

Mastering Soft Skills in the Implementation of Work-Based Learning among Community College Students

Ali, A.^{1*} and Mahmod, S.^{2*}

Department of Education, Faculty of Technical and Vocational, Universiti Tun Hussein Onn, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

ABSTRACT

Various efforts have been taken by the Ministry of Education (MOE) and the Ministry of Higher Education Malaysia (MOHE) to improve the country's education system. Learning methods were introduced to ensure the education system achieves the desired educational goals and produces individuals who are well-balanced spiritually, emotionally and physically. However, the issue of graduate unemployment often crops up in the mass media; more often than not, the discussion has centred on the failure of tertiary educational institutions to churn out quality graduates. Thus, the method of work-based learning (WBL) is seen as a way to improve the soft skills of local graduates. This study was conducted using the quantitative research survey, with an adapted questionnaire as the instrument. Data were analysed using the Statistical Package for the Social Science (SPSS) version 20. The respondents consisted of 97 students who attended WBL programmes at five community college i.e. Community College Selayang, Community College Ampang, Community College Kota Melaka, Community College Sg. Petani and Community College Besut. The findings revealed that the level of soft skills among community college students was high. The soft skills included communication skills, problem-solving skills, learning and information management skills, profession related ethnics skills and leadership skills. This study of community college students is significant because it identified the level of soft

skills of students who had performed WBL methods. The findings of this study can help community colleges to produce high-quality graduates, hence reducing the number of unemployed graduates.

Keywords: Community colleges, soft skills, work-based learning

ARTICLE INFO

Article history:

Received: 01 November 2016

Accepted: 15 April 2017

E-mail addresses:

azita@uthm.edu.my (Ali. A.),

adahsyud@yahoo.com (Mahmod, S.)

* Corresponding author

INTRODUCTION

Education is an important area that contributes to the development of the country. Learning methods are introduced to ensure that the education system reaches its goals as contained in the National Education Philosophy (NEP). According to the Community College Management Sector GCMS (2010), work-based learning (WBL) is an approach to learning and innovative teaching that involves cooperation between the Community College Management Sector and participating companies. WBL is a learning approach that requires work placement as part of the student's learning process; this learning style will increase employment-related competency, real-world work experiences and expertise in industrial applications (Becker, 2013). This may address the issues related to graduate unemployment, a subject often broached by the academic community and employers who regard it a failure of higher education institutions that the nation is suffering a shortage of quality graduates. Students with soft skills are equipped to compete in the job market and in the workplace, and they are ready to tackle the challenges of globalisation (Anuar & Esa, 2010); it is evident from various findings that WBL is one of the effective ways to improve the mastery of soft skills among community college students.

The collaboration between industry and education institutions is a major milestone towards the consolidation of higher education. According to Reave (2005),

cooperation between education institutions and the industry is not well coordinated and implemented; the former are required to include compulsory industrial training for students in the curriculum, while the latter has the responsibility of providing the required training to the students. Cooperation between education institutions and industry is the best way to shape the curriculum in determining the skills required.

Graduate unemployment in Malaysia has become a worrying phenomenon in recent years. This problem occurs not only in Malaysia but also in many other developing countries such as the Philippines, Indonesia and India and even in developed countries such as Britain and the United States (Stevens, 2014). Employers want employees who have technical or hard skills and soft skills. Tahir (2005) stated that an academic degree is no longer the passport to a good job; it is not the main attraction in the job market. Employers of any company today are looking for graduates who have a combination of technical skills and soft skills. Graduates in Malaysia have sufficient technical skills, but employers are less satisfied with their soft skills.

In Malaysia, employers and industry have a limited number of graduates to choose from; many have the knowledge and technical skills, but most are not able to communicate properly (Zaharim, 2009). According to Sulaiman (2010), thinking skills, popularly known as Critical and Creative Thinking Skills (CCTS), were first emphasised in teaching and learning in 1988.

However, the problem or the big question is still: What is the level of critical skills and problem-solving skills attained by students in institutions of higher learning? Reave (2005) stated that although universities have put in place various measures to ramp up the quality of teaching and learning, students still do not have the teamwork skills and experience required by employers. Syed (2013) stated that entrepreneurship is the key transformation factor for solving today's unemployment problem.

Profession-related ethnics are increasingly taking a prominent role due to the high frequency of white-collar crime; these are very serious matters and they involve students (Mohamed, Zin, & Kadir, 2011). Leadership skills are important in the formation of a nation's cultural identity, but students are not paying much attention to developing these necessary skills (Esa, 2013). Thus, this study aimed to investigate the mastery of soft skills namely, communication skills, critical and problem-solving skills, teamwork skills, learning and information management skills, entrepreneurial skills, Profession-related ethnics and moral skills and leadership skills in the implementation of Work-Based Learning (WBL) among community college students.

LITERATURE REVIEW

Communication Skills

According to Zaharim (2009), employers are satisfied with the technical skills of

graduates but are not very happy with their communication skills, which are still poor. This statement is supported by Pumphery (2001), who stated that a large number of graduates do not have the skills required by employers. Students will benefit from the implementation of Work-Based Learning (WBL); their communication skills will improve. In addition, WBL indirectly prepares students to meet the requirements of industry. This is because students who have participate in WBL have actual experience and have become accustomed to working conditions in industry. These skills are very important for the present business environment with its highly competitive nature; many employers are concerned with that their companies should run smoothly and production flow be efficient (Pumphery, 2001).The WBL approach can help various institutions to produce graduates of quality who are equipped with soft skills. This augurs well for the education fraternity, who can take pride in achieving the objectives and goals of teaching and learning, particularly in the aspect of imparting communication skills to students.

Critical Skills and Problem-Solving Skills

Critical and problem-solving skills are crucial abilities that tertiary-level students should acquire as outlined by the Malaysian Higher Education Ministry. Problem solving requires a student to think critically, creatively, innovatively and analytically; at

the same time, he or she must be capable of applying the knowledge and understanding learnt to new and different problems (Acar & Newman, 2003).

Teamwork Skills

Teamwork skills, also known as teamwork or group work, are soft skills that can be applied through WBL. Hambur, Rowe and Luc (2002) defined teamwork skills as skills that allow a structured collection of individuals to interact efficiently with one another to achieve common goals. According to Anderson (2007), teamwork skills are a necessary ingredient for graduates to compete for and complete future work. WBL is an effective approach that can train graduates to have the required teamwork skills for future tasks.

Learning Skills and Information Management

In the 21st century, the international community is more concerned with increasing knowledge through the concept of continuous learning and information management. Learning skills and information management are processes of democratising education, which include programme acquisition of knowledge, skills and competence, formal and informal experiences and training in the workplace. Global competitiveness and diversity requirements compel people to constantly update their knowledge and skills. The

implementation of WBL can help improve the soft skills of students through continuous learning and information management, thereby producing all-rounded employees that employers desire. According to the policy of the Ministry of Higher Education Malaysia (MOHE) (2006), continuing education entails learning independently for the acquisition of new skills and knowledge; it encompasses three stages as outlined by institutions of higher education: Learning how to find and manage relevant information from various sources, learning to accept new ideas and developing the capacity for autonomous learning.

Entrepreneurial Skills

According to Harun (2010), entrepreneurial skills are soft skills that students need to master in the earlier years of schooling or later years of higher education. Entrepreneurial skills give a person the ability to explore opportunities and develop awareness of risk, creativity and innovativeness in business and work-related activities (MOHE, 2006). This is supported by Kuratko and Hodgetts (2007), who pointed out that students require entrepreneurial skills so that they can be shrewd entrepreneurs who are capable of looking for opportunities, take risks and translate dreams and ideas into reality. By undertaking entrepreneurial activities, students will gradually develop business acumen and business culture (Othman, 2009).

Profession-related ethnics

According to the Ministry of Higher Education Malaysia (MOHE, 2006), successful professional practices and fruitful social interaction demand the observance of professional and moral standards. The MOHE (2006) highlighted three stages in the development of profession-related ethics and moral skills: The ability to understand the impact of economic, environmental and socio-cultural factors on professional practices; the ability to analyse problems related to ethics and make decisions in solving them; and the ability to practise ethical behaviour, in addition to having a sense of responsibility towards society.

Leadership Skills

Employers expect their employees to possess leadership skills. According to the MOHE (2006), leadership skills involve the ability to practise leadership in a variety of activities through three levels of knowledge related to leadership: The ability to lead projects; the ability to understand and interchange roles between team leader and team members; and the ability to supervise team members. Students can develop leadership skills through WBL.

METHOD

Descriptive and inferential surveys were conducted to collect quantitative information. For this study, the population

was composed of diploma students of five community colleges i.e. Community College Selayang, Community College Ampang, Community College Kota Melaka, Community College Sg. Petani and Community College Besut, all of which had carried out the implementation of the WBL.

Population and Sample

This study used the random sampling technique and the respondents were students of community colleges in Malaysia. The population in this study consisted of 104 people and the selected sample was 97. This generalisation is based on the sampling schedule developed by Krejcie and Morgan (1970).

Instrument

The instrument used in this study was the questionnaire. The questionnaire used consisted of two parts. Part A included questions related to the background of the respondents. This section contained four items namely, gender, race, education institution and field of study.

Part B aimed to identify the level of soft skills of community colleges when implementing WBL. It consisted of seven sections, each of which represents a soft skill. The scoring was based on a 5-point Likert scale for each soft skill. Table 1 below shows the number of items in the questionnaire.

Table 1
Number of questionnaire items

Factor		
1.	Part A	Demography Gender Race Education Institution Field of Study
		4 items
2.	Part B	Communication Skills Critical Skills and Problem-Solving Skills Teamwork Skills Continuous Learning and Information Management Entrepreneurship Skills Profession-related ethics Leadership Skills
		11 items 11 items 12 items 6 items 9 items 7 items 12 items

To test the reliability of the instrument, this study used the Statistical Package for Social Sciences (SPSS) for Windows 20 to obtain Cronbach's Alpha reliability coefficient, which indicates the connection of items to one another (Ghafar, 1997). This study was reviewed by four experienced academics in the specified field of study.

The results of a pilot study conducted showed that the Alpha value was more than 0.7. Based on the results of the pilot study, the researchers obtained the Cronbach's Alpha values, which indicated good levels of communication skills, namely 0.737 and 0.724 for professional ethics and moral skills, respectively.

Table 2
Respondents' background

Gender, Race, Education Institutions	Number of people	Percentage (%)
Male	36	37.1
Female	61	62.9
Malay	95	97.9
Indian	2	2.1
Kolej Komuniti Selayang	14	14.4
Kolej Komuniti Ampang	10	10.3
Kolej Komuniti Kota Melaka	30	30.9
Kolej Komuniti Sg. Petani	20	20.6
Kolej Besut	23	23.7
Total	97	100

RESULTS

The findings were divided into two parts: Part A consisted of four items on the background of the respondents. Table 2 shows the background of the respondents based on the number and percentage of respondents.

This section contains the descriptive analysis for each soft skill and its level for respondents participating in WBL. The overall average mean score for the level of communication skills was 4.1218, which indicates a high level. The mean score for

critical skills and problem-solving skills was 4.0946, and that of teamwork skills was 4.2297. The mean score for continuous learning and information management was 4.1219, and that of entrepreneurship skills was 4.0240. The mean score for profession-related ethics among community colleges was 3.9410, and that of leadership skills was 4.2104. Overall, the level of soft skills among community colleges which had implemented WBL was high. Table 3 below shows the mean score for each soft skill among the community colleges.

Table 3
Mean score for soft skills

Overall Average Mean Score for Communication Skills	4.1218	High
Overall Average Mean Score for Critical Skills and Problem-Solving Skills	4.0946	High
Overall Average Mean Score for Teamwork Skills	4.2297	High
Overall Average Mean Score for Continuous Learning and Information Management	4.1219	High
Overall Average Mean Score for Entrepreneurship Skills	4.0240	High
Overall Average Mean Score for Profession-related Ethics	3.9410	High
Overall Average Mean Score for Leadership Skills	4.2104	High

The analysis of the one-way ANOVA, listed in Table 4 below, showed a significant difference between the levels of communication skills among the students of the five community colleges. This study showed a significant difference of less than 0.05 ($p < 0.05$). Therefore, the null hypothesis (H_0) was rejected. There was a significant difference in communication skills among community colleges when implementing WBL. As for the other soft skills, there was no significant difference among the students

of the five community colleges, as shown in Table 4 below. It shows that the p-value was greater than 0.05 ($p > 0.05$). Thus, the alternative hypothesis (H_1) was accepted, meaning that there was no significant difference between the critical skills and problem-solving skills, teamwork skills, learning and information management, entrepreneurial skills, profession-related ethics and moral skills and leadership skills among community college students after implementing WBL.

Table 4
Differences between soft skill levels among students of the five community colleges

KI 1	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.803	4	0.451	3.433	0.012
Within Groups	12.079	92	0.131		
Total	13.882	96			
KI 2	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.257	4	0.064	0.648	0.630
Within Groups	9.114	92	0.099		
Total	9.371	96			
KI 3	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.281	4	0.070	0.691	0.600
Within Groups	9.358	92	0.102		
Total	9.639	96			
KI 4	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.330	4	0.333	2.216	0.073
Within Groups	13.809	92	0.150		
Total	15.140	96			
KI 5	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.981	4	0.245	2.241	0.071
Within Groups	10.062	92	0.109		
Total	11.043	96			
KI 6	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.289	4	0.072	0.551	0.699
Within Groups	12.068	92	0.131		
Total	12.357	96			
KI 7	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.661	4	0.165	1.190	0.321
Within Groups	12.784	92	0.139		
Total	13.446	96			

DISCUSSION

Levels of Soft Skills

The overall findings derived from data analysis show that students who took WBL programmes in the community colleges obtained high mean score for the communication skills. The highest mean

score goes to communication skills in English as well. High mean scores were also recorded for both critical skills and problem-solving skills. These skills will be helpful for students when enter the job market and then begin work. This finding contradicted those of Anderson's study (2007), which states that all people use

critical thinking while solving problems because they lack self-awareness and other features that enable them to interpret and evaluate the problem. Most previous studies showed the same trend i.e. students do not use critical thinking to analyse problems properly. However, the researcher found that most of the community college students who were studied in this research displayed good critical thinking skills and problem-solving skills. The community college students surveyed could also improve their skills in order to be more competitive and move ahead of other students to secure a place in the business world.

The analysis of data showed a high score for teamwork skills. This is because during industrial training, the community college students surveyed developed teamwork skills as they were required to cooperate with other workers. This proved that WBL was able to improve teamwork skills among students, who, in fact, also need to cooperate with other students during group sessions that require sharing of ideas, knowledge and solutions. A study conducted by Rosenshine (1999) showed that teamwork is considered present when group members can create interdependent situations among one another. Based on this statement, the community college students who participated in this study are likely to display excellent teamwork skills in the workplace.

The results also showed high scores for continuous learning and information management among the community college students surveyed. This suggests that

students who pursue tertiary education have the aim of seeking knowledge, and they are rewarded with what they desire. This is because these community college students are open-minded; they are ready to assimilate new ideas that bring positive results.

The results also showed a high score for entrepreneurial skills, suggesting that community college students are good at identifying business opportunities. These findings are in line with the studies carried out by Stevens (2014), which showed that graduates surveyed could identify business opportunities in line with solving the problem of unemployment. This suggested that the community college students trained under the WBL approach had learnt good entrepreneurial skills with which to tackle the problem of unemployment. This study finding is supported by Mitchelmore and Rowley (2010), who stated that graduates must think of themselves as inventors rather than job seekers.

In the course of investigation in meeting the objectives of this study, the respondents were asked seven questions. The results showed that the score for profession-related ethics was high. Student culture can be open to immoral or unethical activities that can adversely affect the process of building up a pool of first-class human capital, which is vital for a country to succeed. However, the responses of the community college students surveyed suggested that they possessed a high level of profession-related ethics and moral skills. A good attitude and a professional work ethic will ensure

that students behave and conduct business deals with the utmost propriety, wherever they are. The findings suggested that the community college students surveyed can practise ethical behaviour; this is consistent with the findings of a study conducted by Zaharim (2009), which revealed that quality employees are not only experts in their work, but also have an admirable character and display commendable behaviour.

The results of the data analysis show a high level of leadership skills among community college students. These findings are supported by Lee-Barron (2012), whose study showed that when a person has good leadership skills, he or she can influence and convince people inside and outside organisations to work and help to achieve organisational goals. Based on the findings of this study, the community college students surveyed seem to have excellent leadership skills; they can mingle with and judge people well. The implementation of WBL in community colleges has certainly been a wise move, and will produce students equipped with good leadership skills.

CONCLUSION

The discussion of the findings leads to the conclusion that the implementation of WBL programmes in community colleges has produced students with a high level of soft skills. The result for communication skill shows that the community college students have a high level of communication skills in English. The community college students have a high level of critical skills and problem-solving skills. This is

probably because the students, who were trained through WBL, were thus exposed to higher-order thinking skills required by employers. The implementation of WBL in community colleges seemed to have been effective in training the students to think. In addition, teamwork skills are required in WBL, requiring students to organise group activities together to acquire and exchange views and ideas. The community college students were also open-minded and receptive to the idea that they would benefit from interacting with others. Overall, the community college students had a high level of soft skills. This is in line with the requirements of the Ministry of Higher Education that tertiary-education institutions should produce students who have strong soft skills.

Overall, there were no significant differences in students' level of soft skills among the community colleges that practised WBL. However, there was a significant difference in students' level of communication skills among the community colleges. This may have been caused by various situational factors: different beliefs among the students, different confidence levels among the students and different teaching methods and delivery styles of teachers, among other reasons. However, this study showed that there were no significant differences in students' level of soft skills among the different community colleges. This indicates that the community colleges surveyed had been successful in achieving the objectives of WBL upon implementation of the teaching method and these colleges were now

capable of producing students who meet the requirements of industry. Hopefully, the wider implementation of WBL will continue to supply versatile students as needed by today's employers. With all these positive reports, it is recommended that community colleges around the country introduce more work-based learning (WBL) programmes, especially for courses at the certificate level.

REFERENCES

- Acar, B.S., & Newman, I.A. (2003). Students as tutors-learning problem-solving skills by tutoring PBL. *International Journal Engineering Education*, 19(5), 712–716.
- Anderson, K. M. (2007). Differentiating instruction to include all students in preventing school failure. *International Journal Engineering Education*, 51(3), 49–54.
- Anuar, A., & Esa, A. (2010). Penerapan kemahiran insaniah di pusat giat MARA (PGM): Satu analisis ATIKAN. *Jurnal Kajian Pendidikan*, 3(2), 1–19.
- Becker, G. (2013). *Development education and other academic programs*. Human capital. Retrieved from <http://www.econlib.org/library/Enc/HumanCapital.html>
- Ghfar, M. N. A. (2011). *Pembinaan dan Analisis Ujian Bilik Darjah Edisi Kedua*. Penerbit UTM Press.
- Hambur, S., Rowe, K., & Luc, L. T. (2002). *Graduate skills assessment*. Australian Council for Educational Research. Retrieved from https://www.acer.org/files/GSA_ValidityStudy.pdf
- Harun, N. (2010). Aspirasi kerjaya keusahawanan dalam kalangan institusi pengajian awam. *Jurnal Pendidikan Malaysia*, 11–17.
- Hurley. (2008). *The importance of strong business communication skills*. US: McGraw Hill Inc.
- Kaprawi, N. (2010). Kajian tinjauan secara kuantitatif. In Noraini Idris (Trans.), *Penyelidikan dalam pendidikan (195–214)*. Kuala Lumpur: McGraw-Hill.
- Krejcie, R.V., & Morgan, D.W. (1970). Education and psychological measurement: Determining sample size for research activities. *Educational and Physiological Measurement*, 30, 60–70.
- Kuratko, F., & Hodgetts, M. (2007). *Entrepreneurship: Theory, process and practice*. Taunton, MA: Thomson & South-Western.
- Lee-Barron, J. R. (2012). Martial arts training as a method of modifying attitudes and behaviors in the classroom. *International Journal of Combat Martial Arts and Sciences ICMAUA*, 11(1), 17–22.
- Ministry of Higher Education, Malaysia. (2006). *Modul pembangunan kemahiran insaniah (soft skills) untuk institusi pengajian tinggi Malaysia*. Serdang: Penerbit Universiti Putra Malaysia.
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behavior and Research*, 16(2), 92–111.
- Mohamed, S., Zin, A. A. M., & Kadir, D. F. A. A. (2011). Pembangunan etika dan moral dalam kursus-kursus yang ditawarkan di Universiti Teknikal Malaysia Melaka (UTeM). *Journal of Human Capital Development*, 141-155.

- Othman, H. (2009.). Pelaksanaan pendekatan pembelajaran berasaskan pengalaman (PBL dan POBBL) bagi meningkatkan kemahiran insan iahpelajar. Pemikiran kritis dan kemahiran menyelesaikan masalah. Retrieved from http://eprints.uthm.edu.my/2312/1/PERLAKSANAAN_PENDEKATAN_PEMBELAJARAN_BERASASKAN_PENGALAMAN.pdf
- Pumphery, J.(2001). A comprehensive summary of generic skills requirement. *Paper research the council for administration London*. Retrieved from http://dera.ioe.ac.uk/4698/1/SD13_Generic.pdf
- Reave, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly*, 16(5), 655–687.
- Rosenshine, B.V. (1999). Effective teaching in industrial education and training. *Journal of Industrial Teacher Education*, 23(2), 5–19.
- Stevens, B. (2014). *Career and technical education work-based learning guide*. Richmond, Virginia: DepartmentofEducation, Virginia.
- Sulaiman, N. R. (2010). *Pengajaran Sains KBSM*. Selangor:Dewan Bahasa danPustaka.
- Syed, Z.A. (2013). The need for inclusion of entrepreneurship education in Malaysian lower and higher learning institutions. *Education and Training*, 55(2), 191–203.
- Tahir, K. M. (2005). *Tahap keyakinan kemahiran generik di kalangan pelajar Kolej Komuniti*. (Bachelor’sDegree Thesis). UniversitiTun Hussein Onn (UTHM), Malaysia.
- Zaharim, A.(2009). Employers’ perceptions and expectations toward engineering graduates: A case study. *EDUCATION’10 Proceedings of the 7th WSEAS International Conference on Engineering Education* (398–403).