

Wan Hanim Nadrah Binti Wan Muda, Puteri Nur Izazi Binti Burhanuddin, Mohd Hafizul Hanif Bin Ramlee, Fazlinda Binti Ab Halim
(Universiti Tun Hussein Onn Malaysia, Malaysia)

Relationship between Soft Skills and Engineering Graduates' Employability at UTHM

Abstract

The study focuses on identifying the relationship between the level of soft skills and the employability of the graduates at UTHM. As there were some problems such as lack of soft skills (interpersonal skills and critical thinking) among the technical students, employers began to doubt their skills and qualifications. This study identified the level of soft skills and the graduates' employability from 254 respondents. Respondents were given a questionnaire to answer. Overall, the findings indicate that the level of soft skills and employability are high among engineering graduates. The findings also reveal that there is a very low level relationship between soft skills and a graduate's employability. In conclusion, engineering graduates have sufficient capacity for soft skills and these skills can be polished and enhanced during learning sessions through a variety of activities organized by the faculty and the university.

Keywords: soft skills, employability, engineering graduates, students

1 Introduction

Unemployment has emerged as a burning issue in the current economic scenario all over the world. This common issue is, however, affected by different factors in every country. Although unemployment is a natural phenomenon, it creates a problem for the individual when unemployment covers a longer period. Addressing this issue needs a significant amount of research across various parts of the globe (Rahman, Khan, & Jamal 2019). Malaysia is one of the countries that is heading towards a developed nation status. Mohd Ibrahim and Mahyuddin (2016) stated that Malaysia is enriched with a highly educated workforce and graduates of higher education institutions (universities) from all over the country.

One of the particular roles of higher education is to equip students with skills that are in line with job demands which are highly correlated with graduate employability. Graduate employability is often related to the future career of a student who will undergo individual transformation in terms of personal status in the community and family. Most students believe that high academic achievement will make it easier for an employer to take them on. However, according to Yusoff, Ismail, & Sidin, (2008), the job market in our country has changed with the rapid adoption of technology and the diversity of needs that employers now demand in line with tcurrent globalization. This has created a number of issues and indirectly complicates the country's relatively modest economic performance. Further, the Ministry of

Higher Education (2012) has emphasized that in a knowledge-based world, the success of a country depends on the knowledge it possesses and the innovations it produces. It is thus the responsibility of higher education institutions to realize and produce a first class, knowledgeable workforce. Graduates are encouraged to improve their soft skills to be more readily accepted into the job market. Youth unemployment (ages 15-24) is a global issue, three times higher than in the overall adult workforce (Ibrahim & Mahyuddin 2017). In this context, Malaysia's figure is lower than the global average but is still considered high - with 10.8 per cent of Malaysian youths unemployed in 2017 (Halim, 2018; Statista, 2018).

The Ministry of Higher Education has introduced soft skills as a priority for every student in higher education institutions, encompassing communication skills, critical thinking, problem-solving skills, teamwork skills, continuous learning and information management, entrepreneurial skills, professional moral and ethical skills and leadership skills. According to Faridah et. al. (2010), the seven soft skills developed by the Ministry of Higher Education matched those suggested by potential employers who were interviewed. The aim is to develop students' potential so that when they graduate, they are fully integrated intellectually, spiritually, emotionally and physically in reference to the curriculum and co-curricular activities. Upon graduation, this potential human capital will have become knowledgeable, well-behaved, responsible, capable of producing a harmonious family, society and country (Ismail, 2011). Thus, according to Hanapi (2015), the graduates should focus on the dominant soft skills to enhance their marketability. The institution of education needs to take effective steps in improving the curriculum to produce successful graduates, not only in the context of just getting a job but also working in a field that matches their qualifications or certificates and become competent employees. Graduates will also be able to prepare themselves by applying soft skills that will contribute to their employability. The findings from the Ministry of Higher Education (2012) also show that, among the newly hired, 55.6 per cent said they had attended an interview 1-5 times, illustrating that competition for employment is high among Malaysian higher education graduates. According to Zaliza, Mohd Safarin and Ridzwan (2014), almost 80,000 technical graduates failed to get a job. Most of them are too dependent on academic qualification and pay less attention to the soft skills needed in industry. Data from the Department of Statistics of Malaysia shows that the number of unemployed graduates in 2018 was 162 thousand, an increase of 4.6 per cent from 2017.

Based on the above discussion, researchers carried out a study based on the main factors contributing to unemployment among engineering graduates from UTHM. Some graduates may be demanding in their career expectations, but their English communication skills are weak, for example, or there is a mismatch of between the workforce and the type of work on offer, a lack of industrial training or work experience, a lack of practice in teamwork. In some cases, graduates failed to think critically and suffered from a lack of exposure to problem-solving skills. In short, the engineering graduates at UTHM had insufficient exposure to soft skills training. This study aimed to identify the level of soft skills, the dominant employability for engineering graduates at UTHM. Furthermore, this study also sought to examine the relationship between students' soft skills and the employability of engineering graduates. The

results of this study are aimed at assisting a range of parties, including lecturers, government organizations and future employers in the application of soft skills so that students can be trained and prepared to the maximum extent possible before they enter a challenging work environment.

2 Methodology

This quantitative survey was designed to examine the relationship between soft skills and employability of UTHM engineering graduates. Descriptive statistics include percentages, mean score values, and standard deviations are used to determine the level of soft skills among engineering graduates. The Spearman's correlation is used to ascertain the relationship between the level of graduates' employability and the level of soft skills of UTHM engineering graduate students.

2.1 Population and Sample Study

This study included samples of 254 graduates from the Engineering faculty at Universiti Tun Hussein Onn Malaysia (UTHM). Table 1 shows the total population and samples of the study:

Table 1: **Number of Population and Sample**

Faculty	Number of Students		Number of Samples	Number of Population
	Women	Men		
Faculty of Civil and Environmental Engineering (FKAAS)	495	485	74	980
Faculty of Electrical and Electronic Engineering (FKEE)	217	871	65	1088
Faculty of Engineering Technology (FTK)	338	223	62	556
Faculty of Mechanical and Manufacturing Engineering (FKMP)	140	798	53	938
Total			254	3562

2.2 Research Instruments

The questionnaire form was used to collect research data. Questions were reviewed to ensure they were appropriate to meet the needs of the study. This quantitative study identifies the elements of soft skills needed to enhance marketability, the degree of mastery of students' soft skills in engineering and the dominant soft skills which contribute to the employability of graduate students in engineering at UTHM. In addition, this study also examined the relationship between soft skills and marketability of graduates at UTHM. The findings of this study were obtained from online questionnaires (Google Forms) which were distributed to respondents and shared through social media (such as Whatsapp and Telegram). The

questionnaire consists of three sections, Part A, B and C. The questionnaire form is included in Appendix B of this report. Section A discusses the demographics of the respondents while Sections B and C discuss questions related to graduate marketability and UTHM engineering graduate soft skills.

2.3 Data Analysis

Two types of descriptive statistics and inference statistics are used to analyze the data, with the help of Statistical Package for Social Science (SPSS) version 25.0. According to Nasution (2017), descriptive statistics are used to determine the types of nominal or interim measures such as demographic data, whereas inference statistics are intended to reflect the overall population results through studies conducted on selected samples. Descriptive statistics were used to obtain the mean scores, percentages and standard deviations used to explain respondents' demographics and the level of soft skills among engineering graduates. Spearman's correlation method tests the relationship between graduate employability and soft skills.

3 Findings

The respondents' demographics in the table are based on gender data, years of study and courses at UTHM. Demographic characteristics were analyzed using frequency and percentage values.

3.1 Academic Qualifications

Table 2 shows the number of respondents and the distribution of respondents based on academic qualifications in each faculty. The result shows that the number of respondents of bachelor degree holders is dominated by graduate students working in their own fields of study (24%), those working outside their field number 17%, whilst those continuing their studies amount to 17% and 9.06% are unemployed. The second highest number of graduates were diploma holders, with 10% at work in the field, 7% at work in non-fields), 4% continuing study and 5% not yet working.

Table 2: Respondents Analysis Based on Academic Eligibility

Academic qualifications	Job description	Number of Respondents (person)	Percentage (%)
Diploma	Work in the field	26	10.24
	Work in non-fields	19	7.48
	Continue studying	10	3.94
	Not working yet	12	4.72
Bachelor Degree	Work in the field	62	24.41
	Work in non-fields	44	17.32
	Continue studying	27	10.63
	Not working yet	23	9.06
Master	Work in the field	10	3.94

	Work in non-fields	9	3.54
	Continue studying	8	3.15
	Not working yet	4	1.57
Total		254	100

3.2 The Level of Soft Skills

There are seven constructs of soft skills in this study. Each construct contains five items to measure the level of soft skills among respondents. Table 3 shows mean value and standard deviation of the seven constructs in this study.

Table 3: **Mean and Standard Deviation of Soft Skills**

Soft skills	Mean value	Standard deviation (SD)	Level of mean
Communication skills	4.261	0.623	High
Critical thinking and problem-solving skills	4.215	0.659	High
Teamwork skills	4.344	0.625	High
Lifelong learning and information management	4.317	0.651	High
Entrepreneur skills	4.268	0.690	High
Ethics and professionalism	4.328	0.615	High
Leadership skills	4.301	0.632	High

Table 3 denoted all soft skills in a high level of mean value. The highest value is teamwork skills with a mean score of 4.344 (SD = 0.625) and the lowest value is critical thinking and problem-solving skills with a mean score of 4.215 (SD = 0.659). These results indicated that respondents have strong teamwork skills, but at the same time they need to improve their critical thinking and problem-solving skills. Critical thinking and problem-solving skills are among the most important elements in the workplace to deal with the challenges and tasks set by an employer.

3.3 Level of employability

Table 4 illustrates the results of level of employability among graduates. Overall, means score for eight items are high. The mean score total of level of employability is 4.08 (SD=0.816). The highest mean is item no. 2 with a mean score 4.25 (SD=0.688). Meanwhile, the lowest score is item no. 1 with a mean value of 3.72 (SD=1.191).

Table 4: **Level of employability**

No item	Item	Mean score	Standard Deviation	Level
1	I got a job after 6 month I complete my study	3.72	1.191	High
2	My programme allows me to compete with others in a workforce	4.11	0.753	High
3	I am ready to accept the post in line with my degree	4.25	0.688	High
4	I attend the training from NGO and other organization to improve knowledge and skills	4.05	0.830	High
5	I attend the training during my study that can help me in my job soon	4.16	0.751	High
6	I have a good qualification that can ensure me to get a job	4.11	0.719	High
7	I am ready to accept a job out of my scope	4.05	0.911	High
8	I have enough skills and ability to face the job market	4.13	0.683	High
Total		4.078	0.816	High

From the data, we can infer that engineering graduates - although they have a high level of employability - have to compete with others to get a job. The readiness to work in line with their qualifications is seen as a positive attitude for (skilled) workers. This result also implies that our graduates are ready to work out of their scope, which means that they are prepared to face the challenges of a working environment beyond their comfort zone.

3.4 Relationship between soft skills and graduates employability

The Spearman Correlation method was used to analyze the relationship between soft skills and graduates employability. This method was chosen because data distribution was not standard. Table 5 employed the data of relationship.

Table 5: **Spearman Correlation of relationship between Soft Skills and Graduates Employability**

Spearman Correlation			
		Graduates employability	Communication skills
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 254	.003** .967 254
Communication skills	Correlation coefficient Sig.(2-tailed) <i>N</i>	.003 .967 254	1.000 254
		Graduates employability	Critical thinking and problem-solving skills
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 254	.011** .857 254
Critical thinking and problem-solving skills	Correlation coefficient Sig.(2-tailed) <i>N</i>	.011 .857 254	1.000 254
		Graduates	Teamwork skills

		employability	
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 .033** .602 254	.033** .602 254
Teamwork skills	Correlation coefficient Sig.(2-tailed) <i>N</i>	.033** .602 254	1.000 254
		Graduates employability	Lifelong learning and information management
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 .024** .707 254	.024** .707 254
Lifelong learning and information management	Correlation coefficient Sig.(2-tailed) <i>N</i>	.024** .707 254	1.000 .707 254
		Graduates employability	Entrepreneur skills
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 .004** .946 254	.004** .946 254
Entrepreneur skills	Correlation coefficient Sig.(2-tailed) <i>N</i>	.004** .946 254	1.000 .946 254
		Graduates employability	Ethics and professionalism
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 .009** .892 254	.009** .892 254
Ethics and professionalism	Correlation coefficient Sig.(2-tailed) <i>N</i>	.009** .892 254	1.000 .892 254
		Graduates employability	Leadership skills
Graduates employability	Correlation coefficient Sig.(2-tailed) <i>N</i>	1.000 .015** .809 254	.015** .809 254
Leadership skills	Correlation coefficient Sig.(2-tailed) <i>N</i>	.015** .809 254	1.000 .809 254

**Correlation significant at 0.05

Table 5 shows the results of testing the relationship between soft skills and graduate employability. All seven skills were found to correlate significantly with graduates' employability. The strongest relationship is between teamwork skills and graduates' employability with $r = 0.033$ ($p < 0.05$). Meanwhile, the weakest relationship is between communication skills and graduates' employability with $r = 0.003$ ($p < 0.05$). Significant relationships could be seen between all constructs of soft skills with engineering graduates' employability.

4 Discussions

This section will discuss the findings of the study.

4.1 Level of Mastery of Soft Skills among UTHM Engineering Graduates

The results show that the highest level of mastery of soft skills is teamwork. The results of this study echo Rauf and Rauf, (2012), which stated that organizations need graduates or employees capable of working in groups, indicating that teamwork skills are at a high level among engineering graduates. In addition, this study also reflects the Ibrahim findings, (2012), which stated that teamwork skills in the final year of the International College were high. Final year students also acquired these skills to adapt to the world of work.

Moreover, this study shows that the second level of mastery of soft skills relates to the ethical and moral skills of professionalism. The results of this study support the findings of Johari, Ahmad, Khalil and Sahlil, (2016), which indicated that the co-curriculum of students is very high. This is because co-curricular students are exposed to co-curricular activities that involve students with a variety of spiritual activities that can be used in the future. According to Mohamed, Zin, and Kadir (2012), engineering students also possess high ethical and moral skills of professionalism according to research. This study revealed that many students gained exposure to ethical and moral skills of professionalism from lectures, consultations and group projects where they used much of their skills in learning the topics taught by lecturers.

Furthermore, this study shows that the third level of soft skills is continuous learning and information management skills. The findings from Jama'On (2007) showed that engineering students have high learning skills and a high level of information management. This is because our industry training program enables students to learn how to manage information well in real organizations. However, the findings from Husaini, Mustapaha, Mokhtar, and Omar (2014) suggest that engineering student lecturers found learning skills and information management to be at a moderate level.

In addition, this study shows that the level of entrepreneurship skills among engineering students is high. This statement is supported by Husaini, Mustapaha, Mokhtar, and Omar (2014), who stated that some engineering students are interested in doing business activities while studying. Students' tendency to do business during study is an additional skill that enhances their self-esteem and self-confidence, thus enhancing their communication skills. However, studies from Wahab and Al-Amin (2013) suggest that engineering students are at a moderate level. This is due to the lack of exposure and interest from engineering students in doing business, with students not engaging in activities beyond their ability.

This study shows that the level of leadership skills among engineering students is high. This study is supported by Azmi, Hashim, and Hisyam (2013), which states that the application of leadership skills is an important skill in preparing students before entering the workforce. Involving students in co-curricular activities can foster leadership qualities. Leading a project harnesses students' ability to practice leadership qualities in a variety of activities. Studies from Bokhari, Yahya, Rajikon, Hassan, and Pilus (2011) found that students of engineering institutions were at a high level.

Accordingly, the results imply that the sixth level of mastery of soft skills is communication skills. Communication skills are seen as one of the soft skills that students need to be aware of. Having a high level of knowledge cannot guarantee the student to be accepted by an employer. In fact, employers need workers with good communication skills. Studies from Muridin (2013) found that first-year students also had high levels of communication skills. This is because students are exposed to the importance of communication skills so that they can be applied during the learning period.

Finally, the last soft skills are critical thinking and problem-solving skills. The findings of this study are supported by Husaini, Mustapaha, Mokhtar, and Omar (2014), who found that high school engineering students are capable of coming up with ideas but need to be supervised by lecturers. This shows that critical thinking skills and solving high school engineering students' problems are at a moderate level. In addition, lecturers also said that most high school engineering students are unable to develop the ideas presented. This shows that engineering students of high level institutions are less exposed to and knowledgeable about the topics being studied.

4.2 Engineering Graduate Employability

The findings of this study show that the employability of graduates is high. These results are supported by Kaur & Singh (2014), who stated that community college engineering students are at a high level. The results show that more than 50% of them can get a job in less than six months after graduation. Furthermore, this study has a similar result to Yusof, Jamaluddin, and Lazim (2013), who found that engineering students in higher institutions have a high awareness of the marketability and competition issues that exist in today's job market. This study also found that engineering students are highly confident of getting a job on graduation.

As a result, the findings of the study by Yusoff, Ismail, and Sidin (2008), indicate that the majority of engineering graduates are able to get a job within less than six months after graduation. The findings of this study also indicate that graduates' ability to get a job is better than was shown in previous studies. This means that engineering graduates have more job opportunities than any other field. However, the results of the study by Ismail (2012) found that there is a slight difference between the actual performance of graduates and employers' expectations of marketability. This study shows that from the point of view of employers of engineering graduates, they are still weak in their credibility and consider other alternatives before making decisions, are less responsible for the actions and decisions taken by graduates and less skilled at anticipating potential problems in the future.

4.3 Relation of Soft Skills and Employability of Engineering Graduates

The results illustrated that there is a significant relationship between the level of communication skills and the employability of graduates. The relationship between the two variables is very weak. This indicates that the level of mastery of communication skills can influence the degree of marketability of engineering graduates. Graduates with high

communication skills have a higher degree of marketability compared to other graduates. In contrast, Husaina, Mustapaha, Mokhtar, and Omar (2014) concluded that the degree of mastery of high school engineering students still at the medium level indirectly resulted in lower students' employability.

Furthermore, the results show that there is a significant relationship between the level of mastery of critical thinking skills and problem solving and graduate competence. The relationship between the two variables is very weak. This indicates that the level of mastery of critical thinking and problem solving can affect the degree of marketability of engineering graduates. Engineering graduates who are skilled in critical thinking and problem-solving work to improve their own marketability.

Additionally, the results indicate that there is a significant relationship between the level of mastery of teamwork and the marketability of graduates. The relationship between the two variables is very weak. This shows that the level of mastery of teamwork can have an impact on the marketability of engineering graduates. Engineering graduates who are skilled in solving problems in teams are able to improve their own marketability compared to regular graduates. Overall, there is a significant relationship between the weak level of teamwork and the marketability of engineering graduates. However, this is in contrast to the Ismail study (2012), which found that there is a small gap between the expected performances of employers compared to the actual performance shown by engineering graduates.

The findings also imply that there is a significant relationship between the level of mastery of continuous learning and information management and marketability of graduates. The relationship between the two variables is very weak. This shows that the level of mastery of continuous learning and information management can impact the degree of marketability of engineering graduates. Engineering graduates with advanced learning and information management skills are able to improve their own marketability compared to regular graduates. Overall, there is a significant correlation between weak learning and information management skills and the marketability of engineering graduates. However, the study by Idris, Ariffin, and Ishak (2009) found that the application of continuous learning skills and information management is a closely related process in enhancing the marketability of graduates and in turn strengthening the identity of graduates.

Thus, the results show that there is a significant relationship between the degree of entrepreneurship skills and the marketability of graduates. The relationship between the two variables is very weak. This indicates that the degree of entrepreneurial mastery can impact the degree of entrepreneurship of engineering graduates. An engineering graduate with entrepreneurial skills has the potential to improve his/her own marketability compared to regular graduates. Overall, there is a significant relationship between the weak degree of entrepreneurial skills and the entrepreneurship of engineering graduates. However, the findings of the study by Yusoff, Ismail, and Sidin (2008) found that the correlation of the degree of entrepreneurship skills is relevant to the degree of entrepreneurship of UKM

engineering graduates, but there is a lack of entrepreneurial skills among engineering graduates which has resulted in a lower degree of entrepreneurship.

Results also show that there is a significant relationship between the degree of mastery of the ethical and moral skills of professionalism and the marketability of graduates. The relationship between these two variables is very weak. This shows that the degree of ethical and moral mastery of professionalism can influence the degree of marketability of engineering graduates. Engineering graduates who have the ethical and moral skills of professionalism are better equipped to improve their own marketability compared to ordinary graduates. Overall, there is a significant relationship between the very weak degree of professionalism and moral skills of professionalism and the competency of engineering graduates. Nevertheless, there is a slight discrepancy with the findings of the study by Ibrahim & Mahyuddin (2017), which found that employers raised issues of a lack of ethical and moral skills of professionalism among new workers.

Finally, the results show that there is a significant relationship between the level of leadership and marketability of graduates. The relationship between the two variables is very weak. This indicates that the degree of leadership ability can affect the degree of entrepreneurship of engineering graduates. Engineering graduates with leadership skills are able to improve their marketability in comparison to regular graduates. In general, there is a significant relationship between the very weak level of leadership skills and marketability of engineering graduates. However, this stands in contrast to the findings of Yusoff, Ismail, and Sidin (2008), who found that leadership skills among students were not as prominent.

5 Conclusion

From the discussion, it is possible to conclude that the level of soft skills among Universiti Tun Hussein Onn Malaysia (UTHM) engineering graduates is high. Of the seven soft skills constructs, teamwork skills are dominant among UTHM engineering graduates and the highest point of reference is that engineering graduates can receive good direction from team leaders. This is because engineering graduates tend to follow the directions of their peers in creating and solving related problems using the knowledge they have learned. The results of the graduate degree market show that most engineering graduates agree that the courses they attend while studying can assist them in employment. Therefore, it can be concluded that engineering graduates are capable of applying acquired knowledge in employment situations. In addition, engineering graduates believe they have sufficient skills and capabilities for the job market in the future. Next, there is a clear relationship between the degree of mastery of soft skills and the marketability of engineering graduates. Weak relationships are identified between communication skills, critical thinking and problem solving, teamwork, continuous learning and information management, entrepreneurship, ethics and moral professionalism and leadership. Although the level of soft skills mastery is high, the relationship between the seven soft skills to the engineering graduates is seen to be weak as the graduates are more

driven by various aspects such as different employer expectations, the inadequacies of the job market and overreaching graduate expectations.

References

- Adawiah dan Tiara Ernita (2016). Hubungan Cara Belajar Dengan Prestasi Belajar Siswa Dalam Mata Pelajaran PKN Pada Siswa Kelas X Sma Negeri 1 Banjarmasin. In *Jurnal Pendidikan Kewarganegaraan*, 6(11).
- Ariffin dan Ishak, I. (2009). Pengaruh Kemahiran Generik Dalam Kemahiran Pemikiran Kritis, Penyelesaian Masalah Dan Komunikasi Pelajar Universiti Kebangsaan Malaysia (Ukm). *Malaysian Journal Of Learning & Instruction*, 6, 103-38.
- Ahmad, N. A. (2016). Penerapan pembelajaran aktif dalam meningkatkan pencapaian dan kemahiran insaniah komunikasi pelajar matrikulasi dalam subjek Biologi (Doctoral dissertation, Universiti Pendidikan Sultan Idris).
- Azmi & Hashim dan Hisyam (2013). Penerapan Kemahiran Insaniah Dalam Pelaksanaan Pendidikan Asas Vokasional: Transformasi Sistem Pendidikan Di Malaysia.
- Azmi, I. A. G., Hashim, R. C., & Yusoff, Y. M. (2018). The employability skills of Malaysian university students. In *International Journal of Modern Trends in Social Sciences*, 1(3), 1-14.
- Bokhari, Yahya, Rajikon & Hassan dan Pilus (2011). Keberkesanan Kursus Kokurikulum Berkredit Dalam Memperkasakan Kemahiran Insaniah Dalam Kalangan Pelajar Institusi Pengajian Tinggi Awam (The Effectiveness Of Credited Co-Curricular Courses. In *Empowering Students In Higher Learning Institutions With Soft S. Journal Of Human Capital Development (Jhcd)*, 4(1), 109-123.
- binti Hassan, H. (2018). Ke Arah Kebolehpasaran Graduan: Pertalian Antara Pendekatan Pembelajaran Dengan Kemahiran Insaniah Dalam Kalangan Pelajar IPT Berteraskan Islam.
- Elias, A. & Zain, N. A. M. (2020). Universiy Core Courses (Ungs Subjects): Their Roles and Importance in Strengthening Soft Skills (Kemahiran Insaniah) Among IIUM Students. *AL-ITQAN*. In *Journal Of Islamic Sciences And Comparative Studies*, 4(1), 79-88.
- Esa & Padil dan Selamat (2013). Kemahiran Insaniah Dalam Proses Pengajaran Dan Pembelajaran Pada Program Kejuruteraan Di Politeknik Malaysia. *Atikan*, 3(2).
- Husaina, M. Y., Mustaphab, R., Mohamad, S. A. M. S., Mokhtard, S. B., Awam, J. K. & Omar, P. U. (2014). Persepsi Pensyarah Kejuruteraan Terhadap Tahap Kemahiran Empolyability Pelajar Kejuruteraan Institusi Teknikal: Satu Kajian Kes. *TVEIS 2014*, 157.
- Ibrahim dan Mahyuddin (2017). Youth Unemployment In Malaysia: Developments And Policy Considerations. *Outlook And Policy, Annual Report*.
- Ibrahim (2012). Tahap penguasaan kemahiran insaniah dalam kalangan pelajar tahun akhir di Kolej Antarabangsa IKIP (Doctoral dissertation, Universiti Tun Hussein Onn Malaysia).

Ismail (2012). Kajian Mengenai Kebolehpasaran Siswazah Di Malaysia: Tinjauan Dari Perspektif Majikan. Prosiding Persidangan Kebangsaan Ekonomi Malaysia Ke Vii. Ipoh, Perak: Universiti Kebangsaan Malaysia. Ms, 906-913.

Jama'On (2007). Perbandingan kemahiran insaniah dalam kalangan pelajar Diploma Kejuruteraan Awam melalui program latihan industri di politeknik (Doctoral dissertation, Universiti Tun Hussein Onn Malaysia).

Johari, A. & Khalil dan Sahlil (2016). Penerokaan Kemahiran Insaniah Dalam Kalangan Pelajar Kursus Kokurikulum.

Kadir, H., Mizad, M., & Ngadiran, N. M. (2020). Keberkesanan kursus pengucapan awam terhadap kemahiran insaniah pelajar. In *Jurnal Dunia Pendidikan*, 1(3), 34-41.

Kaur dan Singh (2014). Kebolehpasaran Graduan Kolej Komuniti Kulim: Satu Kajian Perbandingan Graduan SKKT Dengan SMK

Kee, C. P., Ahmad, F., & Ibrahim, F. (2011). Hubungkait antara Kemahiran Insaniah prasiswazah dengan dimensi hubungan organisasi-publik. *Malaysian Journal on student advancement*, (14).

Kementerian Pendidikan Tinggi (2006). Modul Pembangunan Kemahiran Insaniah (Soft Skills) Untuk Institusi Pengajian Tinggi Malaysia. Serdang: Universiti Putra Malaysia.

Mohamed, Zin dan Kadir (2012). Pembangunan Etika Dan Moral Dalam Kursus-Kursus Yang Ditawarkan Di Universiti Kejuruteraan Malaysia Melaka (Utem) (Doctoral Dissertation, Jabatan Dakwah Dan Pembangunan Insan, Akademi Pengajian Islam, Universiti Malaya).

Mohd. Ibrahim & Mahyuddin (2016). Pengangguran Belia Di Malaysia: Perkembangan Dan Dasar Pertimbangan. Tinjauan Dan Dasar, Laporan Tahunan

Mohamad, N. H., Ibrahim, B., & Selamat, A. (2019). Penerapan Kemahiran Komunikasi Bahasa Inggeris Menerusi Kursus Badan Beruniform Palapes UTHM. In *Online Journal for TVET Practitioners*, 4(2), 58-71.

Muridin, (2013). Komunikasi Di Tempat Kerja. Bentong : Pts Publications & Distributors Sdn. Bhd.

Nordin (2008). Membina Pelajar Cemerlang: Evolusi Pembelajaran Sepanjang Hayat. Penerbit UTM.

Quah, W. B., Thalaha, A. & Silim, A. Z. (2018). Penerapan Kemahiran Insaniah Menerusi Sukan Petanque Dalam Kalangan Pemain Di IPTA Dan IPTS. In *Jurnal Sains Sukan & Pendidikan Jasmani*, 7(2), 12-21.

Rauf dan Rauf (2012). Keberkesanan Program Skim Latihan Graduan Bagi Mengurangkan Kadar Pengangguran Dalam Kalangan Siswazah. In *Jurnal Islam Dan Masyarakat Kontemporari*, 6, 3-12.

Sidik, I.F., Awand, M., & Ahmad, A.R. (2020). Keterlibatan Pelajar dan Hubungannya dengan Kemahiran Insaniah. Malaysian. In Journal of Education (0126-6020), 45.

Wahab dan Al-Amin (2013). Penerapan Kemahiran Keusahawanan Dalam Kalangan Pelajar Bidang Kejuruteraan Mekanikal Di Uthm (Doctoral Dissertation, Universiti Tun Hussein Onn Malaysia).

Yusof, Jamaluddin dan Lazim (2013). Persepsi Pelajar Prasiswazah Terhadap Kebolehpasaran Graduan Dan Persaingan Dalam Pasaran Pekerjaan (The Perception Of Undergraduates' Student Towards The Marketability Of Graduate And Competition In The Job Market). In Jurnal Personalia Pelajar, 16, 77-92.

Yusoff, Ismail, & Sidin (2008). Graduan Dan Alam Pekerjaan: Kes Siswazah Ukm (Graduates And Employment: The Case Of UKM's Graduates). Akademika, 72(1).

TVET@asia The Online Journal for Technical and Vocational Education and Training in Asia

CITATION:

Wan Hanim Nadrah Binti Wan Muda, Puteri Nur Izazi Binti Burhanuddin, Mohd Hafizul Hanif Bin Ramlee, Fazlinda Binti Ab Halim (2020). Relationship between generic skills and engineering graduates employability. In: TVET@Asia, issue 15, 1-15. Online: http://www.tvet-online.asia/issue15/wan_hanim_nadrah_tvet15.pdf (retrieved 30.06.2020).

This document is published under a Creative Commons Attribution-NonCommercial-NoDerivs3.0 License



Author(s) Profile



Puteri Nur Izazi Binti Burhanuddin

Universiti Tun Hussein Onn Malaysia, Malaysia

Email: puteriizazi@gmail.com



Wan Hanim Nadrah Binti Wan Muda

Universiti Tun Hussein Onn Malaysia, Malaysia

Email: wanhanim@uthm.edu.my



Mohd Hafizul Hanif Bin Ramlee

Universiti Tun Hussein Onn Malaysia, Malaysia

Email: fezulmhr@gmail.com



Fazlinda Binti Ab Halim

Universiti Tun Hussein Onn Malaysia, Malaysia

Email: fazlin@uthm.edu.my
