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Soft Skills Construct For Architecture Graduate In Accordance With Industries Requirement

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Abstract

In line with the requirements of the job market, implementation of soft skills according to the field of study is important in order to help graduates understand and apply soft skills in the workplace. Construction industry is one of the major industries that affect the development of a country. The emphasis of soft skills aspect among architecture's graduates is one of key elements in producing graduates who are competitive, efficient, durable and flexible when dealing with situations in the workplace. However, employers nowadays are dis-satisfied with the quality of graduates that not meet the requirements of the current job market thus become one of causes for incompetence graduates. This was proven by the number of unemployed graduates in Malaysia especially for architecture's graduate that still high despite the increasing of job vacancies. One of the main reasons for this issues arise because of a mismatch between the elements of soft skills required by employers and soft skills possessed by graduates. This study aims to identify the constructs of soft skills for graduates of diploma in architecture in Malaysian polytechnics according to industries requirement based on literature review. Seven constructs of soft skills for architecture's graduate was listed including communication skills, negotiation skills, environment awareness, self management, problem solving, critical thinking and creative thinking. The importance and needs of soft skills in producing highly skilled architecture's graduates will also be discussed.

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Introduction

The increasing number of unemployed graduates is one of the challenges that faced not only by educational institutions, but also by the industries. According to a report released by International Labour Office (ILO) until 2013, the average number of world unemployment is 202 million people and Southeast Asia ranked second highest by employment-to-population ratio. According to Graduate Trace Study Report by Ministry of Education (MOE) in 2012, 63.7% of total unemployment in Malaysia are polytechnic graduates in technical fields. The increasing number of unemployment is an issue that should not be taken for granted by all parties.

Despite having excellent academic qualifications, graduates still fail to put themselves in the working sector. According to the ILO (2014), among the challenges faced in addressing the unemployment issues is employment are not expending in parallel with the fast growth of labor force. The most obvious weakness can be detected when graduates can not keep pace with the rapid technology changes and industrial requirements (John & Donna, 2009; McIntosh, 2008 and Knight & Elliot, 2008). Apart from graduates attitude, lack of ethics and moral values, technology skills, lack of self-confidence and ability to adapt in the workplace also caused the increasing number of unemployment (MOE Graduate Trace Study Report, 2012 and Nair, Patil & Mertova, 2009). This suggests that soft skills play an important factor in addressing the issue of unemployment among graduates.

Based on the increasing of unemployment among youth especially, this study are focusing on the soft skills requirements by the industry to makesure graduates are able to be competitive in the workplace.

Research Objective

This study aims to identify the constructs of soft skills for graduates of diploma in architecture in Malaysian polytechnics according to industries requirement based on literature review. This study also will evaluate the effect of soft skills in decreasing the unemployment among architecture graduates.

Soft Skills Versus Employment

Current employment scenario

The important of soft skills often been emphasized by employers either in Malaysia or globally. According to Kapsos (2013) in his research about global employment trends for youth, listed skill mismatches, disproportionate economic downturns, job search barriers and business development & creation barriers as the four keys barriers in secure employment. Lack of appropriate soft skills by graduates affect in job application because most of the graduates are young and inexperienced.

In facing the economic boom in the globalization era, employers and industries requires employees to have various additional skills (Hamzah, Bakar&Kazilan, 2006; Nordin, Abd Hamid &Jabor, 2005 and National Centre for Vocational Education Research (NCVER), 2003). According to Helmler (2010), Nair, Patil&Mertova (2009) and McQuick&Linsay (2005), soft skills essential to the job market in the world because the high competition in job market cause employers to hire employees that have the complete package of skills in order to increase national developments. It's also discussed by Stevenson & Bell (2009) and Gibbs (2006), which explains the emphasis on soft skills aspects among students in producing

graduates who are competitive, efficient, durable and flexible when dealing with situations in the workplace.

However, the educational institutions still underestimate the issue of soft skills among students and are not ready to produce a quality graduates that affects the increasing number unemployment among graduates (John & Donna, 2009; Stevenson & Bell, 2009 and David, Michael & John, 2008). This is clearly indicated in the Report of Labor Statistics and Human Resources in 2012 issued by the Ministry of Human Resources in 2013 that shows the number of unemployed graduates in Malaysia is still high despite the increased job vacancies. Only about 5.3% of the graduates manage to be employed despite the vacancies in construction industries recorded by the Ministry of Human Resources are more than 300,000 vacancies. Graduate Trace Studies Report by MOE in 2013 also showed an increase in total number of unemployed graduates in architecture diploma in polytechnic by 1.8% compared to 2012.

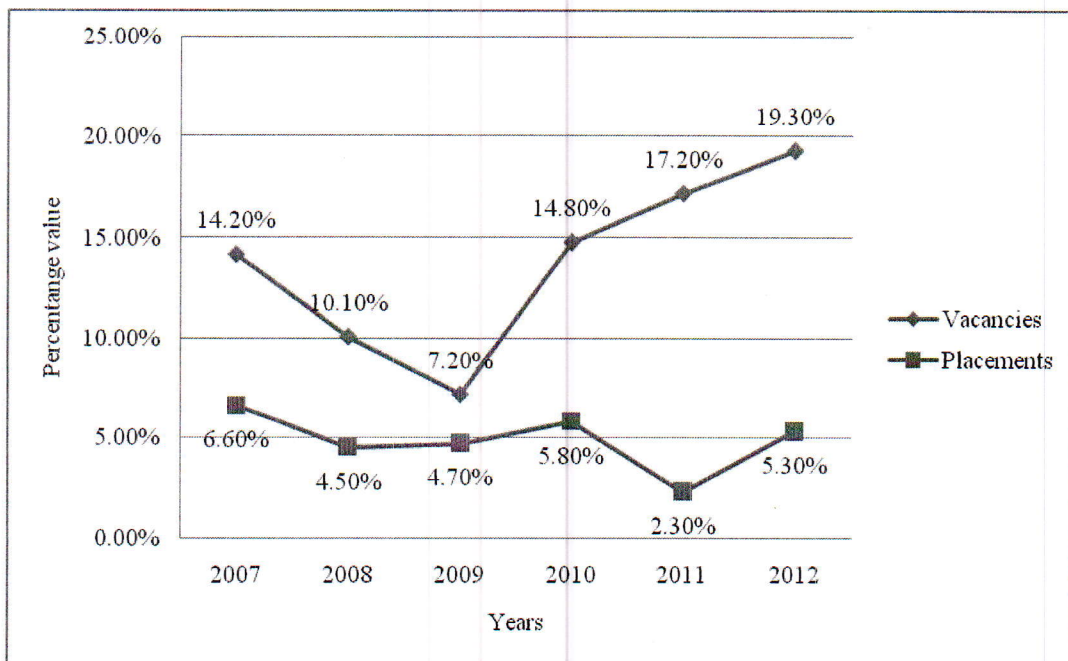


Figure 3.1: difference between vacancies and placements in construction industries

Based on figure 3.1, it clearly shows the gap between placements and vacancies in construction industries in Malaysia from years 2007 to 2012 as reported in Labor Statistics and Human Resources Report in 2012. The large gap between placements and vacancies prove that graduates are still having difficulties to put themselves into the workplace. This is proven by Graduate Trace Studies Report by MOE in 2013 which stated majority of unemployed graduates require additional training program to improve their soft skills include English language skills, ICT skills, career development, interpersonal skills and entrepreneurial skills. According Shutt, Iles and Zhu (2010), Rasul, Ismail, Ismail, Rajuddin & Rauf(2009) and Nair, Patil&Mertova (2009), mismatch between skills required by employers with skills possessed by graduates is one of the causes of unemployment.

Previous studies showed that soft skills play an important factor in addressing the issue of unemployment among graduates. According to Cox & King (2006), Gibbs (2006) and McQuick& Lindsay (2005), employers now a days unsatisfied with the quality of graduates

that lack of skills to meet the requirements of the current job market. It can be concluded that soft skills are one of the skills needed in improving the quality of graduates. The increasing of unemployment could be reduced if graduates produce by HEI have additional skills which coincides with the job requirements.

Soft skills construct for architecture

The existence of k-economy and globalization increase the needs of human resource development among professional and semi-professional that knowledgeable and skilled. Along with the rapid development of the country, graduates must successful in both academics and soft skills to compete in the workplaces. According to Gibbs & Curtin (2004), knowledge, innovation, expertise and soft skills are basic skills that must be possessed by employees to face the economic development. In order to achieve Vision 2020, Malaysia must be competitive to be in par with the other developed countries.

Soft skills possessed by graduates should be applied at higher institutions. According to the Malaysian Report of Labor Statistics and Human Resources in 2013, the highest unemployment rate involves graduate with tertiary education. In order to achieve the National Education Philosophy in producing knowledgeable and qualified human capital, various skills and education needs to be implemented include spiritual, emotion, physical, intellectual and social elements. According to the Department of Polytechnic (2011), implement of soft skills in the education programs parallel with the third and fourth transformation direction of polytechnic to empower students with knowledge and skills.

The need in producing graduates with education, skills, creative and innovative, progressive attitude and critical thinking caused soft skills issues often discussed globally (Hinchliffe & Jolly, 2011 and Shakir, 2009). The application of these skills should be implementing in education institutes to reduce the gap between the industry and graduates also to meet the requirements of industries. According Kapsos (2013), solution that can be taken to reduce skill mismatches are by facilitating access to vocational training, provide entrepreneurship training programs, provide soft and life skills training programs and linking employers with educational institutions.

In line with the requirements of the job market, MOE has developed the Soft Skills Modules for Higher Education Institutional in 2006. The module produced as a basis guideline for HEI in implementing soft skills elements in the curriculum and to produce competitive graduates. Studies on soft skills also involve other developed countries such as Australia and the United Kingdom (Curtis, 2004). Table 3.1 shows the terms and elements of soft skills used by some countries.

Table 3.1: *Terms and elements of soft skills used by some countries*

Soft skills (MOE, 2006)	Employability skills (DEST, 2006)	21st century skills (P21 framework, 2009)
Communication skills	Communication skills	Communication & collaboration
Critical thinking & problem solving	Problem solving skills	Critical thinking & problem solving
-	-	Creativity & innovation
Life long learning & information management	Planning & organising skills	Information literacy
-	Technology skills	Media literacy
-	Life long learning skills	ICT literacy
Morale & professional ethics	-	Social & cross cultural skills
Entrepreneur skills	Initiative & enterprise skills	Productivity & accountability
-	Self-management skills	Flexible & adaptability
-	-	Initiative & self direction
Teamwork skills	Teamwork skills	-
Leadership skills	-	Leadership & responsibility

Several studies have been conducted in exploring soft skills among architecture graduate in different education level. Shannon (2012) in her research on employability attributes of architecture graduates in Australia state that the employability skills prioritised in hired architecture graduates are self-management, communication skill, creative, initiative and enterprise, planning and organisation, problem solving, lifelong learning and technology. According to Savage, Davis & Miller (2009), Building Environment and Design (BED) stakeholders listed sixteen soft skills element that should be possessed by graduate in universities including research skill, critical and conceptual thinking, analysis and problem solving, information literacy and computing, ability to work well in team, ability to learn new things, technically capable, skills and knowledge in their field, tolerance of others, ability to present well, ethics and corporate responsibility, articulate, ability to work autonomously, flexible to a variety of work situations and prepared to work hard.

As noted by previous researchers, the need of soft skills in graduates are important to secure employment after graduation. To determine the elements of soft skills required by architecture graduates in accordance with construction industries requirement, researchers

have listed seven attributes of soft skills include communication skills, negotiation skills, environment awareness, self management, problem solving, critical thinking and creative thinking. These skills are selected based on job specification for graduates of architecture as state by selected agencies. Table 3.2 shows the elements of soft skills needed by architecture graduates.

Table 3.2 : Elements of soft skills needed by architecture graduates

Council for Industry and Higher Education (CIHE)	Board of Architect Malaysia (LAM)	United States Occupational Information Network (O*Net)	Australian Institute Of Architects (AIA)
<i>Collaboration with others</i>	<i>Management practice and law</i>	-	<i>Negotiation skills</i>
<i>Self management</i>		<i>Self management</i>	-
<i>Respond to social & ethical concerns</i>	<i>Environment</i>	-	<i>Environmental concern</i>
<i>Effective communication skills</i>	<i>Communication</i>	<i>Speaking skills</i>	<i>Communicate effectively</i>
-	-	Reading comprehension	-
Lifelong learning	-	Active learning	-
Time management	-	Time management	-
Computer skills	Technology	-	-
<i>Problem solving skills</i>		<i>Complex problem solving</i>	<i>Analyse & critically assess problem</i>
-	<i>Cultural contact</i>	<i>Critical thinking</i>	
-		Decision making	-
flexible	-	-	-
adaptable	-	-	-
<i>Design skills</i>	<i>design</i>	-	<i>Creative thinking</i>

Based on table 3.2, it clearly shows that communication skills, negotiation skills, environment awareness, problem solving, critical thinking and creative thinking are soft skills

that often listed as the skills required for architecture graduates. These skills must be applied by graduates to ensure the skills possessed by them are in accordance with the requirements of construction industries in Malaysia in particular.

Conclusion

The emphasis on soft skills that coincides with education programs helps graduates to understand and apply the soft skills in the workplace. In addition, mismatches of soft skills possessed by graduates and soft skills required by the industry affect the quality of graduates. Soft skills elements required by architecture graduates differ with other professions and based on market needs in construction industries. Researchers hope that the construct of soft skills for architecture graduates will help graduates to improve their additional skills, thus reducing unemployment among architecture graduates.

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