing	0 (.0)	5 (10.0)	10 (20.0)	25 (50.0)	10 (20.0)	
Management Skills	Services	1 (1.8)	5 (9.1)	9 (16.4)	22 (40.0)	18 (32.7)	0.132
	Manufacturing	1 (2.0)	5 (10.0)	8 (16.0)	30 (60.0)	6 (12.0)	

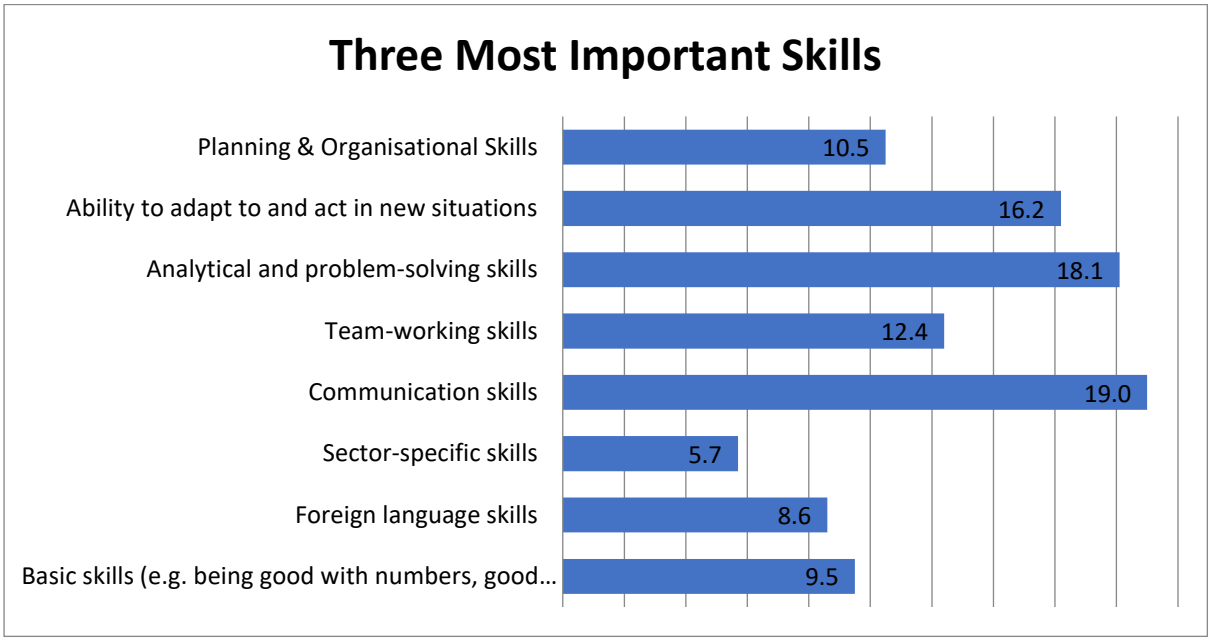
Note: G1 = Very Dissatisfied; G2 = Dissatisfied; G3 = Neither; G4 = Satisfied; and G5 = Very Satisfied; $p < 0.05$; $^{**}p < 0.001$.

Employer's Opinion on the three most importance skills for new higher education undergraduates in the next five to ten years.

Figure 1 demonstrates the opinions of the employer's with respect to three most important skills and competencies for new higher education undergraduates in the next five to ten years. Communication skills record the highest score (19.1 percent), follow by analytical and problem solving skills (18.1 percent), and ability to adapt to and act in new situation (16.2 percent). This result is in accordance with the survey by Jackson and Chapman (2012) which agreed on the importance of communication skills as pivotal components of the graduate toolkit. Furthermore, the results are also in agreement with the concern on Malaysian graduates lacking in analytical thinking, problem-solving and communication abilities (World Bank, 2014c).

Figure 1.

Three Most Important Skills and Competencies



Conclusions and recommendations

This study examined the perceptions of manufacturing and service sector employers in three principal areas including the alignment between the undergraduate trainees/interns are taught in university and what is required of them in employment; their satisfaction with undergraduate trainees/interns employability skills; and their opinion with regard to three most importance skills and competencies for new higher education undergraduates in the next five to ten years. A survey was conducted using a structured questionnaire to 105 employers from manufacturing and services sectors. Consistent with previous research, this study found the degree of alignment among the employer and higher education providers regarding the provision of employability skills in WIL programmes. Furthermore, majority of employers from services and manufacturing sectors were consistently satisfied and very satisfied with undergraduate trainees/interns employability skills including interpersonal; communication; thinking and management except for entrepreneurial skills which recorded only 40 percent of respondent's satisfaction. However, there is a significant difference between the employer from manufacturing and services sectors with respect to their degree of satisfaction on undergraduate computing skill. Communication skills; analytical skills and problem solving; and ability to

adapt to and act in new situation has been regarded as three most critical skills and competencies in the next five to ten years.

In summary, this study provides insight regarding the benefits of WIL programmes and skill and competencies developed by undergraduates during internship programmes from the perspective of employers. The information provided by employer's regarding to undergraduate WIL programs will contribute to the profiling industry-relevant skills and competencies in higher education graduate programmes. Furthermore, this study responds effectively to developing economies' need for efficient and value-adding higher education graduates by refining what is most required skills and competencies in the modern higher education undergraduate. Furthermore, the employer's perception regarding to undergraduate's skills provision in WIL programmes are considered vital for university's mapping and benchmarking process to cater the needs of domestic employer. This study also provides valuable insights for the Malaysia higher-education providers of industry-relevant skills and competencies, and to assist them in evaluating their curricullum. There are two limitations to this study. First, the study did not discriminate the firm's size of the firms involved since previous study has reported that large firms offered a more structured WIL training regime while SMEs offered more flexible WIL training regime (Elijido-Ten & Kloot, 2015). Second, the questionnaire responses by the employer should be interpreted with caution because perceptions and self-insight are subjective and may not be reflective of reality. Further research may take into consideration a comparison of various WIL programmes across institutions and disciplines. Future studies can also use the reflection approach and interview to better explain the employability skills developed through WIL programmes.

References

Allen, J., & van der Velden, R. (2012). Skills fof the 21st century: Implications for education. *Maastricht: Maastricht University*.

Bradshaw, D. (1989). Higher education, personal qualities and employment: Teamwork. *Oxford Review of education, 15*(1), 55-71.

Brown, N. (2010). WIL [ling] to share: an institutional conversation to guide policy and practice in work-integrated learning. *Higher Education Research & Development, 29*(5), 507-518.

CIMA, & Talent Corp. (2014). *Ready for business: Bridging the employability gap. The Malaysian perspective*. Retrieved from http://www.cimaglobal.com/Documents/Our%20locations%20docs/Malaysia/Partnerships/Ready%20for%20Business%20Malaysian%20Perspective.pdf

Dacre Pool, L., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education+ Training*, *49*(4), 277-289.

Drysdale, M., McBeath, M. L., Johansson, K., Dressler, S., Zaitseva, E., Helyer, R., & Helyer, R. (2016). Psychological attributes and work-integrated learning: An international study. *Higher Education, Skills and Work-Based Learning*, *6*(1).

Elijido-Ten, E., & Kloot, L. (2015). Experiential learning in accounting work-integrated learning: a three-way partnership. *Education+ Training*, *57*(2), 204-218.

Ferns, S., Campbell, M., & Zegwaard, K. (2014). Work integrated learning. *WIL in the Curriculum HERDSA Guide. NSW: Higher Education and Development Society of Australasia Inc*.

Jackson, D. (2013). Student perceptions of the importance of employability skill provision in business undergraduate programs. *Journal of Education for Business*, *88*(5), 271-279.

Jackson, D., & Chapman, E. (2012). Non-technical competencies in undergraduate business degree programs: Australian and UK perspectives. *Studies in Higher Education*, *37*(5), 541-567.

Jainudin, N. A., Francis, L., Tawie, R., & Matarul, J. (2015). Competency of Civil Engineering Students Undergone Industrial Training: Supervisors' Perspectives. *Procedia-Social and Behavioral Sciences*, *167*, 245-249.

Khalid, N., Hamid, N. A. A., Sailin, R., Othman, N., Awang, A. H., & Nor, M. F. M. (2014). Importance of Soft Skills for Industrial Training Program: Employers' Perspective. *Asian Journal of Social Sciences & Humanities Vol*, *3*, 4.

Mayhew, K., & Keep, E. (1999). The assessment: knowledge, skills, and competitiveness. *Oxford Review of Economic Policy*, *15*(1), 1-15.

Oliver, B. (2015). Redefining graduate employability and work-integrated learning: Proposals for effective higher education in disrupted economies. *Journal of Teaching and Learning for Graduate Employability*, *6*(1), 56-65.

Omar, N. H., Manaf, A. A., Mohd, R. H., Kassim, A. C., & Aziz, K. A. (2012). Graduates' employability skills based on current job demand through electronic advertisement. *Asian Social Science, 8*(9), 103.

Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL (Work Integrated Learning) report: A national scoping study [final report]*: Queensland University of Technology.

Robinson, J. P. (2000). What are employability skills. *The workplace, 1*(3), 1-3.

Smith, C., & Worsfold, K. (2014). WIL curriculum design and student learning: a structural model of their effects on student satisfaction. *Studies in Higher Education, 39*(6), 1070-1084.

Thornton, G. (2013). Global Economy in 2013: Uncertainty Weighing on Growth. *Grant Thornton International Business Report*.

Torkzadeh, G., & Lee, J. (2003). Measures of perceived end-user computing skills. *Information & Management, 40*(7), 607-615.

Voogt, J., & Roblin, N. P. (2010). 21st century skills. *Discussienota. Zoetermeer: The Netherlands: Kennisnet*.

World Bank. (2014c). *Malaysia Economic Monitor: Boosting Trade Competitiveness. June 2014*. Retrieved from

Yorke, M., & Knight, P. T. (2006). Embedding employability into the curriculum.