

Curriculum, Work Readiness, and Employability in Malaysian Higher Education: Unpacking the Nexus

Menyelusuri Perhubungan: Menyingkap Hubungan Antara Reka Bentuk Kurikulum, Kesiediaan Bekerja, dan Kebolehpasaran Dalam Pendidikan Tinggi Malaysia

FILZAH MD ISA, MUHAMMED ABDULLAH SHARAF*, SHAISTA NOOR & MUHD AFIQ SYAZWAN AHMDON

ABSTRACT

The correlation between curriculum design and a student's knowledge and skills is pivotal. As the effective application of acquired knowledge and skills directly impacts individual work readiness and employability. Inherently, the employability of graduates has always been one of the main concerns among employers. In line with this issue, a qualitative study was conducted to investigate the graduates' readiness for employment in Malaysia. This study delves into examining the universities' curriculum design to understand the students' view on the quality of the curriculum design for Master's degrees in their respective Higher education Institution. The present study adopts the qualitative research strategy. A focus group discussion was conducted in English language in two universities - i.e., one public and one private. The reason to choose public and private universities is to get deeper exploration from both perspectives. From each of university 20-40 participants were involved in the focus group. During the focus group, the participants were led into a discussion on the relationship between curriculum design, work readiness and employability in Malaysian Higher Education. The audio-recorded focus groups were transcribed verbatim and analysed. The findings indicate the presence of effective modules and a moderate comprehensiveness of the Postgraduate program modules (Master), which influence the students' knowledge and skills relevant to their jobs and readiness for employment. For the practical implications, universities need to add problem-based learning, internship and apprenticeship, field trips and site visit, technology integration and project-based learning modules to enhance their graduates' employability and prepare them for any uncertainties.

Keywords: *graduates' readiness; employability; curriculum design; master's program; higher education*

ABSTRAK

Reka bentuk kurikulum boleh mempengaruhi pengetahuan dan kemahiran seseorang pelajar secara signifikan. Selain itu, keupayaan pelajar untuk menggunakan pengetahuan dan kemahiran akan seterusnya menentukan kesiediaan beliau untuk bekerja dan juga kebolehpasaran beliau dalam industri. Sememangnya, kebolehpasaran graduan sering menjadi salah satu perkara utama yang dititikberatkan di kalangan majikan. Selaras dengan isu ini, suatu kajian kualitatif telah dijalankan untuk menyiasat kesiediaan para graduan untuk bekerja di Malaysia, serta mengkaji reka bentuk kurikulum universiti, bagi memahami pandangan pelajar tentang kualiti reka bentuk kurikulum Sarjana di universiti mereka. Kajian ini menggunakan kaedah perbincangan kumpulan fokus yang telah dijalankan di dua universiti yang berbeza iaitu universiti awam awam dan swasta, yang melibatkan 40 peserta di mana seramai 20 peserta mewakili setiap universiti. Penemuan kajian menggambarkan kewujudan modul program yang berkesan dengan tahap komprehensif modul yang sederhana, yang mempengaruhi pengetahuan dan kemahiran pelajar, serta sesuai dengan perkerjaan masing-masing dan juga sesuai dengan kesiediaan mereka untuk bekerja. Dari sudut implikasi praktikal, universiti perlu memperbaiki modul program dan reka bentuk kurikulum untuk menyerlahkan daya kerja siswazah mereka, dan mempersiapkan mereka untuk menghadapi sebarang ketidakpastian di alam pekerjaan.

Kata kunci: kesiediaan graduan, dayakerja, rekabentuk kurikulum, program sarjana

INTRODUCTION

Higher education has gained remarkable importance and undergone various modifications over the past few decades. Universities play a vital role in innovation and human capital development with

the ever-changing global trends, especially due to technological advancement and consumers' lifestyles (OECD, 2012). Today, universities are considered an important source of knowledge and human capital because they educate many societal members. It is widely accepted that investment in

higher education crops well-groomed, educated graduates. University graduates play a key role in the knowledge-based economy as HEIs produce new knowledge, conduct prime research, and facilitate ongoing industry-based projects.

Knowledge is a core element of higher education institutions. Universities play a main role in establishing a successful, viable, knowledge-based economy (Dil et al., 2010). In addition, apart from spreading knowledge, universities are also responsible for preparing students with sufficient employability skills that enable them to get ready for work after graduation (Bramwell, 2015). Universities are pressurized to equip students with strong academic backgrounds and general skills required in various types of employment. McQuaid et al. (2005) define employability as the distinctiveness of an individual. Hence, employability skills and career development paths are significant for the universities' future (Knight et al., 2003). Previous research has highlighted that employability skills require the participation of greater individuals. In this regard, a career advisor plays a vital role in scheming the applicability of any initiative. However, senior management should know about it.

From recent to 40 - 50 years ago, higher education is referred to as traditional research universities. The scenario has completely changed today as university education is widely spread due to the entrance of new players and the diversification of HEI profiles, programs, technological advancements, and students. The transfer of knowledge between academia and business enhances investments' economic and social returns, the country's progress, and high living standards. Hence, academic research and development are the keys to economic prosperity and development (Moss et al., 2007). In recent years, governments around the globe have been stressing the growth of the university education system for economic progress. Around the world, it is accepted that innovative ideas generated by human capital are drivers of economic progress and growth (Jeon et al., 2011). The role of universities needs to be demonstrated in the transformation of society. It is a societal reproduction (Moss et al., 2007). Santiago et al. (2008) stated that human resources are closely linked with universities in the knowledge base economy, which are students that universities produce for the job and level of academics held by higher education institutions.

Universities play a remarkable role in the economic development and progress of the country via knowledge transfer and knowledge management. Hence, effective knowledge management strategies within higher education institutions enhance their capability to become a key player in economic growth. Higher Education Institutions are facing an important issue of graduate employability worldwide. Bridgstock (2009) stated that skills and knowledge are the core ingredients of employability, which consist of common skills of career management and subject knowledge. The employability of graduates is considered a key issue as graduates face highly viable and changing employment sectors (Andrews et al., 2008). Employability is the capability of graduates to acquire a job appropriate to their educational standards. Employability is directly linked with students as the main aim of most university students is not an in-depth study of specific subjects. On the other hand, it boosts their employment status (Stewart et al., 2000).

Knowledge sharing in the form of technology commercialization is a big challenge and the third mission activity for universities apart from teaching and research. Universities all around the globe accepting this challenge of academia-industry collaboration. Hence, graduates from Higher Education Institutions respond to industries, developing graduates' employability. Consequently, preparing students to succeed in a knowledge-based economy requires an environment that stresses creativity, innovation and thinking. It is a challenge for higher education institutions to prepare students to excel in a complex knowledge base economy due to globalization. Universities tend to be in a state of investigation, analysis, and prediction and responsive towards issues raised by knowledge sharing and creation (Stukalina, 2008).

Malaysia is a developing country ranked in the upper middle-income group, and it will join a high-income bracket by the year 2020. The government is determined to accomplish this goal by enacting policies and measures that help the country's overall development and progress. The importance of universities is widely accepted. Investing in Higher Education Institutions Research and Development produces highly productive, trained graduates in the market and a high employability rate. Previous research conducted in the context of work readiness and employability highlights that there is a mismatch exists between employers, instructors and student's perceptions about the relative priorities amongst

work readiness skills, which are considered important for employment (Paviotti, 2020; Silva et al., 2021). The huge gap between employer expectations and graduates in skills preparation should be integrated into curriculum design for continuity improvement (Czerwińska-Lubszczyk et al., 2022).

Moreover, the knowledge and skills gained by the students throughout their university studies seem inadequate as, in various cases, they need to meet industry requirements. Their employability skills directly influence students' work readiness. The present study is conducted from Malaysia's perspective to determine the universities' postgraduate students' work readiness. The exploratory study examines whether existing universities' curriculum designs can impart adequate knowledge and skills required by the students to enable them for employability.

LITERATURE REVIEW

Several decades ago, higher education was referred to as traditional research universities. However, to date, the scenario has completely changed as university education is widely spread due to the entrance of new players and the diversification of higher education institutions (HEIs) profiles, programs, technological advancements, and students from various parts of the world. Malaysia is also experiencing a revolution in higher education due to the increasing demands of industry players for well-equipped graduates who can become resourceful human capital to their organisations. It is widely accepted that innovative ideas generated by human capital are drivers of economic progress and growth (Jagódka & Snarska, 2021; Alexandra Dorneanu et al. 2022). The transfer of knowledge between academia and business enhances the economic and social returns of investments, the progress of the country and the high standards of living in the society. Thus, a quality curriculum design that fits both students and employers will help develop and enhance the employability skills required by the industries.

In recent years, governments around the globe have been stressing the growth of the university education system for economic progress. The role of universities is not only demonstrated as the transformation of society but in fact, it is considered as a society reproduction (Chervona & Bulvinska, 2021; Gubanov & Gubanov, 2022). Zheng (2020) stated that human resources are closely linked

with universities in the knowledge base economy, especially with the emergence of computer-assisted technology, students which universities produce for diverse jobs and levels of academics held by universities. However, preparing students to succeed in the labour market requires an educational environment that stresses creativity, innovation and thinking. It is a challenge for universities to prepare students to excel in a complex knowledge base economy due to globalization and Industrial Revolution 4.0 (IR4) (Bashir et al., 2022). The Malaysian education industry faces extreme competition from neighbouring countries, observing the same consumer groups in this region. This is the biggest trial for Malaysian universities: formulate education programs that attract the market and help students get the right jobs. Thus, it is a big challenge to prepare education programs that are attractive to the markets and, at the same time, able to push graduates towards the right employment opportunities.

Suitable employment opportunities require sufficient employability skills. Hence, employability has become a topic of great concern as many university graduates are unable to fulfil employers' needs. Employability is a complex term as there is no cohesively agreed-upon definition; few research studies have highlighted that employability is the rate of employment after graduation, whereas others stress performance. Nguyen & Hartz (2020) explained employability in terms of successes, skills and overall personal qualities that help attain employment and carry comprehensive personal and economic benefits. On the other hand, McQuaid and Lindsay (2005) defined employability as individual distinctiveness. Hence, employability skills and career development paths are considered significant for universities' future survival as universities are pressurized to prepare students with a strong academic background as well as with general skills, for instance, creativity, innovation, leadership, psychological capital and interpersonal relations concerning to various types of employment (Awwad, 2021; Elsey et al. 2022).

Past studies show that graduates' employability directly relates to HEIs and job marketable graduates as a commodity, whereas primary responsibility comes to students (Leong & Kavanagh, 2013; Lundgren-Resenterra & Kahn, 2020) and increasing graduates' employability in the challenging world (Aman, 2020). Hence, university students should adopt a proactive approach, lifelong learning

(Mainga et al., 2022), self-awareness, critical reflection (Mainga, 2022), personality (Ling et al., 2022) to prepare themselves to meet the standards of employment (Leong & Kavanagh, 2013). In other words, without proper skills and knowledge, students might not be able to get jobs as per their expectations. Universities have to offer programs and modules that match industrial expectations to equip students with the general skills employers require in globalisation and IR4. (Mian et al., 2020). Research conducted at Peninsula Medical School depicts early, structured, and sustained experimental learning focused on practical knowledge and analytical reasoning, proving that such curriculum design prepares students for the job market in a better way (Bleakley & Brennan, 2011). However, the importance of revisions in curriculum designs comes from students needing to learn how to deal with ambiguity and handle uncertainty by putting them in an illustrated situation (Bleakley, Bligh & Browne, 2011). Thus, universities usually produce students with different skills and readiness even though their teaching contents stress the importance of refining curriculum designs. In addition, another worth mentioning attribute to graduates' work readiness is employability skills, which, according to Sherer and Eadie (1987), cut horizontally across industries and vertically across jobs from top management levels down to entry levels. Khir (2006) stated that many Malaysian graduates do not possess soft skills, which makes employability a challenging task apart from being well-trained in their specialised area; this critical issue proves the importance of this study (Shah et al. 2022).

METHODOLOGY

This study employed the focus group as the main data collection process. Two focus group discussions were conducted at two different universities, a public and a private university. In this study, 40 participants were involved in both focus group discussions, 20 from each university. The reasons behind adopting the focus group discussion strategy are; 1) it's potential to provide various information, especially for exploratory data (Vaughn, Schumm, & Sinagub, 1996); 2) its ability to dig for knowledge and experience of participants, not only on what they think but also on why they think like (Krueger, 1994);

3) it can be used to generate new ideas or knowledge from a study (Barnett, 2002); 4) it is a tool to explore how an issue emerged and how this issue being given attention and focused (Kitzinger, 1999); 5) this method can assist in a hypothesis development (Barnett, 2002), and finally; 6) it can provide the latest information about a particular issue or attain a new idea for another new research (Nassar-McMillan & Borders, 2002). Furthermore, focus group discussions were instrumental in generating new ideas or knowledge, exploring the emergence and attention given to specific issues, aiding hypothesis development, and providing the latest information on the research topic.

The sampling technique employed in this study aimed to ensure representation from both public and private university settings. A purposive sampling approach was utilized to select 20 participants from each university, totalling 40. This method allowed for intentionally selecting individuals with relevant experiences and perspectives related to the research topic. The study sought to capture a comprehensive range of insights by including participants from diverse educational backgrounds. Tongco (2007) stated that the purposive sampling strategy aimed to enhance the validity and richness of the data gathered during the focus group discussions, contributing to a more nuanced understanding of the research phenomenon.

The focus group discussion served as this study's central data collection process. Two sessions were conducted, each lasting a considerable duration, to encourage in-depth exploration of participants' thoughts and experiences. The discussions were guided by open-ended questions, carefully crafted to elicit comprehensive responses, stimulate meaningful dialogue among participants (Casey & Powell, 2021). The research team, well-versed in qualitative research methodologies, facilitated the sessions to ensure a conducive environment for open and honest exchanges. Despite the strengths of the focus group discussion, the study acknowledged its limitations, particularly the tendency to involve general questions. To mitigate potential discomfort and foster a cooperative atmosphere, the researchers refrained from posing overly personal or sensitive queries, emphasizing the importance of ethical considerations in the data collection (Mattos & Lingler, 2019).

FINDINGS

RESEARCH PARTICIPANTS

Tables 1 and 2 demonstrate the study's findings as they comprise data pertaining to the participants' demographic profiles, which are divided into

two different universities, public and private. Table 1 highlights the demographic profiles of the participants from the Public Sector University, while Table 2 shows the demographic profiles of the participants from private sector universities. The subsequent parts reveal the feedback of participants from both universities.

TABLE 1. Participants' Background (Public University) N=20

Demographics	Categories	Frequency
Education	Master's in education	11
	Master's in IT	4
	Master's in management	2
	Master's in finance	2
	Master's in management and business administration	1
Age	21 to 25	10
	26 to 30	4
	31 to 35	5
	35 to 40	1
Gender	Female	13
	Male	6
Work Experience	Yes	14
	No	7
Status	Full time	14
	Part time	6
Country	Malaysia	15
	Jordan	1
	Iraq	1
	Yemen	2
	Others	1

Table 1 shows that nearly half of the participants are from the Master's in Education program, with 11 students, followed by Information Technology students who make less than half of the previous number. Furthermore, two participants are doing a Master's in Management, two students are taking a Master's in Finance, and the other is doing a Master's in Business Administration. Exactly half of the participants from the public university are between 21 and 25 years old, which indicates that most students from public universities usually go

for Master's programs directly after they graduate with their bachelor's degree. The participants are 13 females and seven males. Regarding work experience, 14 participants claim to have work experience, whilst the other 6 have none. About 14 of them are full-time students, and six are studying part-time. Finally, the participants are 75 % from Malaysia, while the remaining 25% consisted of students from Yemen, Jordan, and Iraq, and one did not specify this information.

TABLE 2. Participants' Background (Private University) N=20

Demographics	Categories	Frequency
Education	Master's in management	9
	Master's in finance	3
	Master's in management and business administration	8
Age	21 to 25	3
	26 to 30	12
	31 to 35	3
	36 to 40	1
	41 to 45	1
	Gender	Female
Male		7
Work Experience	Yes	18
	No	2
Status	Full time	14
	Part time	6
Country	Malaysia	13
	Bangladesh	3
	Pakistan	1
	China	2
	Oman	1

. Table 2 illustrates the demographic profile of the participants from the private university. It is shown that almost half of the participants are from the Master's in Management program (9). At the same time, students enrolled in Master's in Management and Business Administration make a total of 8, followed by Master's in Finance with only three students. Most students are aged between 26 and 30, and this might be because they mostly enroll on master's programs within a year or two after they graduate with their bachelor's degree. Students aged between 21 and 25, as well as those between 31 and 35, both have three representatives each, while another two participants are older than 35 years old. Among the 20 participants, 13 are females, and seven are males. Almost all participants have work experience except for two, and the majority are full-time students with a total of 14, while the other six are doing part-time study. Since the research is conducted in Malaysia, there are a total of 13 Malaysian participants, whereas the other seven participants are from different countries, namely Bangladesh, China, Pakistan, and Oman.

By comparing the two tables (1 and 2), we may imply that most students pursuing master's programs in public universities are younger and have just finished their bachelor's degree. In contrast, private university students usually work for a few

years before enrolling in any master's program. Hence, we may conclude that those studying at a private university might have more exposure to industries than those in a public-sector university. Both participants from the private and public sector universities have many students with little work experience; however, from the age groups, it might be possible that those with work experience from the public sector university have undergone simple work that could be related to in-store work chores, restaurants, and in-campus businesses. On the contrary, the group from the private sector university has a majority of participants aged more than 26; hence, this indicates that their working experience can be more related to the courses they took in their bachelor's degree, and they have a knowledge of the corporate industry to some extent.

THE FOLLOWING DISCUSSIONS ARE RELATED TO THREE QUESTIONS THAT HAVE BEEN POSED TO THEM DURING THE FOCUS GROUP DISCUSSION SESSION.

RESEARCH QUESTIONS

Q1: What is/are your comment(s) on the University existing curriculum design for master's degree? Please explain your personal view on this matter

TABLE 3. Participants' View on the Goodness of the Curriculum Design

Public University	Private University
Good - (17)	Good - (16)
Not Good - (3)	Not Good - (4)

From Table 3, we can observe the participants' views on curriculum design in their respective universities. In this regard, the highest responses came from the public-sector university participants, suggesting that the curriculum design is quite good. A total of 17 participants stated that the university's curriculum design provided them with simple knowledge and skills that helped them be ready for employment and enabled them to join the industrial sector confidently. However, only three participants disagreed with this and were hesitant to make the curriculum good in lieu of the industrial sector.

Similarly, from the private sector university, 16 out of 20 students agreed that the curriculum design is good, and they benefit from the knowledge and

skills they have attained during their studies, which prepare them for the work world. On the contrary, four students opposed these remarks. They stated that the present university's curriculum design is not good enough for them to utilise their knowledge and skills in the industry they chose to work. This feedback shows that both universities' existing curriculum designs are considered well and provide the students with adequate knowledge and skills that the employers need.

Q2: Do you think the University provides a comprehensive program module (subjects) that are needed by employers in the industries? Please justify your answer.

TABLE 4. Participants' View on the Comprehensiveness of the Modules

Public University	Private University
Yes - (9)	Comprehensive - (14)
No - (11)	Not comprehensive - (4)
	Moderate - (1)
	No idea - (1)

From Table 4, we can view the different opinions of both groups of participants. More than half of the participants from the public sector university (11 students) stated that the modules are not comprehensive enough, and these subjects are mostly theoretical; thus, studying them does not benefit the students to practice their knowledge and skills in their jobs. However, the majority of the participants from the private sector university believe that their present program modules are

comprehensive and cover all subject areas that are needed in the workplace, and this allows them to feel ready to work immediately after completing their studies or to further explore better opportunities in the future employment.

Q3: Based on the accumulated knowledge and know-how that you gathered from your learning experience at the University, are you ready for employment? Please justify your answer.

TABLE 5. Participants' Readiness for Employment

Public	Private
Yes - (16)	Ready - (16)
No - (4)	Not ready - (4)

Table 5 illustrates that most participants from both private and public-sector universities believe they are ready for employment; hence, both sectors' participants have a total of 80% agreement on this point. However, it is interesting to note that most of the participants' comments from the public-sector university showed their readiness

to enter the academic field after graduation rather than join any profit-oriented organisations to practice their knowledge. Similarly, students from private universities expressed their readiness for employment, but on the contrary, they believe they are more ready to join the practical industry than academic-related work.

DISCUSSION

CURRICULUM DESIGN

The findings from this study reveal that the majority of the participants from both sector universities articulated their satisfaction with the overall

curriculum designs in their respective universities. However, here is a list of feedback from their discussions that the universities can use to improve their curriculum design further. Table 6 highlights the most shared comments that participants have given during the focus group discussions.

TABLE 6. Participants' Comments on the Curriculum Design

Public University	Private University
Provides a good theoretical knowledge (K)	The need for wide range of class distribution (-ve)
Many helpful assignments and mini projects (K)	Case studies improve students' perspective (K)
Helps in sharing knowledge (K)	The design improves teamwork (S)
Provides a good interaction platform (S)	Provides a good foundation for business knowledge (S)
The need for presentations improves soft skills (S)	Long hours of classes (-ve)
Lack of skills training (-ve)	Intensive design which makes it hard to follow (-ve)
	There is a need to provide more elective subjects (-ve)
	The curriculum is not diverse enough (-ve)

Acronyms: (1) Knowledge – (K) (2) Skill - (S) (3) Negative feedback – (-ve)

Based on Table 6, the participants' feedback is classified into positive and negative comments. The feedback can also be further clustered into several forms: 1) knowledge improvement (K) and 2) skill improvement (S). The curriculum designs in both sector universities can help the students improve the knowledge and soft skills required for employment. However, there is also a list of negative feedback (-ve), mostly from private universities, that needs to be focused on and taken into consideration by both sector universities' top management if they intend to be competitive in the educational industry. The students' grievances over the long hours of classes, inability to follow the intensive design of modules, lack of training to build skills, insufficient elective subjects to be chosen and lack of variety of

curriculum should be taken seriously and utilised as the main reason to re-review the present curriculum designs in the universities. The upcoming curriculum design must strongly match students' and employers' needs and requirements. This is needed to create a continuous supply of human capital with exceptional talents that will benefit the three influential parties: students, universities, and employers.

MODULES (SUBJECTS) OFFERED

Pertaining to modules that are presently offered by the universities, a list of comments is derived from both focus group discussions, and their feedbacks are provided in Table 7.

TABLE 7. Participants' Comments on the offered modules

Public University	Private University
Good knowledge coverage (K)	More courses are needed (Sug)
Modules do not cover the soft skills improvement (-ve)	Reliable case studies are offered (K)
Focuses more on the theoretical knowledge (-ve)	The modules offered develop student's soft skills (S)
A good platform for research development (KS)	Modules cover almost all managerial aspects (KS)
The module is only good for those already working (-ve)	Can easily be applied on the industry (S)
Lacks practical knowledge (-ve)	Good theoretical and practical coverage (KS)
	Provides solid foundation (KS)

Acronyms: (1) Knowledge – (K)
 (2) Skill - (S),
 (3) Negative feedback
 (4) Suggestion – (Sug)
 (5) Mixture of knowledge and skills

Overall, the modules in both sector universities encompass the transfer of knowledge and skills and the mix-match of knowledge and skills that benefit students. The modules can expand their knowledge on the subject matters and help them develop new skills that can lead them to fit well in their present and/or future jobs, subsequently influencing their job satisfaction level. We can detect more positive views regarding the outcome of their learning process from private universities than from public sector universities. However, participants from the private university suggested that more courses should be included in the master’s program. Participants from the public university state their concerns over the inability of the modules to improve their soft skills, as they are too theoretical and lack practical skills to apply the knowledge.

READINESS FOR EMPLOYMENT

Despite the negative feedback mentioned in the focus group discussions, most participants indicated their readiness for employment, either for the first time or for a better career option in the future.

From their feedback earlier, many participants from public universities prefer to work in academic fields, whereas those from private universities seem to be ready to join industries where they can practice their skills. Their choice of work could be accredited to the organisational factors, environmental factors or the service cape of the university that surrounds them on the campus. Specifically, public universities in Malaysia are mostly sponsored, dictated, and subsidised by the Government, and they are also not profit-oriented institutions. On the other hand, private universities are generally self-funded and establish themselves as profit-oriented institutions that practically garner their revenues from the students’ registration fees, grants, external projects, contributions or donations, business networks, etc. The university characteristics and operational system differences could influence the participants’ career types. Figure 1 illustrates the conceptual framework of this study which derived from the participants’ feedback.

CONCEPTUAL FRAMEWORK

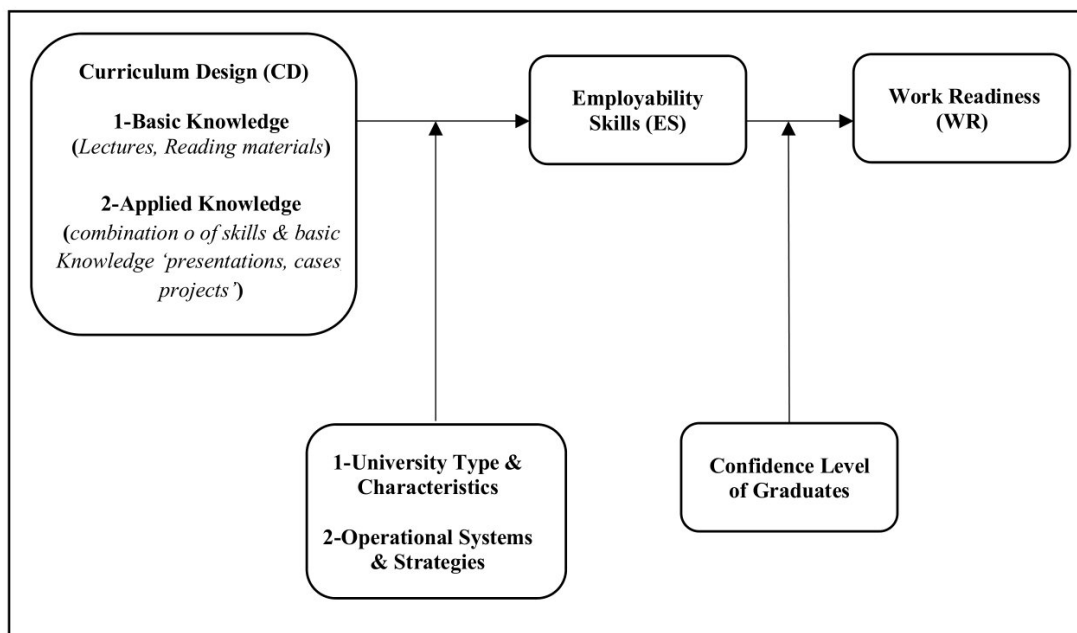


FIGURE 1. Relationship of curriculum design and employability towards work readiness.

From the figure above, it is suggested that curriculum design influences employability skills. Curriculum design consists of basic knowledge that students get in their universities, whether from lectures or reading materials; general skills students possess, such as presentation skills or problem-solving skills; and applied knowledge, which is a combination of both the knowledge and the skills which are in line with Bridgstock (2009) who used the terms “graduate attributes” to describe the skills students get during their studies and stated existence of a positive relationship with employability skills.

The second relationship in the figure suggests that employability skills have a positive relationship with graduates’ work readiness, which means the more employability skills graduates have, such as “communication skills, transactional skills, problem-solving skills and managerial skills”, the better chances they will have in landing the desired jobs they seek and performing well in them, this finding is similar to that of Fallows and Steven (2000) who shed light on the importance for graduates to obtain both curriculum knowledge and different skills and how that directly impacts graduates chances of employability. The role of employability here is a mediator between curriculum design and work readiness.

From the answers given by the participants, two moderating variables were proposed in the framework. The first is the university type, as whether the university is private, or public can moderate the relationship between curriculum design and employability skills. The other moderating variable is the graduates’ confidence level in the relationship between employability skills and work readiness. This variable could moderate the relationship, and the stronger a graduate’s confidence level, the more their employability skills impact their work readiness and vice versa.

Based on the study’s findings, we may conclude that the most fitting theory to explain the relationships among the variables derived from the participants’ responses is the Human Capital Theory (HCT). HCT is the most applied theory for studying graduates’ readiness and employability. Human Capital is a term that refers to the collection of “knowledge, habits, social and personality attributes, including creativity, embodied in the ability to perform labour to produce economic value” (Becker, 2009). This theory has been used extensively in many studies on higher education (HE) and careers since the 1960s. Shultz (1961) argued that a country’s future

social and development opportunities and growth rely heavily on the skills and knowledge gained from education and work placements. Thus, this can impact the creation of talents that can turn themselves into resourceful human capital for their organisations. HCT highlights that human resources can differentiate the efficacy readiness of employment seekers based on their unique characteristics and the soft skills they have. Nevertheless, graduates’ lack of talent as required by the industries, lower education quality and fewer career opportunities create a challenging process of employability (Lehhari & Weiss, 1974).

CONCLUSION AND FUTURE RESEARCH

Despite the existence of some weaknesses in universities’ modules, graduates are ready for employment and credited to existing curriculum designs of universities. However, further developments are needed to improve the quality of the current curriculum design. In the process of enhancing the curriculum design, universities need to find innovative ways to deliver the required knowledge, not in a way that could overwhelm the students; they should aim to expose them to novel experiences and new ideas that could guide and benefit them in their industrial or academic journey. It is important to highlight the importance of having a balanced curriculum design, which enhances graduates’ knowledge and improves the skills they need in the work field. This study has covered the curriculum design and employability of graduates in the Malaysian context. However, further research needs to be conducted in different universities.

To extend the insights garnered from this study, future research could encompass several dimensions. Firstly, a comparative analysis across diverse universities would offer a broader understanding of curriculum designs and their impact on graduate employability. Examining variations in educational approaches and industry demands across different institutions could provide valuable insights for refining curricula. Additionally, delving into the employers’ perspective is imperative to comprehensively assess the alignment between graduates’ knowledge and skills and industry requirements. Collaboration with industries could identify specific skill sets desired by employers, facilitating targeted curriculum development.

Furthermore, investigations into integrating technological advancements in curriculum delivery

and incorporating experiential learning methods represent promising areas of exploration. Evaluating the effectiveness of emerging technologies and innovative pedagogical strategies may offer practical recommendations for curriculum reform. Expanding the geographical scope to include an international context could allow for cross-cultural comparisons, offering a more comprehensive understanding of global trends in curriculum design and employability. In the realm of future research, the focus should be on refining and expanding the current knowledge base to continually improve university education and better prepare graduates for the dynamic demands of the professional landscape.

REFERENCES

- Aman, A. 2020. Sustainability of Impact Sourcing Initiatives in Higher Education for Graduates' Employability. *Sustainability*. <https://doi.org/10.3390/su13010008>.
- Andrews, J., & Higson, H. 2008. Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher education in Europe*, 33(4): 411-422.
- Awwad, F. 2021. Assessment of the graduates' skills environment for job performance: structural equation modeling., 11, 7956-7970. <https://doi.org/10.28919/10.28919/JMCS/6662>.
- Barnett, J. M. 2002, Focus groups tips for beginners. *Texas Centre for Adult Literacy & Learning*.
- Bashir, M., Iqbal, S., & Yusof, K. 2022. Development of Innovation and Digital Fluency in the HEI Curriculum as an IR4.0 Enabler. *Int. J. Innov. Digit. Econ.*, 13, 1-10. <https://doi.org/10.4018/ijide.292008>.
- Becker, G. S. 2009. *Human capital: A theoretical and empirical analysis, with special reference to education*: University of Chicago Press.
- Bleakley, A., & Brennan, N. 2011. Does undergraduate curriculum design make a difference to readiness to practice as a junior doctor?. *Medical teacher* 33 (6): 459-467.
- Bramwell, A. 2015. Who Speaks for Toronto? Collaborative Governance in the Civic Action Alliance. *Collaborative governance regimes* 95.
- Bramwell, A., Nelles, J. and Wolfe, D.A. 2008. Knowledge, innovation and institutions: global and local dimensions of the ICT cluster in Waterloo, Canada. *Regional Studies* 42(1): 101-116.
- Bridgstock, R. 2009. The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development* 28(1): 31-44.
- Casey, S., & Powell, M. 2021. Usefulness of an e-Simulation in improving social work student knowledge of best-practice questions. *Social Work Education*, 41: 1253 - 1271. <https://doi.org/10.1080/02615479.2021.1948002>.
- Chervona, L., & Bulvinska, O. 2021. Social And Cultural Determinants of University Social Responsibility. *Continuing Professional Education: Theory and Practice*. <https://doi.org/10.28925/1609-8595.2021.2.3>.
- Czerwińska-Lubszczyk, A., Grebski, M., & Jagoda-Sobalok, D. 2022. Competencies of Graduates – An Industry Expectation. *Management Systems in Production Engineering*, 30: 172 - 178. <https://doi.org/10.2478/mspe-2022-0021>.
- Dorneanu, A., Neamtu, D., & Hapenciu, C. 2022. Education and digitalization, the path to a more sustainable, resilient and secure society. *Proceedings of the International Conference on Business Excellence*, 16: 670 - 681. <https://doi.org/10.2478/picbe-2022-0064>.
- Elsy, V., Heijden, B., Smith, M., & Moss, M. 2022. Examining the role of employability as a mediator in the relationship between psychological capital and objective career success amongst occupational psychology professionals. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.958226>.
- Fallows, S. and Steven, C. 2000. Building employability skills into the higher education curriculum: A university-wide initiative. *Education+ training* 42(2): 75-83.
- Gubanov, N., & Gubanov, N. 2022. Education as the Supporting Structure of the Knowledge Society. *Alma mater. Vestnik Vysshey Shkoly*. <https://doi.org/10.20339/am.10-22.030>.
- Jagódka, M., & Snarska, M. 2021. The State of Human Capital and Innovativeness of Polish Voivodships in 2004–2018. *Sustainability*. <https://doi.org/10.3390/su132212620>.
- Khair, K. 2006. Training employable graduates: Innovation in training methodology. In *National Conference on Continuing Technical Education & Training* 34-52.
- Kitzinger, J. (ed.). 1999. *Introduction: the challenge and promise of focus groups*' in R. London: Sage.
- Krueger, R. A. 1994. *Focus groups: A practical guide for applied research*. Thousand Oaks, CA, Sage.
- Leong, R. and Kavanagh, M. 2013. A work integrated learning (WIL) framework to develop graduate skills and attributes in an Australian university's accounting program. *Asia-Pacific Journal of Cooperative Education* 14(1): 1-14.
- Levhari, D. & Weiss, Y. 1974. The effect of risk on the investment in human capital. *The American Economic Review*, 64(6), 950-963.

- Ling, H., Teng, S., Liu, X., Wu, J., & Gu, X. (2022). Future Work Self Salience and Future Time Perspective as Serial Mediators Between Proactive Personality and Career Adaptability. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.824198>.
- Lundgren-Resenterra, M., & Kahn, P. 2020. Higher education in a post-truth era: whose agency is triggered by a focus on employability?. *Journal of Critical Realism*, 19, 415 - 431. <https://doi.org/10.1080/14767430.2020.1805277>.
- Mainga, W., Daniel, R., & Alamil, L. 2022. Perceptions of Employability Skills of Undergraduate Business Students in a Developing Country: An Exploratory Study. *Higher Learning Research Communications*. <https://doi.org/10.18870/hlrc.2022.v12i1.1257>.
- Mainga, W., Murphy-Braynen, M., Moxey, R., & Quddus, S. 2022. Graduate Employability of Business Students. *Administrative Sciences*. <https://doi.org/10.3390/admsci12030072>.
- Mattos, M., & Lingler, J. 2019. Research Data Disclosure in the Digital Age.. *Journal of Alzheimer's disease : JAD*. <https://doi.org/10.3233/jad-190725>.
- McQuaid, R.W. and Lindsay, C. 2005. The concept of employability. *Urban studies* 42(2): 197-219.
- Mian, S., Salah, B., Ameen, W., Moiduddin, K., & Alkhalefah, H. 2020. Adapting Universities for Sustainability Education in Industry 4.0: Channel of Challenges and Opportunities. *Sustainability*. <https://doi.org/10.3390/su12156100>.
- Nassar-McMillan, S.C. and Borders, L.D. 2002. Use of focus groups in survey item development. *The Qualitative Report* 7(1): 1-12.
- National Centre for Vocational Education Research. 2003. Defining generic skills report. available at: <http://www.heacademy.ac.uk/ourwork/learning/employability>. Retrieved on: 23 November 2017.
- OECD. 2012. *Better skills, better jobs, better lives: a strategic approach to skills policies*. Organisation for Economic Co-operation and Development.
- Paviotti, G. 2020. Self-perceived employability and implications for learning design: An exploratory case study. *Education Sciences and Society*, 10, 170-193. <https://doi.org/10.3280/ESS2-2019OA8671>.
- Pham, T.H. 2008, Higher education in Vietnam: A look from labour market angle. In *Hanoi: Vietnam Development Forum*.
- Shah, N., Aziz, N., & Balraj, B. 2022. Soft Skills for Employability from Academics Perspectives. *Journal of Advances in Humanities Research*. <https://doi.org/10.56868/jadhur.v1i3.36>.
- Sherer, M. and Eadie, R. 1987. Employability skills: Key to success. *Thrust* 17(2).
- Silva, S., Silva, C., & Soares, G. 2021. Great Expectations. *Handbook of Research on Human Capital and People Management in the Tourism Industry*. <https://doi.org/10.4018/978-1-7998-4318-4.CH005>.
- Stewart, J. and Knowles, V. 2000. Graduate recruitment and selection: implications for HE, graduates and small business recruiters. *Career Development International* 5(2): 65-80.
- Stukalina, Y. 2008. How to prepare students for productive and satisfying careers in the knowledge-based economy: Creating a more efficient educational environment. *Technological and Economic Development of Economy* 14(2): 197-207.
- Tongco, M. 2007. Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications*, 5, 147-158. <https://doi.org/10.17348/ERA.5.0.147-158>.
- Tran, N. C. 2006, *Universities as drivers of the urban economies in Asia: The case of Vietnam*, Vol. 3949, World Bank Publications.
- Vaughn, S., Schumm, J. S., & Sinagub, J. M. 1996. *Focus group interviews in education and psychology*, Sage.
- Zheng, Y. 2020. Research on Innovation of Human Resource Management Mechanism in Colleges and Universities Based on Computer Aided Technology. *Journal of Physics: Conference Series*, 1648. <https://doi.org/10.1088/1742-6596/1648/3/032192>.
- Zucker, L. G., & Darby, M. R. 2006, *Movement of star scientists and engineers and high-tech firm entry*, No. w12172, National Bureau of Economic Research.

Filzah Md Isa
Taylor's University, Malaysia
filzah.mdisa@taylors.edu.my

Muhammed Abdullah Sharaf (corresponding author)
University Utara Malaysia, Malaysia
mu21shi@yahoo.com

Shaista Noor
Teesside University International Business School,
United Kingdom
shaistanoor25@gmail.com

Muhd Afiq Syazwan Ahmdon
Taylor's University, Malaysia
afiqsyazwan8888@gmail.com