

## **Eight Dimensions of Basic Employability Skills: A Survey on the Academics' Level of Awareness**

Faizah Abd Majid, Wan Nurul Elia Haslee Sharil, Mohd Alif  
Amin Salmee

Faculty of Education, Universiti Teknologi MARA

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i9/14443>

DOI:10.6007/IJARBSS/v12-i9/14443

*Published Date: 16 September 2022*

### **Abstract**

This article was written based on a part of a bigger research project on developing a Graduate Employability (GE) Teaching Model which received university funding. Industry Revolution 4.0 has emphasised on the importance of the 21<sup>st</sup> century soft skills among fresh graduates in securing employment. A growing literature of GE also suggests that graduates need to be prepared with sufficient soft skills in enhancing their employability skills. However, along with the demand of the IR4.0 industry, came a new challenge in training the university students during the COVID-19 pandemic. Due to COVID-19 pandemic, higher education institutions now operate in a new norm that is unprecedented. This raises several concerns on how GE is now being addressed, given the changing industry and education landscape. Much yet need to be learned from the academics about their awareness of the GE skills and how those skills are trained during the pandemic. Hence, the study aims to investigate academics' level of awareness of the basic employability skills required of the graduates and the important factors to be considered in developing a GE teaching model. A quantitative research design was employed resulting in the administration of an online survey. As part of a bigger data collection procedure, the survey was completed by 39 academics from various social science faculties in one of the public universities. The investigation focused on eight key dimensions of basic employability skills: basic literacy and numeracy skills, critical thinking skills, management skills, leadership skills, interpersonal skills, information technology skills, systems thinking skills and work ethic disposition. Using SPSS, data was analysed using descriptive statistics. The academics' levels of awareness were identified by each dimension and the findings help the study to identify areas for further training needed by the academics. Some of the salient findings suggest academics need further training on the digital and technology related skills such as systems thinking and information technology skills and that the GE teaching model could encapsulate the need for professional development in the technological domain besides the pedagogy and content domains. Further research on areas such as academics' professional development and revised or futuristic curriculum could be considered.

**Keywords:** Graduate Employability Skills, Higher Education, Pandemic Covid-19, Teaching Model

### **Introduction**

Over the last few years, the world has seen dramatic changes in the political, economic and education landscape. Changes that would naturally occur over years, is further propelled by the arrival of the COVID-19 pandemic in 2020. In 2020, the World Economic Forum (WEF) produced a report that highlights the importance of Industrial Revolution 4.0 and how soft skill are deemed to be more important than ever by key industry players. Following this, a lot of attention now shifts towards preparing future workforce with relevant soft skills needed for them to be hired by the industry. The job opportunities of late are very much influenced by global market demand in the 21st century. Adding on is the demand for jobs that have yet to be created. This leads to the need for the preparation of graduates who are not only ready for the existing workforce but also ready as job creators. Skills such as entrepreneurial and leadership with strong communication abilities are becoming the prime attributes sought in every graduate to champion in the industries. However, various newspaper reports and tracer study reports have confirmed the rising number of unemployed graduates. Hence, it can be concluded that lot of discussion now centers on graduate employability (GE) and how Higher Education Institutions (HEIs) can help to prepare these future graduates with the relevant skills needed by the industry.

In preparing the future workforce, HEIs is often seen as the key stakeholder, as the HEIs are the pitstop before the graduates embark into the working world. Although some traditional scholars posited that university should be described as “a place of teaching universal knowledge” (Newman, 1852), more recent scholar such as McCowan (2015) argues that HEIs should promote employability, on the condition that this goes in line with the HEI’s purpose to foster understanding through an open-ended inquiry. Needless to say, the purpose of HEIs should now include employability as part of the institutions’ key mission in preparing graduates for the working world. Malaysia’s Ministry of Higher Education (MOHE) has always been committed to ensuring GE issues is addressed by the HEIs under its care.

In teaching and learning, the technological, pedagogical content knowledge (TPACK) Model has always been referred to. Koehler etal (2012) suggest that teachers and educators must be equipped with relevant technological and pedagogical knowledge to ensure their teaching is effective. If we focus our attention on the TPACK Model, there is no room for GE, as the perspective of the TPACK Model is constrained to teaching. This raises another question, on whether teachers and academics in HEIs are equipped to prepare future graduates with relevent GE skills. Hence, this study aims to answer the following research question:

1. What are the academics' levels of graduate employability awareness according to the eight dimensions of basic employability skills?

### **Literature Review**

Employability and employment are two distinctive concepts. As stated in the National Graduate Employability Blueprint 2012-2017, employment is defined as the potential to secure a job at a workplace while employability is the potential to secure, maintain, and grow in a particular job at the workplace. Based on this definition, it is safe to conclude that

employability requires a set of skills that could direct the individuals to get employed, maintain being employed and even possibly become self-employed and create jobs. The term employability is also reciprocally used with the term work-readiness (Yorke, 2010). Work-readiness can be defined as a set of conditions such as sufficient knowledge and skills to gain employment. Graduates with work readiness have the basic academic requirements, critical thinking and personal skills necessary to execute a particular job which in turn, are qualified to make sound judgment, acquire new knowledge along the way and adapt to various work circumstances. Regardless of its terminology, graduates' chances to be hired for a long time is higher if they are both employable and work-ready.

Recently, Zavala (2020) argues that employability can at present time be defined as a person's competence in designing their professional career, accessing the job market and managing their job development with success and satisfaction. Although this definition of employability is focused on personal competence, there are external factors such as one's level of education and work environment that are accountable for shaping their career progress. Graduates in this era are also required to respond to the uncertain economic situation, the rising rate of unemployment and the negative impacts of globalization. Zavala (2020) also points out an important feature in defining employability which is graduates' ability to know, in this sense knowing how to do and knowing how to be. Having a great amount of knowledge in executing their roles in a company is not enough if graduates cannot anticipate or adapt to unforeseen circumstances surrounding their work that require them to find and troubleshoot new solutions. To top it all, the pandemic Covid-19 has also brought into light new urgencies in preparing the graduates as the world had to witness the closing of HEIs due to the Movement Control Order (MCO) and paved the way forward in learning delivery through the Open Distance Learning (ODL) mode during the pandemic and MCO (Dao and Duong, 2021; Simamora et al., 2020). It was highlighted by several researchers that the pandemic has indirectly enabled the learning delivery to leverage on the training of relevant skills especially those that relate to digital literacy, information technology skills and independent and leadership skills among the students (Condrat, 2020; Suryaningsih, 2021 ).

Although various efforts were taken by the Malaysian MOHE to increase the GE level, the job market has been hit hard, fuelled by the impacts of the pandemic. According to Leo (2019), GE has fluctuated across the year 2006 to 2019 as the report indicated that the percentage of unemployed graduates is 25% of which 35% are from the Social Sciences, Business and Law degree holders. Looking into the landscape of graduates in 2020 and post-COVID-19, there is a strong indication that close to 30% of graduates could remain unemployed. According to the Department of Statistics Malaysia (2016), Malaysia's unemployment rate has risen to 3.5 per cent in September 2016 from 3.3 per cent the previous year in which the number of unemployed people grew by 4.5 per cent. The increasing percentage of unemployment in 2016 serves as a testament to the issue that remains unresolved despite the GE Blueprint (2012-2017) and the Ministry's initiatives since the blueprint's first conception in 2012.

Literature offers ample evidence on the necessary employability skills needed by graduates to gain their first job and maintain their employment. McQuaid and Lindsay (2005) reported that the European Commission has remarked some of the increasingly demanded skills among graduates are transferable skills such as the ability to work within a team, creative thinking and problem-solving. Transferable skills are those abilities or expertise that can be utilised

across jobs and responsibilities. Employers are increasingly in need of those skills beyond occupational skills. The University of Sydney Career Centre has identified seven skills required by graduates to gain employment which are communication skills, teamwork skills, problem-solving skills, initiative and enterprise skills, planning and organisational skills, learning skills and technology skills (Naher, 2018). This input is highly regarded as the main point of reference due to the university's status of being at the top position in graduate employability in Australia.

There are also several pieces of research done throughout several countries that focus on the perspectives of employers. Among employers in Scotland, McMurray, Dutton, McQuaid and Richard (2016) found that 'reliability', 'trustworthiness', 'leadership', 'motivation', 'willingness to learn', and 'communication skills' as the most demanded skills needed in recruiting graduates. Wilton (2011) deduced that the United Kingdom employers are looking at graduates with 'drive', 'research skills', 'application of knowledge', 'action planning', 'leadership' and 'global skills' for effective employment. Pakistani employers perceive the most demanded skills among graduates are 'professionalism', 'achievement orientation', 'positive attitude', 'interpersonal skills', 'online search skills' and 'interview skills' (Warraich & Ameen, 2010). In Bangladesh, Chisty et al (2007) identified 'academic results', 'understanding corporate culture', 'presentation skill', 'analytical skill' and 'communication skill' for effective GE. Looking at the East, Chino (2003) proposed 'cooperation', 'responsibility', 'visionary', 'creativity', 'ambition', 'management skills' and 'understanding of corporate culture' as being vital attributes to Japanese employers. Taiwanese employers on the other hand showed interest in graduates who possess the ability to work under pressure and time management skill for effective employment (Duoc & Metzger, 2007). Several other researchers on GE have also provided a list of potential GE skills. Durrani and Tariq (2012) highlight the importance of graduates' numeracy skills and how numeracy tests as potential GE skills. Additionally, Messum, Wilkes, Peters and Jackson's (2016) discovered from their research the importance of leadership skills. Rosenberg et. al (2012) affirm that system thinking skills are a set of important GE skills yet are often neglected by the instructors.

Most often than not, when it comes to teaching and learning, most teachers or academics focus on the TPACK Model (Mishra and Koehler, 2006) and GE does not appear to be an apparent focus in their teaching. There appears to be a gap in the context as Bennett, Richardson, and MacKinnon (2016) discovered that over 60 per cent of the students reported that not only they depended on their lecturers to provide them with up-to-date information on the industry and careers, but they also depended on their lecturers more than any other sources for similar information. These students also confirmed that they needed their lecturers to provide real professional practices or at least imitate real work-based contexts. Studies done by Scott and Yates (2002) have shown similar findings. These studies suggest that it is pertinent for the academics to be aware of issues surrounding GE and to keep abreast of the changes that are taking place in the industry so that relevant changes can be made to ensure that they prepare the graduates according to what the industry needs.

## **Methodology**

### *Research Design*

To answer the research question, a quantitative research design was used, where the research instrument collects quantitative data through an online survey. The quantitative

data yielded relevant findings that help to answer the research question, which is the academics' level of awareness on GE skills.

### **Participants**

The participants consist of 39 academics teaching at various social science faculties at a local university. The faculties consist of the Faculty of Education, Faculty of Art and Design, Faculty of Business and Administration and the Faculty of Law. A majority of the respondents have been teaching for more than 10 years. All the respondents have a minimum qualification of a masters degree and most of them are senior lecturers at their respective faculties.

### **Instrument**

The instrument was adapted from Rosenberg, Heimler and Morote's (2012) basic employability skills instrument. The instrument consists of three parts- Part A, Part B and Part C. Part A asks the participants about their demographics, Part B investigates their awareness on the employability skills, and Part C investigates the challenges and strategies in facing GE issues. Part B specifically examined the academics' awareness on GE by examining eight dimensions of basic employability skills which are basic literacy and numeracy skills, critical thinking skills management skills, leadership skills, interpersonal skills, information technology skills, systems thinking skills and work ethic disposition. As the article is written based on a bigger research project, only data pertaining to the respondents' level of GE skills is presented. The instrument was piloted and the Cronbach alpha value for the instrument is .96, which suggests that the instrument is highly reliable.

### **Data Analysis**

A descriptive statistical analysis was conducted to analyze the means and standard deviation for each item and construct (the eight dimensions of basic GE skills) that were used in developing the survey questionnaire. As stated, a 5-point Likert scale was used in the questionnaire. To interpret the levels of awareness from the 5-point Likert scale, the following interpretations were applied;

1.00 - 1.80 Strongly Disagree; 1.81 - 2.60 Disagree; 2.61 - 3.40 Neutral; 3.41 -4.20 Agree and 4.21 - 5.00 Strongly Agree (Pimentel, 2019).

### **Findings and Discussion**

The data from the questionnaire helps to answer the following research question:

1. What are the academics' levels of graduate employability awareness according to the eight dimensions of basic employability skills?

The academics' views were determined by the respondent's level of agreement based on the 32 statements on graduate employability skills awareness. The mean scores for each of the items in the eight dimensions of basic employability skills were calculated to see the level of agreement and the mean average of each item and also each dimension besides the overall dimensions of basic GE skills. The academics' awareness of graduate employability, on the whole, was positive with the overall result ( $m = 4.50$ ;  $SD = .691$ ).

The following discussions present the findings according to each of the eight dimensions of basic GE.

Table 1

*Literacy and Numeracy Skills*

Item	M	SD
1. I am aware that basic computations are fundamental for graduates to be employed.	4.72	.560
2. I am aware that the ability to communicate orally is fundamental for graduates to be employed.	4.85	.432
3. I am aware that the ability to receive, interpret, and respond to basic verbal messages/cues are fundamental for graduates to be employed.	4.82	.451
4. I am aware that the ability to read and interpret basic written information in documents is fundamental for graduates to be employed.	4.77	.485
Average	4.79	.482

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The majority of the respondents have a high awareness of the importance of literacy and numeracy skills as shown from Item 1 ( $m = 4.79$ ;  $SD = .482$ ). Item 2 (I am aware that the ability to communicate orally is fundamental for graduates to be employed) has the highest mean score (4.85) while item 1 (I am aware that basic computations are fundamental for graduates to be employed) has the lowest mean score (4.72). The other three items have a mean score ranging from 4.82 to 4.85 indicating a high level of awareness of the respective items in the dimension of literacy and numeracy skills. This is in accordance with Durrani and Tariq's (2012) argument that highlights the importance of graduates' numeracy skills and how numeracy tests are mostly utilised in the recruitment of graduates for employment that match their career goals, besides the findings from (Richard, 2016; Wilton, 2011).

Table 2

*Critical Thinking Skills*

Item	M	SD
1. I am aware that the ability to recognize problems and devise and implement a solution is fundamental for graduates to be employed.	4.77	.427
2. I am aware that the ability to acquire and apply new knowledge and skills from multiple sources is fundamental for graduates to be employed.	4.77	.536
3. I am aware that the ability to understand the principle underlying the relationship between two or more objects and apply it when solving a problem is fundamental for graduates to be employed.	4.41	.751
4. I am aware that the ability to specify goals, consider risks, evaluate and choose the best option is fundamental for graduates to be employed.	4.59	.595
Average	4.64	.577

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The overall mean score for this dimension is 4.64 (D = .577). It could be deduced that the respondents generally have a high level of awareness of critical thinking skills as one of the dimensions of basic GE. While items 1 (I am aware that the ability to recognize problems and devise and implement a solution is fundamental for graduates to be employed.) and 2 ( I am aware that the ability to acquire and apply new knowledge and skills from multiple sources is fundamental for graduates to be employed) have the highest mean score (4.77), item 3 (I am aware that the ability to understand the principle underlying the relationship between two or more objects and apply it when solving a problem is fundamental for graduates to be employed) shows the lowest mean score (4.41). These findings are in consistent with Christy et al (2007); Chino (2003) reports that emphasized critical-thinking abilities as one of the most crucial employability qualities for new employees.

Table 3

*Leadership Skills*

Item	M	SD
1. I am aware that self-worth and the ability to maintain a positive view of oneself are fundamental for graduates to be employed.	4.67	.621
2. I am aware that the ability to exert a high level of effort and persevere toward goal attainment are fundamental for graduates to be employed.	4.59	.677
3. I am aware that the ability to set personal goals, monitor progress, exhibit self-control and take responsibility for one's actions are fundamental for graduates to be employed.	4.54	.720
4. I am aware that the ability to choose the right ethical courses of action is fundamental for graduates to be employed.	4.56	.641
Average	4.59	.665

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The majority of the respondents have a high awareness of the importance of leadership skills (overall mean - 4.59). Item 1 (Self-worth and the ability to maintain a positive view of oneself) shows the highest mean score (m= 4.67; SD .621), while item 3 (the ability to set personal goals, monitor progress, exhibit self-control and take responsibility for one's action) has the lowest mean score (m = 4.54; SD = .720). This shows how academics have a high awareness of leadership skills as part of GE skills. This is in accordance with Messum, Wilkes, Peters and Jackson's (2016) argument that highlights the importance of leadership skills in facilitating decent employment of graduates when they enter the working world, besides the findings from (Richard, 2016; Wilton, 2011).



Table 4

*Management Skills*

Item	M	SD
1. I am aware that the ability to select goal-relevant activities, allocate time and follow a schedule are fundamental for graduates to be employed.	4.54	.682
2. I am aware that the ability to keep records and make adjustments to meet objectives are fundamental for graduates to be employed.	4.46	.720
3. I am aware that the ability to store and use materials efficiently is fundamental for graduates to be employed.	4.31	.977
4. I am aware that the ability to delegate work accordingly, evaluate performance and provide feedback are fundamental for graduates to be employed.	4.21	.923
Average	4.38	.826

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The respondents generally agreed that management skills is one of the dimensions of basic GE that is important as the overall mean score indicates a value of 4.38 (SD = .826). The highest mean score (4.54; SD = .682) is shown by item 1 (ability to select goal-relevant activities, allocate time and follow a schedule). Item 4 (ability to delegate work accordingly, evaluate performance and provide feedback) shows the lowest mean score (m = 4.21; SD = .923). These findings are in agreement with Chino's (2003) and the University of Sydney's Career Centre report that state management skills are one of the indicators of employability skills (Naher, 2018). However, it is noted that the overall mean score for this dimension (m = 4.38; SD .826) is among the lowest of the eight dimensions.

Table 5

*Interpersonal Skills*

Item	M	SD
1. I am aware that the ability to contribute and cooperate in group efforts are fundamental for graduates to be employed.	4.77	.536
2. I am aware that the ability to work alongside men and women from diverse backgrounds are fundamental for graduates to be employed.	4.62	.673
3. I am aware that the ability to work toward agreements involving the exchange of opinions and resolve divergent issues are fundamental for graduates to be employed.	4.54	.720
4. I am aware that the ability to demonstrate understanding, friendliness, adaptability, empathy and politeness in group settings are fundamental for graduates to be employed.	4.74	.595
Average	4.67	.631

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The majority of the respondents have a high awareness of the Interpersonal skills as one of the dimensions for basic GE (m= 4.67; SD =.631). As shown in Table 5, item 1 (I am aware that the ability to contribute and cooperate in group efforts are fundamental for graduates to be employed.) has the highest mean score (m = 4.77; SD = .536). While item 3 (the ability to work toward agreements involving the exchange of opinions and resolve divergent issues) has the lowest mean score (m = 4.54; SD = .720) The overall mean score as well the mean scores for each item in this dimension indicate that the respondents have a high level of awareness on the interpersonal skills as part of GE skills. This is in accordance with Warraich and Ameen (2010); Hamid et al (2013) who state that employers seek graduates who have six dimensions of employability skills, which include interpersonal skills.

Table 6

*Information Technology Skills*

Item	M	SD
1. I am aware that the ability to choose the relevant tools, applications, software and procedures are fundamental for graduates to be employed.	4.44	.754
2. I am aware that the ability to organize, process and maintain written or computerized records and other forms of information are fundamental for graduates to be employed.	4.38	.711
3. I am aware that the ability to identify and solve problems using technology is fundamental for graduates to be employed.	4.33	.806
4. I am aware that the ability to use computer software to acquire, analyse, and communicate information is fundamental for graduates to be employed.	4.38	.747
Average	4.38	.755

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

As shown in Table 6, Information Technology Skills has an overall mean score of 4.38 (SD = .755). This could be deduced as the respondents' high level of awareness of this dimension. It is noted that item 1 (I am aware that the ability to choose the relevant tools, applications, software and procedures are fundamental for graduates to be employed) has the highest mean score (m= 4.44) while item 3 (I am aware that the ability to identify and solve problems using technology is fundamental for graduates to be employed) has the lowest mean score (m= 4.33, SD = .806). These findings concur with Warraich and Ameen (2010) and the Confederation of British Industry (CBI) report that mentioned information technology skills are one of the key predictors of employability skills (Confederation of British Industry, 2016). However, it is noted that the overall mean score for this dimension (m = 4.38; SD .755) is the among the lowest of the eight dimensions.

Table 7

*Systems Thinking Skills*

Item	M	SD
1. I am aware that the ability to know how social, organizational and technological systems work is fundamental for graduates to be employed.	4.33	.701
2. I am aware that the ability to distinguish trends and predict the impacts of actions on system operation are fundamental for graduates to be employed.	4.10	.852
3. I am aware that the ability to understand the interaction and interrelationship of systems within an organization is fundamental for graduates to be employed.	4.15	.904
4. I am aware that the ability to understand the interaction and interrelationship of systems in a global economy is fundamental for graduates to be employed.	3.82	.970
Average	4.10	.857

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The overall mean score for Systems Thinking Skills is 4.10 (SD = .857). Although this indicates a fairly high level of awareness, it is the lowest mean score among the eight dimensions of basic GE. It is also noted that all the items have mean scores ranging from 3.82 (item 4: I am aware that the ability to understand the interaction and interrelationship of systems in a global economy is fundamental for graduates to be employed) to 4.33 (item 1: I am aware that the ability to know how social, organizational and technological systems work is fundamental for graduates to be employed). These findings are in accordance with Rosenberg et. al. (2012) finding that system thinking skills are the lowest skill of importance that is related to graduate employability skills.

Table 8

*Work Ethic*

Item	M	SD
1. I am aware that the ability to attend required organizational meetings and events and be on time are fundamental for graduates to be employed.	4.38	.782
2. I am aware that the ability to achieve organizational and personal goals independently are fundamental for graduates to be employed.	4.13	.923
3. I am aware that the ability to understand organizational protocols and procedures are fundamental for graduates to be employed.	4.31	.694
4. I am aware that the ability to demonstrate a positive attitude at work is fundamental for graduates to be employed.	4.77	.536
Average	4.40	.734

*M=mean, SD=standard deviation; 1 - 5 (1=Totally Disagree, 5=Totally Agree)*

The respondents indicate that the Work Ethic dimension is important in GE development as the overall mean score of their awareness level is 4.40 (SD = .734). The highest mean score (m = 4.77; SD = .536) is seen in item 4 (I am aware that the ability to demonstrate a positive attitude at work is fundamental for graduates to be employed) while the lowest mean score (m= 4.13; SD = .923) is seen in item 2 (I am aware that the ability to achieve organizational and personal goals independently are fundamental for graduates to be employed). These findings are in agreement with Richard (2016); Warraich and Ameen (2010); Konig et al (2016) who emphasized on work ethics as one of the important skills that employers are seeking in graduates.

### Conclusion

At the onset of the research, several considerations were thought of in determining a potential teaching model that integrate the development of GE skills in the existing teaching model. TPACK has been a classic teaching model (Mishra and Koehler, 2006), however a challenge arises when there is a need to integrate knowledge on GE development. Additionally, the pandemic's impact on the new norm in learning delivery has also brought to light new challenges and opportunities all at the same time (Suryaningsih, 2021; Condrat, 2020). Therefore the idea of integrating GE skills and the new skill set brought up by the pandemic could be given a special focus in developing a new GE teaching model. The salient findings from the present study focused on identifying the levels of awareness among the

respondents with regard to the eight dimensions of basic GE skills. Out of the eight dimensions, it was discovered that literacy and numeracy skills has the highest mean score (4.79), followed by interpersonal skills ( $m = 4.67$ ) and critical thinking skills ( $m = 4.64$ ). On the other hand, dimensions with the lowest mean score include systems thinking skills ( $m = 4.10$ ), information technology skills ( $m = 4.38$ ) and management skills ( $m = 4.38$ ).

It is important to note that the respondents in the present study are academics from the social sciences discipline. The nature of teaching and learning in the relevant courses among the social sciences faculties tend to emphasize on literacy and numeracy skills besides the interpersonal skills and critical thinking skills (Naher, 2018). Based on the same social sciences context, it is quite easy to understand why the following skills; systems thinking skills, information technology skills and management skills scored the lowest mean scores. Many aspects of the social sciences curriculum could be reconsidered in interpreting the salient findings. Such aspects could include the choices of lesson materials, classroom activities and assessment methods (Mishra and Koehler, 2006). While topics within the syllabus of a specific curriculum need to be consistent with the needs of the programme's learning outcomes, it is perhaps feasible to review the delivery and emphasis on the material selection, classroom activities and assessment strategies, which could hone the development of GE skills such as systems thinking skills, information technology skills and management skills (Suryaningsih, 2021). The academics in the social sciences discipline may be given exposure to how such GE skills could be trained through their subject matter. The pandemic has brought many opportunities in embracing the new norm in higher education delivery. Online learning, whether it is synchronous or asynchronous, could be manifested by the academics (Conrad, 2020) and it could be the same in training the said GE skills. Nonetheless, as the findings reveal their low level of awareness of specific GE skills, special training or hands-on workshop could be provided to increase the academics' awareness and ability to integrate the training of those GE skills in their lessons.

Finally, in complementing the existing teaching model, the proposed GE teaching model could assimilate GE skills development teaching competency in the three common teaching knowledge domains namely; technology, pedagogy and content knowledge. To clarify, in terms of the technology knowledge, the academics need to have the competency of integrating technology-related GE skills such as information technology and systems thinking skills. Next, with regard to the pedagogy knowledge, the academics need to be competent in integrating the training of GE skills through digital; online and offline learning platforms. In other words, the academics need to be able to develop relevant teaching materials, conduct online and offline class activities and provide assessments by employing a variety of teaching acts. To complete the GE model, the content knowledge could specify relevant topics that could leverage the training of the GE skills. An overt approach in exploring relevant topics within the syllabus through the inclusion of literacy and numeracy, critical thinking, leadership, management and interpersonal skills as well as work ethics could serve as an indirect manifestation to the training of the identified GE skills through the academics' competency in their respective content knowledge. The suggestions given on the potential training of the GE skills through the delivery of content knowledge resonate well with the idea of integrating the 21st century skills as specified in the P21 Framework (P21, 2015).

All in all, the present study has confirmed findings from past studies related to the list of GE skills. Most important of all, it has also confirmed the levels of awareness among the academics regarding the eight dimensions of basic GE skills. Relevant considerations related to the areas of training or hands-on workshop have been identified. A set of new aspects that could be included in the existing teaching model has also been proposed to develop a new GE teaching model. It is expected that academics, training departments and curriculum developers in the HEIs could benefit from the present study.

### Acknowledgement

The study was a part of a bigger research project that was funded by the university grant (ref: 600-RMC/GPK5/3(015/2020). The researchers wish to thank Univeriti Teknologi MARA for the funding and the respondents for their willingness to participate in the survey.

### References

- Bennett, D., Richardson, S., and MacKinnon, P. (2016). *Enacting strategies for graduate employability: How universities can best support students to develop generic skill Part A*. Canberra, ACT: Australian Government, Office for Learning and Teaching, Department of Education and Training (<http://www.olt.gov.au/project-how-universities-can-best-support-students-develop-generic-skills-enactingstrategies-gradua>)
- Chowdhury, T. A., and Miah, M. K. (2019). Perceptions of students and employers regarding employability skills for entry level positions in sales and marketing. In *Australian Journal of Career Development*. Vol 28 (1). p. 3-13. <https://doi.org/10.1177/1038416217751566>
- Christy, K. K. S., Uddin, G. M., & Ghosh, S. K. (2007). *The business graduate employability in Bangladesh: Dilemma and expected skills by corporate world*. Retrieved from <http://dspace.bracu.ac.bd/bitstream/handle/10361/379/The%20business%20graduat%20employability%20in%20Bangladesh.pdf?sequence=1>
- Condrat, V. (2020). Developing learners' soft skills in the time of a pandemic. In *Studia Universitatis Moldaviae (Seria Științe Umanistice)*. Vol 134(4). p. 37-40. DOI: <http://doi.org/10.5281/zenodo.3984800>
- Confederation of British Industry, "The right combination: CBI/Pearson education and skills survey 2016." (2016). Retrieved from <https://epale.ec.europa.eu/sites/default/files/cbi-education-and-skills-survey2016.pdf>
- Thu, D. T. H., & Hong, D. N. (2021). An Analysis of the Difficulties in Learning Soft Skills through the Synchronous E-learning for Students of Public Universities in Vietnam. In *2021 5th International Conference on Education and Multimedia Technology*. p 145-153. <https://doi.org/10.1145/3481056.3481092>
- Department of Statistics. (2016). *Malaysia Unemployment Rate*. Retrieved from <https://tradingeconomics.com/malaysia/unemployment-rate>.
- Duoc, T. Q., & Metzger, C. (2007). Quality of business graduates in Vietnamese institutions: multiple perspectives. In *Journal of Management Development*. Retrieved from [https://www.researchgate.net/profile/Duoc-Truong-2/publication/36397069\\_Quality\\_of\\_business\\_graduates\\_in\\_Vietnamese\\_institutions\\_Multiple\\_perspectives/links/56cfbb5](https://www.researchgate.net/profile/Duoc-Truong-2/publication/36397069_Quality_of_business_graduates_in_Vietnamese_institutions_Multiple_perspectives/links/56cfbb5)
- Durrani, N., & Tariq, V. N. (2012). The role of numeracy skills in graduate employability. *Journal of Education and Training*. 54. p. 419-434. DOI:10.1108/00400911211244704

- Hamid, M. S. A., Islam, R., & Manaf, N. H. (2013). Enhancing Malaysian graduate employability skills: Quality function deployment approach. In *Proceedings of the International Symposium on the Analytic Hierarchy Process*. p. 23-26. Retrieved from <http://www.rafikulislam.com/uploads/myworks/43167429855ceb3340cc14.pdf>
- Koehler, M. J., Shin, T. S., & Mishra, P. (2012). How do we measure TPACK? Let me count the ways. In *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches*. IGI Global. p. 16-31. Retrieved from [https://www.academia.edu/3620638/How\\_do\\_we\\_measure\\_TPACK\\_Let\\_me\\_count\\_the\\_ways](https://www.academia.edu/3620638/How_do_we_measure_TPACK_Let_me_count_the_ways)
- Kónig, L., Juric, P., & Koprivnjak, T. (2016). Graduate Employability: A Gap between Perspectives - the Case of Croatia. In *Advances in Economics and Business*. Vol. 4(10). p. 525-538. doi:10.13189/aeb.2016.041002
- Leo, M. (2019). *What You Didn't Know About Fresh Graduate Unemployment in Malaysia* [Infographic]. Retrieved from <https://eduadvisor.my/articles/what-didnt-know-fresh-graduate-unemployment-malaysia-infographic/>
- Messum, D., Wilkes, L., Peters, K., & Jackson, D. (2016). Content analysis of vacancy advertisements for employability skills: Challenges and opportunities for informing curriculum development. In *Journal of Teaching and Learning for Graduate Employability*. Vol. 7(1). p. 72-86. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1235859.pdf>
- McCowan, T. (2015). Should universities promote employability? In *Theory and Research in Education*. Vol 13(3), p. 267-285. DOI:10.1177/1477878515598060
- McMurray, S., Dutton, M., McQuaid, R., & Richard, A. (2016). Employer demands from business graduates. In *Education+ Training*. Retrieved from <http://www.storre.stir.ac.uk/bitstream/1893/25629/1/Paper%20Employer%20Demands%20For%20Business%20Graduates%20260914e%20FINAL.pdf>
- McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. In *Urban Studies*. Vol. 42(2), 197- 219. Retrieved from <https://journals.sagepub.com/doi/abs/10.1080/0042098042000316100>
- Mishra, P., and Koehler, M. J. (2006). Technological pedagogical content knowledge: a framework for integrating technology in teachers' knowledge. In *Teachers College Record*. Vol 108 (6). p. 1017-1054. <http://dx.doi.org/10.1111/j.1467-9620.2006.00684.x>
- Newman, J. H. (1852). *The idea of university*. London: Longmans, Green, and Co.
- Pimentel, J. L. (2019). Some biasness in using Lickert scaling usage and its correction. In *International Journal of Sciences: Basic and Applied and Research*. Vol 45. p.183-191. Retrieved from [https://www.researchgate.net/publication/332533000\\_Some\\_Biases\\_in\\_Likert\\_Scaling\\_Usage\\_and\\_its\\_Correction](https://www.researchgate.net/publication/332533000_Some_Biases_in_Likert_Scaling_Usage_and_its_Correction)
- P21. Partnership for 21st Century Learning. (2015). P21 Framework definitions. Retrieved from [http://www.p21.org/storage/documents/docs/P21\\_Framework\\_Definitions\\_New\\_Logo\\_2015.pdf](http://www.p21.org/storage/documents/docs/P21_Framework_Definitions_New_Logo_2015.pdf)
- Ribble, M. (2017). Digital citizenship: Using technology appropriately. Retrieved from <http://www.digitalcitizenship.net/nine-elements.html>
- Rosenberg, S., Heimler, R., and Morote, E. (2012). Basic employability skills: a triangular design approach In *Education + Training*. Vol. 54(1). p. 7-20. DOI:10.1108/00400911211198869
- Simamora, R. M., de Fretes, D., Purba, E. D., & Pasaribu, D. (2020). Practices, challenges, and prospects of online learning during Covid-19 pandemic in higher education: Lecturer



- perspectives. In *Studies in Learning and Teaching*, Vol.1(3). p. 185-208. Retrieved from [https://www.academia.edu/52820291/Practices\\_Challenges\\_and\\_Prospects\\_of\\_Online\\_Learning\\_during\\_Covid\\_19\\_Pandemic\\_in\\_Higher\\_Education\\_Lecturer\\_Perspectives](https://www.academia.edu/52820291/Practices_Challenges_and_Prospects_of_Online_Learning_during_Covid_19_Pandemic_in_Higher_Education_Lecturer_Perspectives)
- Suryaningsih, V. (2021). Strengthening Student Engagement: How Student Hone Their Soft Skill Along Online Learning During Covid-19 Pandemic?. In *Jurnal Manajemen Bisnis*. Vol. 18(1), p. 1-15. DOI: <https://doi.org/10.38043/jmb.v18il.2806>
- Scott, G., & Yates, K. W. (2002). Using successful graduates to improve the quality of undergraduate engineering programmes. In *European Journal of Engineering Education*. Vol 27(4). p. 363-378. DOI: 10.1080/03043790210166666
- Warraich, N. F., & Ameen, K. (2010). *Perceptions of LIS professionals regarding use of Pakistan National Digital Library databases*. The Electronic Library. Retrieved from [https://www.researchgate.net/profile/Kanwal-Ameen/publication/220677531\\_Perceptions\\_of\\_LIS\\_professionals\\_regarding\\_use\\_of\\_Pakistan\\_National\\_Digital\\_Library\\_databases/links/54ee130e0cf25238f9399454/Perceptions-of-LIS-professionals-regarding-use-of-Pakistan-National-Digital-Library-databases.pdf](https://www.researchgate.net/profile/Kanwal-Ameen/publication/220677531_Perceptions_of_LIS_professionals_regarding_use_of_Pakistan_National_Digital_Library_databases/links/54ee130e0cf25238f9399454/Perceptions-of-LIS-professionals-regarding-use-of-Pakistan-National-Digital-Library-databases.pdf)
- Wilton, N. (2011). Do employability skills really matter in the UK graduate labour market? The case of business and management graduates. In *Work, Employment and Society*. Vol. 25(1), p. 85-100. Retrieved from <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.831.6104&rep=rep1&type=pdf>
- Yorke, M., & Knight, P. (2004). *Learning & employability: Learning and Teaching Support Network*. Retrieved from [http://www.employability.ed.ac.uk/documents/staff/heabriefings/esect-3-embedding\\_employability\\_into\\_curriculum.pdf](http://www.employability.ed.ac.uk/documents/staff/heabriefings/esect-3-embedding_employability_into_curriculum.pdf)
- Zavala, M. C. (2020). Influence of the characteristics of competences on the employability of graduates of Higher Education Institutions. *Revista Iberoamericana de educación*, 3(3). p. 1-17. Retrieved from <https://files.eric.ed.gov/fulltext/ED608024.pdf>