Work Integrated Learning in higher education: Enhancing workplace readiness and graduate employability in Malaysia

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Abstract

Enhancing graduate employability is an ever-increasing focus for stakeholders in Malaysia as many universities contend with the notion of developing knowledgeable and skilled graduates for the workforce. National statistics show declining rates of graduate employment outcomes, suggesting a skills gap between industry requirements and the outputs from the education system. Despite efforts to improve graduate employability, including policy reviews by the government and initiatives taken by a few universities, results have not yielded the desired outcomes in terms of work-ready skills development. This study confronts the challenge of enhancing graduate employability within Malaysia. It surveys existing approaches and initiatives in the Malaysian higher education sector and then evaluates a Work Integrated Learning (WIL) framework which, it is argued, can enhance the work-readiness and employability of Malaysian business graduates.

The context of this study began by recognising the highly centralised education system and cultural differences in Malaysia, a developing country. Literature reveals that while Malaysian universities have attempted to incorporate generic skills in undergraduate studies, the initiatives were not supported by significant or measurable learning outcomes. This study addresses the gap between the existing fragmented efforts to build work-ready capabilities by proposing the introduction of a structured framework and teaching pedagogy which includes the development and assessment of workplace competencies. This research focuses on the ongoing concerns regarding graduates' workplace readiness and examines the need for collaborative work by multiple stakeholders to address this problem. More precisely, this research seeks to examine the attitudes and expectations of stakeholders regarding the quality of existing employability teaching strategies and the potential value of a structured WIL program.

The academic discourse on employability and the concept of WIL by non-Malaysian scholars are discussed by drawing on key theories underpinning WIL development in universities worldwide. Specific learning frameworks are examined to define a WIL model to suit different learning requirements. As evidenced in substantial global literature, using WIL in the curriculum can aid in the development of positive learning outcomes, specifically graduate attributes and employability skills. Such literature shows the importance for WIL programs to be structured in their design, and customized to individual country's needs, particularly those relating to learning culture and education systems.

A social constructivist approach using a qualitative methodology was adopted to undertake this research. A purposive sampling protocol was employed to select the groups of participants as stakeholders of this research outcome. A total of 24 interviews and focus group sessions were conducted involving 57 participants. A robust thematic data analysis process identified the perspectives and expectations of the stakeholders to establish the contribution of WIL to enhance graduate employability.

There was strong evidence across the groups for the career, social and personal benefits of WIL for graduates. The foremost challenges to successful WIL were identified as policy empowerment involving curriculum flexibility, establishing a structured assessment and measurement of WIL in the curriculum and the collaboration of all stakeholder groups. Building on these research findings, the thesis then advances a three-stage process by which an effective WIL program may be operationalized, including the preparatory, implementation, and evaluation stages. Overall, the thesis makes an important contribution to our understanding of stakeholder attitudes and expectations regarding the current state of employability teaching in Malaysian higher education and the means by which this vital area of university practice can be improved.

Declaration of Authenticity

"I, Chitra Devi Ragunathan, declare that the PhD (Integrated) thesis entitled "Work Integrated Learning in higher education: Enhancing workplace readiness and graduate employability in Malaysia" is no more than 60,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work".

"I have conducted my research in alignment with the Australian Code for the Responsible Conduct of Research and Victoria University's Higher Degree by Research Policy and Procedures.

Ethics Declaration

"All research procedures reported in the thesis were approved by the Victoria University Human Research Ethics Committee (VUHREC) Ethics Approval Reference No: **HRE20-134".**

Signature: Date:

ChitraDeviRagunathan March 31, 2023

Acknowledgement

This work is the fruit of countless and arduous sacrifices. I would like to commence by humbly dedicating this labour to God, whose divine guidance and wisdom proved indispensable in bringing this research odyssey to fruition.

My heartfelt gratitude and indebtedness go to my primary supervisor, Dr Edward Lock, and my associate supervisor, Associate Professor Dr Fiona Henderson. Their exceptional mentorship and tireless backing played a pivotal role in ensuring the punctual completion of this thesis. Their efforts transcended conventional expectations, and their commitment to my advancement acted as a driving force. This is particularly noteworthy as I navigated these past three years as an international student situated overseas, reliant on virtual guidance amidst the challenges posed by the pandemic.

Alongside these dedications, I reserve a special place in this work for my late father, an abundant wellspring of my inspiration. His early emphasis on educational excellence laid the foundation for my fervour and resolute commitment as I set forth on this journey. Also deserving of this dedication, is my mother, my siblings, and their families, a constant source of encouragement who take pride in my accomplishments. Finally, but by no means least, I extend my heartfelt appreciation to my beloved husband and our four precious children. Their unwavering support, deep empathy, and buoyant spirits have smoothed the often-arduous path, especially during challenging junctures.

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"In every victory, let it be said of me, my source of strength, my source of hope, is Christ alone"

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LIST OF ABBREVIATIONS

ACCI	Australian Chamber of Commerce and Industry
ACER	Australian Council for Educational Research
ACEN	Australian Collaborative Education Network
ALTC	Australian Learning and Teaching Council
BCA	Business Council of Australia
CAP	Career Advancement Programme
CAQDAS	Computer-Assisted Qualitative Data Analysis System
CBI/NUS	Confederation of British Industry/National University of Singapore
CEDA	Committee for Economic Development of Australia
CSPP	Centre for Skills, Performance and Productivity, Singapore
CEUP	Committee on University Education Pathways
CIPD	Chartered Institute of Personnel & Development, UK
DfE	Department for Education, UK
DoSM	Department of Statistics Malaysia
ELT	Experiential Learning Theory
ESW	Employability in Malaysia: Selected Works
ESWPP	Employability Skills-Based Work Performance Prediction
EPU	Economic Policy Unit, Malaysia
EWIL	Embedded Work Integrated Learning
FYA	Foundation for Young Australians
GEP	Graduate Employability Policies, Malaysia
GTS	Graduates Tracer Study, Malaysia
HE	Higher Education
HEI	Higher Education Institutions
HERDSA	Higher Education Research and Development Society of Australasia
HERE-SA	Higher Education Reform Experts, South Africa
HOT	Higher Order Thinking
ICT	Information and Communications Technology

ILO	International Labour Organisation
MEB	Malaysian Education Blueprint
MoHE	Ministry of Higher Education, Malaysia
MoE	Ministry of Education, Malaysia
MQA	Malaysian Qualification Agency
NHESP	National Higher Education Strategic Plan, Malaysia
NCVER	National Centre for Vocational Education Research
NPE	National Philosophy of Education
OECD	Organisation for Economic Co-operation and Development
QAA	Quality Assurance Agency for Higher Education, UK
QILT	Quality Indicators for Learning and Teaching
SOP	Standard Operating Procedures
TEF	Teaching Excellence Framework
TEQSA	Tertiary Education Quality and Standards Agency
THE	Times Higher Education
UUCA	Universities and University Colleges Act
WACE	World Association for Cooperative Education
WBL	Work-Based Learning
WEF	World Economic Forum
WIE	Work-Integrated Education
WIL	Work-Integrated Learning

Chapter 1

Introduction

"More and more graduates are facing unemployment in Malaysia. As such, graduate employability is one of the main agendas of the ministry. The ministry together with the higher education institutions are working to ensure that graduates meet the requirements of the job market" *(Noraini Ahmad, Minister of Higher Education Malaysia)*

Graduate employability: A priority of the Education Ministry

The New Straits Times - February 18, 2020

The above statement by the Minister of Higher Education in the national media in Malaysia sets the stage for this study. The concern of various stakeholders is the preparedness of students to get a discipline-related job upon graduation. With the increasing number of graduates year after year due to the massification of universities and university colleges in Malaysia, coupled with the changes in the economic climate and labour market requirements (Mok 2016), the chances of students attaining a suitable job appear challenging, to say the least.

The concept of employability has over the past two decades become a topic of great importance to stakeholders in Higher Education Institutions (HEIs) in Malaysia, including undergraduate students, academics (and, in particular, Heads of Programs), employers and the government (and policymaker). Extant literature confirmed by labour market studies establishes a skills gap between the industry requirements and the outputs from the education system (Bremner 2018; Cappelli 2015; Jackson 2010, 2015; Raybould & Sheedy 2005; Sarker et al. 2021). Although policy reviews by the government and initiatives by some HEIs have attempted to address the skills gap, the rising unemployment statistics in Malaysia show the ongoing nature and growth of this challenge (Department of Statistics Malaysia (DoSM) 2021 www.dosm.gov.my). This study explores the topic of a strategic curricular intervention to address the skills gap and enhance the employability of Malaysian graduates.

This chapter explores existing research regarding how graduate employability should be defined and how it can best be developed by students. It moves on to consider the value of work-integrated learning as a specific curricular approach to graduate employability development. Finally, research that evaluates WIL models utilised in various settings is

examined to identify the core criteria that successful WIL programs ought to meet to enhance students' employability skills. This chapter evaluates certain Work Integrated Learning (WIL) models which are used as a curricular strategy, aimed at enhancing the employability of graduates. In addition, the benefits of a WIL curriculum are postulated as not only beneficial academically to students but also as a personal and professional advantage. To understand what skills are needed to realize specific learning outcomes, the literature review draws on learning theories by early researchers such as Kolb (1994), Nonaka and Takeuchi (1994), Cotton (2001) and Wenger (2004) about how people learn, which provides an understanding of the concepts that reinforce WIL development in universities worldwide. These learning theories emphasize that knowledge can be built and sustained through skills development (Cotton 2001), experience and reflection (Kolb 1994; Kolb and Kolb 2005), relationship building for mutual benefits (Wenger 2004), and through the interplay of tacit and explicit knowledge management (Nonaka and Takeuchi 1994), which will be discussed as a comparative study in Chapter Two.

Next, the review explores theoretical developments on WIL in Non-Malaysian universities to reveal the conceptualizations of WIL programs globally and to identify the considerations for WIL in Malaysia. An analysis is undertaken to determine what factors drive the need for WIL intervention, as well as what factors may challenge the anticipated learning outcomes of WIL while recognizing the different stakeholder roles. Furthermore, being cognizant of the massification of universities in Malaysia, scrutiny is carried out on global case studies in non-Malaysian universities that use WIL linked to learning outcomes (graduate attributes and employability) as a strategic differentiator in a student-centered market (Patrick et al. 2008).

1.1 Personal and professional curiosity

Prior to joining the world of academia, my experience as a Human Resource professional spanned more than 15 years in various portfolios. During this period, seven years of managing a recruitment team exposed me to conducting interviews and various stages of assessments with new graduates. In addition, business meetings and networking sessions placed me strategically with government officials and other employers in collaborative events and panel discussions. This experience made me increasingly aware of the challenges faced by Malaysian graduates to articulate or communicate clearly with external stakeholders despite securing good academic grades. Their challenge with communication was compounded during assessment sessions which were aimed at gauging their professional or workplace

competencies such as critical thinking, analytical thinking, problem-solving, learning agility, teamwork and interpersonal skills.

My deep concern for the lack of preparedness of Malaysian graduates to meet employers' expectations and the added challenge of an increasing number of new graduates seeking employment, led me to the realisation that there was a critical need to address the work-ready skills development in undergraduate studies. My passion to develop undergraduates beyond technical knowledge navigated me towards academia with the purpose to contribute beyond the subject knowledge and make a difference by upskilling them professionally.

My five years of teaching in various management units instilled a desire to embark on a journey that would make a significant contribution to a growing body of research by examining the nexus of higher education and employment in Malaysia. My debut in academic research began with a joint paper on the effectiveness of blended learning in tertiary education which was published in 2019 (Valentine et al. 2019). This experience spurred my interest as a researcher and my proposal defence in March 2019 provided a platform for me to share this passion and motivation. My research passion is in the area of exploring strategic curricular interventions in higher education that focus on a holistic learning outcome involving both technical and work-ready skills development for graduates to enhance their employability.

1.2 Chapter overview

Chapter One provides a background to the research by presenting an overview of the Malaysian Higher Education system, followed by the current unemployment challenges faced by Malaysian graduates. The role of the policymaker, which is the Ministry of Higher Education Malaysia (MoHE) is discussed, with details on its ongoing initiatives aimed to address this concern.

From a Malaysian perspective, the chapter then shifts to a global overview of higher education and deliberates on the strategic action steps being taken by various countries to prepare their graduates for successful employability outcomes. Next, a broad examination of Work Integrated Learning (WIL) as a teaching and learning approach designed to support employability is carried out.

The scope of the research is then explained together with the objectives and questions that this thesis seeks to address, as well as a discussion on the limitations of the research. Finally, the contribution to knowledge and the statement of significance are outlined, ending with the organisation of the bulk of this thesis.

1.2.1 The Malaysian Higher Education system: A historical focus on employability

Before considering how the employability of graduates from Malaysian higher education programs might be pursued, it is necessary to appreciate the distinctive features of the system in which those programs operate. The Malaysian education system was inherited from the British colonial government. Subsequently, the Education Act of 1961 was enacted and implemented in stages, aimed at achieving national unity and development through education and ensuring a gradual transition towards a Malaysian education system. It was this gradual implementation of the Education Act which characterized educational development after independence in 1967, towards an education system with a Malaysian outlook and Malaysian-oriented curriculum (Malaysian Education System 2014). The Malaysian education system and the educational processes envisioned by the National Philosophy of Education (NPE 1998), maintained a strong focus on promoting national economic development and the employability and economic potential of its graduates (Al Hudawi et al. 2014; Malaysian Education System 2014).

The NPE (1998) stressed that education in Malaysia is an ongoing effort toward developing the potential of individuals in a holistic and integrated manner. The NPE (1998) aimed to produce Malaysian citizens who are knowledgeable, skilled and competent, who possess high moral standards and who are capable of achieving personal well-being and contributing effectively to the society and the nation. Curriculum planning and development was (and is) done at the federal level and the national education system is centrally administered. Curriculum changes mainly involve reviewing and adapting the curriculum to fulfil the development needs of the country (Malaysian Education System 2014).

However, within the Ministry of Higher Education (MoHE) there was recognition that the education system needs to keep evolving to stay abreast of global trends and challenges; for example, disruptive technologies such as advanced robotics, the Internet of Things (IoT), and the automation of work processes which will reshape the business and social landscape (MoHE Annual Report 2020). Preparing Malaysian graduates for these trends and work challenges requires a fundamental transformation of how the higher education system and higher education institutions (HEIs) operate. Thus, the Ministry in 2013, began developing the 10-year Malaysia Education Blueprint 2015–2025 (MEB 2015-2025). Over two years, the Ministry drew on multiple sources of input, from Malaysian and international education experts to stakeholders at Malaysian universities and various industries. The end product is a blueprint with a focus on human capital development to improve graduates' employment outcomes (MoHE Annual Report 2020).

1.2.2 The unemployment challenge today

Despite the Malaysian higher education sector's focus on graduate unemployment, the contemporary challenge related to high rates of unemployment of graduates shows that there is work yet to do. The Department of Statistics Malaysia (DoSM) which released its annual Labour Market report on Oct 13, 2021, stated that the unemployment rate was 4.7% in August 2021, an increase of 1.4% from the same month of the previous year 2020 (DoSM 2021). Notwithstanding, the unemployment statistics as of August 2022, reflected a decline in the unemployment rate to 3.9% which is the lowest rate since August 2020, as the Malaysian economy recovers from the coronavirus pandemic. On the other hand, while there is a slight decline in the unemployment statistics, the statistics also reveal that 17.3% of the employed graduates are unable to secure employment of their choice that commensurate with their qualifications. Instead, to earn an income upon completion of their undergraduate studies, the graduates have accepted jobs as mostly daily income earners or are self-employed as small retailers and hawkers (DoSM 2022). As evidenced by industry feedback (Fahimirad et al. 2019; Ghani & Muhammad 2019; Law 2018; Nair & Fahimirad 2019; Suppramaniam, Siew & Ainara 2019; Tahir et al. 2018; Teng et al. 2019; Wan 2018), securing a suitable job depends not only on academic performance with a focus on technical knowledge but also on 'soft skills' or professional skills and competencies acquired from 'in and out of class' activities and work experiences before graduation.

In the 4th Industrial Revolution Era (4IR), there is a high demand for both technical skills as well as critical thinking, problem-solving and communication skills (Teng et al. 2019). The World Economic Forum (WEF) predicted that by 2022, 75 million jobs across 20 major economies will be displaced by emerging technologies (WEF 2020 Future of Jobs Report). On the other hand,133 million new roles are expected to be created by these very same technological advances. While this may be good news for people in the workforce, nevertheless these advancements require relevant training, upskilling and re-skilling (WEF 2020 Future of Jobs Report). Failure to acquire these skills will contribute to the unemployment rate among graduates in Malaysia which has been on the increase as reported by the Graduate Tracer Study in 2018, the DoSM Report in 2021 and other related higher education reports (GTE 2018; DoSM 2021; MoHE Annual Report 2020, 2021).

1.2.3 The contemporary employability challenge: Recognition and responses

The challenge noted above has not been ignored by the MoHE or by the broader higher education system in Malaysia. In 2020, the MoHE, realising the strain caused by unemployment among graduates, initiated various programmes to remedy this problem. One of these programmes is the Career Advancement Programme (CAP) which is expected to benefit 20,000 unemployed graduates through a series of training courses in sectors such as banking, manufacturing and Information and Communications Technology (ICT). To support this initiative, the Finance Ministry announced an allocation for this programme, scheduled to commence in stages beginning in mid-2021 to end-2022. The MoHE added that the Covid-19 pandemic has made a global impact on the labour market and world economy which has resulted in a competitive and extremely challenging labour market. As such, the ministry reiterated that proactive steps will be taken for undergraduates and new graduates to both reskill as well as sharpen their skills and competencies through the Career Advancement Program (CAP) and other new initiatives which will be rolled out in stages (MoHE Annual Report 2020). The HEIs and the industry were also tasked to collaborate alongside the MoHe to prepare undergraduates for the job market with specific reference to the 10 thrusts of the Malaysian Education Blueprint (MEB 2015-2025).

Responding to the call for industry and university collaboration, a Malaysian job market survey was carried out among new graduates (*numbers not disclosed)* by a private organisation on December 28, 2020 (UOB Survey Report 2020). Findings revealed that graduates concur with the need to upskill or reskill themselves to stay relevant and competitive in the post-pandemic world, given an increasingly uncertain job market (UOB Survey Report 2020). The report disclosed that the widespread view (90%) comes amid expectations that it would be tough to secure a new job due to the economic uncertainties. Meanwhile, 85% of the respondents believe that companies prefer hiring people who can perform multiple functions and 83% foresee that employers will reduce headcount by focussing on digitalisation efforts in the 4th Industrial Revolution Era (UOB Survey Report 2020).

Whilst the MoHe is initiating strategies to meet labour market challenges, the strategies that might best address the underlying causes of undergraduates' lack of readiness before entering the workforce remain underdeveloped. The underlying cause as defined by scholars, is termed the 'employability gap' which refers to the lack of development of 'soft skills' and 'personality traits' that contribute to a gap in graduate work-readiness and successful employment (Hewitt, Owens & Stewart 2018; Jackson 2016a, 2016b; Moore & Morton 2015).

1.3 Developing Employability Skills in higher education: An overview

To gain a better understanding of the 'employability gap' which contributes to the lack of workplace readiness amongst the Malaysian undergraduates, I have reviewed global literature on employability challenges and strategic interventions in higher education aimed at meeting the evolving labour market requirements.

Several global changes in the labour market over the last two decades have affected the way higher education operates. These changes have resulted in various international talent sourcing strategies to meet labour market expectations and demands from stakeholders, namely the undergraduates, academics, employers as well as the policymaker (Brown, Lauder & Sung 2015; Drewery, Pretti & Church 2020; Seow & Pan 2022). Consequentially, higher education has become more closely linked with its environment, including business enterprises and the community. For universities in developed as well as developing countries to remain competitive and sustainable, the higher education system constantly faces the challenge of keeping abreast of these changes and developing new forms of interaction and methods of collaboration with other stakeholders (Hendersen & Trede 2017; Rook 2015; Rowe, Winchester-Seeto & Mackaway 2012; Vargas et al. 2019; Wardle 2014).

In developed countries like Australia, changes in Federal Government policy over the past decade, in tandem with industry and student expectations, have emphasised the need for higher education institutions to develop new ways of interacting with the workplace (Australian Learning & Teaching Council (ALTC) 2011; Jackson 2015, 2016c; Organisation for Economic Co-operation and Development (OECD) 2019, 2020a, 2020b; Oliver 2011, 2015, Patrick et al. 2008; Rook 2015; Trede & Wehr 2021). The Australian Federal Government policy changes include a focus on increasing the number of students attending university as well as producing additional 217,000 graduates by the year 2025 (Department of Industry Innovation Science Research and Tertiary Education 2009).

In the UK, developing graduates' skills outlined in the UK Chartered Institute of Personnel & Development Report (CIPD 2017a, 2017b) addresses today's competitive and evolving global economy, where the skills and capabilities of the workforce are vital to economic sustainability and growth. From industrial strategy through to education, the development of relevant skills is important for both policy and enterprise as much as for providing opportunities for individuals (Birds 2010; Brinkley & Crowley 2017; Pegg et al. 2012; Pegg & Carr 2010; Pond & Harrington 2013). The UK education policy outlook (cited in OECD 2019) identifies and highlights that with all the predictions of a changing world of work and the nature of jobs alongside increasing automation, the ability to upskill and reskill the workforce is very important. However, they are

also cognizant that the learning pipeline begins with new graduates as “new skills” entering the workforce (Brinkley & Crowley 2017) and therefore, the need to constantly review and reinforce professional skills development in higher education in tandem with technical skills and competencies.

The OECD 2021 discusses a Skills Taxonomy Framework and its Focus Education Indicators, which was presented during the World Economic Forum 2020. The framework postulates that the workforce of the future will be required to rapidly learn and relearn new skills as reskilling, upskilling and redeployment define the ‘new normal’ in the future of work (OECD 2021; WEF 2020 Future of Jobs Report). Shifting to a skills-based system can not only provide more efficient mechanisms by which employers can identify the talent they need for business to flourish but can also create fairer labour markets where new graduates can be matched to employment through unbiased and skills-based evaluation. In addition, new graduates will also have greater access to learning opportunities at the workplace as part of the relearning and upskilling process (OECD 2021) and are, therefore, able to seamlessly transition between roles in the ‘future-of-work’ environment. Furthermore, a common skills taxonomy will address the critical need for collaboration among employers, universities and governments to understand and employ a ‘common’ language for use in hiring, learning and skills development (WEF 2020 Future of Jobs Report). The report which uses a unique combination of qualitative and quantitative information to expand the knowledge base about the future of jobs and skills while tracking the pace of labour market changes, revealed that using a skills-based approach to work readiness has resulted in job placement success five times higher than the traditional route of a degree’s technical requirements (WEF 2020 Future of Jobs Report). Talent is rooted in an applicant’s character and their orientation to the world, and there is a growing body of evidence that suggests that employers tend to seek ‘talent’ rather than technical capabilities (Brown, Lauder & Sung 2015; Lauder 2014; Lim et al. 2020; Scott & Ali 2013; Seow & Pan 2022; Yahya & Kaur 2010).

Industry, as a result of talent sourcing and its demand for highly skilled graduates who are work-ready, is bringing the relationship between higher education and the workplace closer. As Oliver and de Jorre (2018), O’Leary (2017) and Rook (2015) reiterate, industry is seeking graduates who have the skills and knowledge required for effective and active participation in the workplace and economy. As the boundaries between industries, workplaces and higher education begin to blur, their relationships, however, are being strengthened (Rook 2015). A common objective is to produce competent graduates, not only in technical skills and knowledge but also in professional or work-ready skills (Brown, Hesketh & Wiiliams 2003).

1.3.1 Definitions of Employment, Employability and the context of this research

This thesis is interested in the success of developing graduates' skills and attributes for workplace readiness in a Malaysian context. At the heart of research regarding employability in higher education, lie a number of terms that, while interrelated, must be clearly distinguished from one another. These terms include:

(i) The definition of Employment

Employment signifies the state of being employed by an organization or engaging in self-employment. Employment is the outcome of successfully securing a job offer based on one's qualifications, skills, and suitability for a specific role or position. (Rainie & Anderson 2017; Varghese & Khare 2021; WEF 2016, 2020). It is an individual's experience of gaining or not gaining relevant employment, and are influenced by various external or macroeconomic factors, namely, labour market conditions, the changing demand for specific skills, networking, and the competitiveness of job seekers (ILO 2022; Varghese & Khare 2021; WEF 2020).

(ii) The definition of Employability

While employment refers to the act of being engaged in paid work or having a job, employability refers to an individual's overall readiness and ability to secure and maintain employment (Varghese & Khare 2021). More precisely, the term employability can relate to an individual's ability to gain initial employment, the ability to maintain employment and to make transitions between jobs and roles to meet new job requirements (Gedye & Beaumont 2018).

Definitions of employability suggest that it is determined by the range of skills, attributes, and qualities that make a person attractive to potential employers (Rowe & Zegwaard 2017). Such definitions, particularly when used in the context of higher education, often draw upon human capital theory, which asserts that individuals' skills and knowledge are valuable assets, akin to physical capital, that contribute to their productivity and earning potential in the labor market (Riley, Michael & Mahoney 2017; Wright & Ross 2021) According to this theory, investing in skill development enhances an individual's human capital, thereby increasing their chances of finding employment and improving their earning capacity (Wright & Ross 2021).

(iii) The distinction in the context of this research

Often, in research and measurement of employability, employment outcomes are used as a proxy measure due to their relative ease of measurement and availability of data. Researchers often rely on short-term graduate employment outcomes, such as employment rates or time

to secure employment after graduation, to assess employability (Jackson & Bridgstock 2018, 2019, 2021). While there is value in using such measures, it is important not to conflate the two terms: an individual might have strong employability attributes and skills and yet still find that it is difficult to achieve a positive employment outcome, especially if economic conditions are against them (Artess, Mellors-Bourne & Hooley 2017).

To summarise, employability, in the context of this research, focuses on the development of skills and attributes that make graduates attractive to employers, while employment refers to the actual act of being engaged in paid work. Employability is a broader concept that encompasses the readiness for employment, whereas employment represents the specific outcome of securing a job (Artess, Mellors-Bourne & Hooley 2017; Minocha, Hristov & Reynolds 2017; Rainie & Anderson 2017; WEF 2020).

1.3.2 The concept of Skills Gap and its relevance to employability and employment outcomes.

In the context of this research, employability focuses on the development of skills and attributes that make graduates attractive to employers. However, an important factor in the transition from employability to actual employment is the existence of a skills gap. A skills gap refers to the mismatch between the skills and qualifications possessed by job seekers, such as recent graduates, and the skills demanded by employers in the current job market (Bremner 2018; Cappelli 2015; Jackson 2015).

Employability is not solely about having a set of skills; it's about having the right skills that are aligned with the evolving demands of industries and job roles (Jackson 2010; 2015). In today's rapidly changing job market, technological advancements and shifts in industry requirements can create gaps between the skills graduates possess and the skills needed by employers (Bremner 2018; Kenayathulla, Ahmad & Idris 2019; Raybould & Sheedy 2005; Sarker et al. 2021). This gap can hinder the seamless transition from being employable to being employed.

Therefore, while employability emphasizes the development of knowledge, skills and attributes that enhance graduates' attractiveness to potential employers, addressing the skills gap is crucial for converting employability into actual employment (Hosain, Mustafi & Parvin, 2021; Jackson 2015, 2016b; Sarker et al. 2021). Efforts to bridge this gap involve aligning educational curricula with industry needs, promoting continuous skill development, and fostering a dynamic learning environment in higher education that enables students to adapt to changing job market requirements (Kenayathulla, Ahmad & Idris 2019; OECD 2012; 2016).

1.3.3 An introduction to Work Integrated Learning

With a heightened focus on educational attainment and the industry's demand for work-ready graduates, current and prospective undergraduates are seeking a holistic education that develops both discipline knowledge and work-ready skills. WIL is a teaching and learning framework to employability teaching. Other similar models or frameworks are USEM (Yorke & Knight 2004, 2006), CareerEdge (Dacre Pool, Qualter & Sewell 2014; Dacre Pool & Sewell 2007), PBE (Higgs 2012; Higgs et al. 2012) among others. WIL is focused on because it is recognised as a particularly beneficial approach to employability teaching (Campbell et al. 2019, 2021; Dwesini 2017; Freudenberg, Brimble & Cameron 2011; Nguyen 2020; Palmer, Young & Campbell 2018; Tanaka & Carlson 2012; Trede & Wehr 2021; Wardle 2014; Zegwaard & McCurdy 2014). However, the viability of other mechanisms that might enhance employability cannot be evaluated within this thesis.

Oliver and de Jorre (2018) reiterate that given the global uncertainty related to rapid technological developments and the world of work, the assurance of developing graduate attributes to enhance employability opportunities is arguably more important now than ever before. This importance is evidenced in extensive scholarly focus over the past two decades, calling for developing work-ready competencies in higher education with a specific focus on Work Integrated Learning (WIL) in the curriculum (Atkinson 2016; Billet 2009, 2011; Buchan et al. 2023; Campbell et al. 2021; Coll & Zegwaard 2006; Frawley & Litchfield 2009; Higher Education Research and Development Society of Australasia (HERDSA) Report 2009, 2017; Jackson 2017a, 2017b; Jackson & Chapman 2012; Jackson & Tomlinson 2021; Knight & Yorke 2004; Lasen et al. 2018; Melynk & Yablokov 2023; O' Leary 2016, 2017, 2021; Oliver 2013; Oliver & de Jorre 2018; Palmer, Young & Campbell 2018; Patrick et al. 2008; Pretti, Etmanski & Durston 2020; Rowe & Zegwaard 2017; Rook & Sloan 2021; Sachs & Rowe 2016; Tanaka & Zegwaard 2019; Venville, Lynch & Santhanam 2018; Wehr & Trede 2022).

The conceptual framework of this study hinges on the introduction of WIL programs where theory and practice are merged and implemented discipline-wide as a holistic curriculum aimed at developing work-ready competencies before graduation. This approach is evidenced in countries like Australia, the UK and Canada as WIL forerunners, to close the gap between knowledge and learning in formal education and learning and knowledge gained in the workplace curriculum. Research on WIL as a teaching and learning framework for employability teaching in these countries is extensive and ongoing to ensure practises are periodically reviewed against other countries to adopt best practices that are aligned with labour market expectations (Bennett 2019, 2020; Bennett et al. 2022; Billet 2011, 2012; Birds 2010; Brown et al. 2019; Campbell et al. 2021; Dean et al. 2020; Drewery, Pretti & Church

2020; Jackson & Bridgstock 2019, 2021; Jackson & Tomlinson 2021; Kramer & Usher 2011; Peters, Sattler & Kelland 2014; Pretti, Etmanski & Durston 2020; OECD 2017; Trede & Wehr 2021; Xia, Caulfield & Ferns 2015; Zegwaard, Pretti & Rowe 2020).

Ongoing research in Singapore and developing countries in Asia and Africa also espouses the benefits of WIL in the curriculum to develop work-ready skills (Dwesini 2017; Govender & Wait 2017; Karunaratne & Perera 2019; Lim 2015; Lim et al. 2020; Nguyen 2020; Nxumalo 2022; Seow & Pan 2022; Tanaka & Zegwaard 2019; Tran 2012; Tynjala et al. 2017; Xia, Caulfield & Ferns 2015). These studies which encompass both developed and developing countries provide the basis for establishing the benefits of WIL as a curricular intervention strategy to enhance graduate employability while acknowledging the conditions for WIL implementation and the challenges faced. The multi-cultural consideration and education policies are also recognized as enablers or inhibitors for successful WIL implementation.

With research revealing positive links between WIL, graduate attributes and employability, WIL is increasingly being considered by universities that are driven to deliver stakeholder interest (Jackson 2015; Litchfield, Frawley & Nettleton 2010; McIntyre, Cooper & Welch 2010; Patrick et al. 2008; Sloan 2021). While the interest in WIL increases, the range of WIL programs may differ according to the disciplinary focus, measurability of outcomes and selected assessment methods (Rook 2015). From a socio-economic perspective where massification of universities has increased the competition for student enrolment against stakeholders' expectations, Abeysekera (2015) highlights that universities are reviewing their teaching and learning practices in alignment with the demands of the 21st century. Abeysekera's (2015) study is supported by Bell's (2016) and Lauder's (2014) research on 21st century transformative higher education, and Oliver and de Jorre's (2018) study which explore skills and attributes required of 21st-century graduates and how WIL in the curriculum is valued by stakeholders to enhance graduate employability.

Building upon these studies, this research seeks to establish the effectiveness of WIL as a strategic curricular intervention to enhance the employability of 21st-century graduates in a Malaysian context. Whilst the experiences in the developed countries are critical to gaining an understanding of WIL best practices for those contexts, scrutinising literature on WIL initiatives in developing countries similar to Malaysia, which is carried out in Chapter 2, helps to obtain a realistic perspective of WIL processes, their implementation process and challenges, and how WIL can be built on the foundations of theories about how people learn.

1.3.4 Higher education research and WIL in the Malaysian context

Currently, extensive academic evidence exists on the concept of WIL and graduate employability in both developed and developing countries. Whilst there is ongoing research on graduate employability concerns in Malaysia, research regarding the interventions that might best address these concerns remains underdeveloped. This thesis is a response to the shortfall in the current Malaysian studies in terms of a lack of research on possible intervention strategies to enhance employability outcomes.

The literature review affirms that while Malaysian universities have attempted over the past two decades to incorporate generic skills in undergraduate studies, the initiatives have been 'loosely' introduced with minimal if any, significant or measurable learning outcomes to address the 'skills-gap'. This is evidenced by the investigation of research undertaken at several universities in Malaysia (Azmi, Hashim & Yusoff 2018; Chan et al. 2017; Fahimirad et al. 2019; Grapragasam, Krishnan & Mansor 2014; Nair & Fahimirad 2019; Rahmah, Ishak & Wei Seng 2011; Tahir et al. 2018; Yaacob 2012; Yaacob & Mahmud 2019; Yasin & Liu 2016; Yassin et al. 2008). These strategies, which are divulged in Chapter 3, reveal that though these efforts seek to develop undergraduates' employability skills, they are nevertheless, fragmented efforts which lack structure and measurement of outcomes to build work-ready capabilities. The academic contribution of this research is to propose a structured curricular intervention strategy which has measurable assessments and learning outcomes to develop work-ready competencies and enhance graduate employability in Malaysia.

1.4 Scope of the research

As deliberated earlier, the Malaysian government recognises the labour market challenges and industry expectations which are compounded by economic uncertainties since the Covid-19 pandemic. In response, the MoHE has in 2020, initiated collaborative measures like the Career Advance Program (CAP) with universities and the industry. However, the 2021 DoSM Report which revealed an increase in unemployability statistics indicates that there is a need for specific curricular interventions like WIL with clear and measurable learning outcomes, if, the work-ready skills gap is to be reduced. This approach responds to the feedback from Malaysian literature which postulates that securing a suitable job depends not only on academic performance with a focus on technical knowledge but also on developing work-ready competencies acquired from 'in and out of class' activities and work experiences before graduation. As is noted above, there is substantial research showing that WIL is an

intervention strategy that can enhance graduate employability. However, this research also shows that successful use of WIL requires acknowledgement of the conditions in which a WIL program is to be introduced which include, in particular, the cultural context in which learning and employment are to take place and the nature of the higher education system in which the program is situated (Barton et al. 2017; Doolan et al. 2019; Entwistle 2011; Govender & Taylor 2015; Nguyen 2020; Rae 2007; Tanaka & Carlson 2012; Tanaka & Zegwaard 2018, 2019; Trede & Wehr 2021).

This research seeks to investigate the employability concerns in Malaysia to enhance the understanding of the probable causes of low graduate employability outcomes and to evaluate existing and potential means of addressing this problem. To do so, this study will survey existing Malaysian literature on graduate employability concerns, the related MoHE policies and government initiatives and the curricular strategies being used in business programs to promote employability. After which, this study will progress to evaluate the potential for WIL as a structured curricular intervention to enhance the work readiness of business graduates for successful employability outcomes.

Whilst the MoHE policy documents indicate that the ministry is explicit in its pursuit to improve graduate employability outcomes, the strategies lack assessment protocols and structured measurement of expected learning outcomes. These policy weaknesses are corroborated by growing evidence from research on graduate employability and the initiatives undertaken by Malaysian universities to develop workplace competencies. Fundamentally, the absence of milestone tracking against the thrusts of the policy documents, especially the overarching Blueprint, reveals a significant inadequacy in the present education system which is the research gap that this study aims to address.

To pursue the research objectives of this study, a social constructivist approach and qualitative research design are employed. The strengths of using a similar approach are seen in the literature (Campbell et al. 2019, 2021; Dean et al. 2020; Hallet 2012; Jackson & Collings 2017; Jackson 2018; Kauppila 2016; Kruikow 2021; Mason, Williams & Cranmer 2009; McRae 2014; Nguyen 2020; Nguyen, Yoshinari & Shigeji 2005; Nxumalo 2022; Rook 2015; Rook & Sloan 2021; Seow & Pan 2022; Sumanasiri, Ab Yajid & Khatibi 2015; Wardle 2014) and are elaborated in Chapter 2.

1.4.1 Research Objectives

This thesis seeks to respond to the issue of graduate employability through educational means. To do so, the objectives of this research are:

RO1 To survey existing curricular strategies used to promote employability in the Malaysian higher education sector;

RO2 To evaluate the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates.

1.4.2 Research Questions and Research Sub-Questions

To pursue the two research objectives, this research considers two broad research questions and three specific sub-research questions as follows:

RQ1 What curricular strategies have been used in Malaysian higher education institutions to promote graduate employability?

RQ1(a) What evidence is there to support the use of the different employability-focused curricular strategies currently used in Malaysia?

RQ2 What is the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates?

RQ2 (a) What conditions need to be met if WIL is to be implemented successfully within a curriculum? and

RQ2 (b) Are these conditions met or can they be met within the Malaysian higher education system?

1.4.3 Limitations in qualitative research

The proposed context of inquiry to address the research objectives and answer the research questions using a qualitative methodology faces several possible limitations, as follows:

- The research carries out this evaluation in the context of business degrees. The scope of research was focused on business students and academics/Heads from the business discipline. The employers were also purposefully selected from those hiring business graduates or offering work placements to business students. This was due to time factors as well as better accessibility to and response from Business schools

while observing Covid-19 restrictions in Malaysia. It is also necessary to limit the scope of the research because of the need to evaluate the viability of WIL through interviewing stakeholders who must cooperate in the design and delivery of WIL. The applicability of the findings to other fields of education cannot be taken for granted.

- The data collection protocol whilst purposive, with a generous sample size of 57 participants across three stakeholder groups in 24 interview and focus group sessions, could have included a larger number of newly employed graduates (alumni). Alumni feedback would enable a keener insight on graduate work readiness and how changes in curriculum design and learning outcomes could have reduced their challenges when they entered the workforce. In addition, input from alumni could enlighten contrary views that work-ready skills can be developed as an additive approach or acquired while 'on-the-job' (Wheelahan, Moodie & Doughney 2022), rather than considering a structured curricular strategy as a proposed intervention to enhance employability outcomes.

- Due to the restrictions imposed during the Covid-19 pandemic, the researcher was unable to meet the policymaker (the MoHE officials) both face-to-face and online, due to pandemic standard operating procedures (SOPs) as well as other stringent guidelines. This constraint was overcome by, instead, examining three MoHE policy documents and three related employability review documents, which was proposed to and approved by the VU Research Ethics committee. The document review outcome was also corroborated during the focus groups and interview sessions with the academics and Heads of Program as stakeholders who are familiar with and employ these policy guidelines at the universities.

- Another possible limitation is the selection of WIL as a proposed strategic curricular intervention in Malaysia rather than frameworks like USEM (Yorke & Knight 2004, 2006), CareerEdge (Dacre Pool, Qualter & Sewell 2014; Pool & Sewell 2007), PBE (Higgs 2012; Higgs et al. 2012) and other similar employability frameworks. WIL is focused on because it is recognised as a particularly beneficial approach to employability teaching. However, the viability of other mechanisms that might enhance employability was not evaluated within this thesis.

- This research is focused on the viability of introducing WIL as a strategic curricular intervention to enhance graduate employability outcomes. However, other factors

which need to be considered prior to implementation of a curriculum change (e.g. the financial cost) cannot be considered in this thesis.

To mitigate these limitations, recognized at the onset of the research, careful consideration was taken during the stages of data collection for authenticity and credibility (Lincoln & Guba 1985).

1.5 Contribution to knowledge

The academic contribution of this study lies in firstly, adding to the scholarship of literature concerning work readiness and graduate employability. In particular, this study provides new knowledge in understanding the existing roles and attitudes of stakeholders about the potential value of WIL in Malaysia as a strategic curricular intervention to enhance work-ready competencies as a means of addressing the employability issue of Malaysian graduates. While there is ongoing research on graduate employability concerns in Malaysia, there is no research evaluating the potential introduction of WIL in Malaysia as a structured curricular intervention to address these concerns. Secondly, this research, in addition to being country-specific, also investigates the differences and similarities between Public and Private HEIs' curriculum design about embedding WIL to enhance graduate employability. In Malaysia, Public HEIs are government-owned whereas Private HEIs are private entities that, though having some flexibility in programs and curriculum designs, are still under the purview of the MoHE. The findings of this research which have been scoped within the business undergraduates in Malaysia would enable and encourage cross-disciplinary research, both in Malaysia and beyond.

Thirdly, while extensive global studies admit the importance of WIL in preparing students for the work environment (Billet 2015, 2020; Clarke, Litchfield & Drinkwater 2010; Dwesini 2017; Ferns & Zegwaard 2014, 2019; Freudenberg, Brimble & Cameron 2010, 2011; Hallet 2012; Jackson 2014a, 2014b; Lim 2015; Lim et al. 2020; Nguyen 2020; Palmer, Young & Campbell 2018; Seow & Pan 2022; Smith 2012, 2013; Smith et al. 2014; Trede 2012; Trede & Wehr 2021; Young, Palmer & Campbell 2017; Zegwaard, Pretti & Rowe 2020), research on the effectiveness of a scaffolded WIL and how it is being measured and valued by different stakeholders in a different culture and education system needs to be investigated.

1.6 Statement of Significance

Higher education, driven by the MoHE's 10-year Blueprint (MEB 2015-2025) to develop a balanced and holistic individual, is a crucial enabler to embark on a transformation to develop and progress human capital in Malaysia (MoHE 2018). However, the strategies in the Blueprint need to be translated into specific action steps to drive the focus areas of the Blueprint, which is already in its eighth year of inception. There is also a need to align these strategies with other related policy documents, namely the 11th Malaysia Plan 2016-2020, which on the contrary, focuses on producing a skilled and efficient graduate for the labour force which is an economic perspective of higher education in Malaysia, rather than a holistic and balanced education as advocated in the Blueprint (Chang, Sirat & Abd Razak 2018).

Besides investigating the effectiveness of WIL and stakeholders' interest and collaboration to introduce WIL in higher education curriculum to enhance employability, this study is significant as it probes and explores issues relating to the collaboration between the stakeholder groups, collaboration that is needed to drive strategic initiatives aimed at developing work-ready competencies. The important consideration for collaborative efforts is an ongoing discussion by Malaysian scholars (Aida, Norailis & Rozaini 2015; Ali, Tahir & Zulkifli 2017; Buntat et al. 2013; Chan et al. 2017; Che Omar & Rajoo 2016; Cheong et al. 2016; Fahimirad et al. 2019; Tahir et al. 2018, Tanius et al. 2019: Yaacob & Mahmud 2019; Zain et al. 2017).

A key stakeholder in this research is the MoHE, where the overarching goal of both the Blueprint (MEB 2015-2025) and the 11th Malaysia Plan is for graduates to enter the world of work as competent professionals, who can make meaningful contributions to their profession and the community (Entwistle 2011; Entwistle & Petersen 2004). Elaborating on Entwistle and Petersen's (2004) definition of competent professionals, Bowden (2009, p.3) distinguishes these competencies as "the qualities, skills, attributes and understandings that students would desirably develop during their time at the institution". The findings and analysis of this research have a two-fold practical contribution to stakeholders. First, this research highlights the evolving expectations of industry relative to labour market challenges, which necessitates higher education policy review with a focus on curricular alignments toward improved educational and employability outcomes. Second, the findings on the proposed intervention of WIL as an effective curricular intervention tool enable higher education institutions in Malaysia to consider a pathway which could improve the quality of outcomes and, as a result, chase competitiveness relative to HEIs in other national settings.

1.7 Organisation of the thesis

The remainder of this thesis is organised into five chapters. Chapter Two reviews literature regarding employability learning and teaching. This chapter reviews extensive global literature to understand the concept of WIL and the development of WIL programs in higher education. Through surveying the literature across developed countries like Canada, the UK, Australia and New Zealand, it was found that there is a range of WIL programs being offered which encompass the development of graduates' work-ready skills towards enhanced employability outcomes. Recognising that WIL forerunners are mainly the developed countries enables a clearer perspective on what are the possibilities as well as challenges of introducing WIL in a developing country like Malaysia, which is multicultural with a centralised education system.

Nevertheless, scrutinising literature by developing countries like India, Sri Lanka, China and Africa, reveal their attempts to address the challenges of graduate work readiness with successful employability outcomes, which assists in benchmarking Malaysia against such initiatives. Overall, the global academic discourse highlights similarities as well as differences in the practice of WIL across countries which consequentially, identifies the challenges and drivers of WIL. Nevertheless, exploration of the range of WIL programs as a curricular intervention reveals positive outcomes to develop work-ready competencies and enhance graduate employability.

The concept of WIL in higher education curriculum has not been considered in Malaysia despite some alternative initiatives undertaken in their individual capacities by a few private and public universities which are examined in Chapter Three. Chapter Three is focused on providing a clear and detailed overview of the Malaysian higher education system and its centralized policies. A review of three public policy documents and three related employability review documents is conducted as well as a review of Malaysian literature on graduate employability concerns and some of the initiatives pursued and being pursued by Malaysian universities. This review is imperative to determine their impact on graduate employability and to establish the areas of investigation.

In Chapter Four, the methodological approach used to conduct this research is explained in detail. To outline the fundamental values that guide this research journey, this chapter considers a combination of learning theories that build the foundation of WIL in the curriculum to achieve the intended learning outcomes. The data collection protocol inclusive of the purposive and snowball sampling techniques is explained and the focus groups and semi-structured interviews are described.

Chapter Five presents the results thematically, drawing upon analysis undertaken using a computer-assisted qualitative data analysis system. Each theme is analysed both individually as well as clustered against stakeholder groups to present the results of both individuals as well as collective views. Linkages between themes are also carried out to investigate common perceptions and expectations from introducing WIL in the curriculum as well as anticipated concerns and challenges highlighted by each stakeholder group. Lastly, the results of both the policy documents and employability related review documents which were discussed during the focus groups and interview sessions with the academics and Heads of Program is also presented. The appendices attached to this thesis are substantial and contain the source data which are the 24 focus group and interview transcripts.

Chapter Six concludes by recapitulating the objectives of this research. The summary of findings against the research objectives and research questions is deliberated and the practical implications of the findings to knowledge are presented. The significance of this study as a practical contribution to the Malaysian higher education system is established with a series of recommendations and guidelines. Finally, the chapter ends with an acknowledgment of the study's limitations and some suggestions for future research in Malaysia on Work Integrated Learning and graduate employability.

Chapter 2

Literature Review

2.1 Introduction

An investigation of the potential value of Work Integrated Learning (WIL) as a means of promoting graduate employability in Malaysia requires consideration of a range of bodies of literature. Chapter 1 provided the research overview and the justifications for this study. In addition, the scope of the research needed to understand the existing curricular strategies to promote graduates' readiness for employment in Malaysia, was also discussed. Malaysia's concerns about employability echo those raised across the region. This chapter begins with a regional focus on improving employability education to further understand the context of this research. Next, the notion of WIL from the perspective of global scholarly literature is discussed to understand the similarities as well as differences across developed and developing countries to recognise the potential of WIL as a strategic curricular intervention in Malaysia. Also, graduate employability, employability skills and work-ready competencies relating to the future of work are defined for clarity. A review of key theories of how people learn is then pursued as it is these theories that can provide an understanding of the concepts underpinning any curricular intervention strategies.

Upon establishing a clear understanding of skills, competencies and learning theories, as outlined in Chapter One, this chapter explores existing research regarding how graduate employability should be defined and how it can best be developed by students. The value of work-integrated learning as a specific curricular approach to graduate employability development is considered by evaluating certain WIL models which are aimed at enhancing graduates' employability outcome. Importantly, while considering the differences in culture, learning environments and the higher education system in Malaysia, the models and frameworks are scrutinised to assess the conditions that need to be met so that potential models or frameworks can be customized for use in Malaysia.

In addition, the benefits of a WIL curriculum place an emphasis on both academic as well as personal and professional advantage. To understand what skills are needed to realise specific learning outcomes, the literature review begins by drawing on learning theories, which will be discussed as a comparative study in ***Section 2.3***. Next, theoretical developments on WIL in Non-Malaysian universities are reviewed to reveal the concepts of WIL programs globally and to recognise relevant WIL considerations in Malaysia. Furthermore, what factors drive the need for WIL intervention, as well as what potential factors may challenge the anticipated

learning outcomes of WIL, are analysed whilst recognising the importance of different stakeholder roles towards a successful WIL implementation outcome.

2.2 Importance of context

The keynote address at the 13th ASEAN[1] SHARE policy dialogue 2021 was focused on 'jobs of the future', employer engagement and graduate employability. The address on 'jobs of the future', relating to the Industrial Revolution 4.0 (IR 4.0), emphasised building a learning culture among students and academics alike. IR 4.0 is often characterized by the goal to enable value creation through a synchronised integration of stakeholder roles (World Economic Forum 2020). This means governments must pursue a holistic approach, creating active linkages and coordination between education providers and employers. Students need to be equipped with industry-relevant, role-based skills to fuel the workforce and address the talent or skills gap, needed in 'jobs of the future'. Academics need to review and evolve curricula to meet industry challenges as well as to reskill themselves to meet these changing needs in higher education (ASEAN Share 2021; Broom 2021; WEF 2020). The dialogue held on November 2021, is premised on the World Economic Forum Future of Jobs Report 2020 which highlights the global top five skills of 2025 of new graduates, identified by employers/industry as (1) Analytical thinking and innovation, (2) Active learning and learning strategies, (3) Complex problem-solving, (4) Critical thinking and analysis and (5) Creativity, originality and initiative. Skill gaps continue to be high as the skill requirements across jobs change (WEF 2020). In addition to the top five skills outlined by WEF, employers elaborate a further requirement for self-management skills such as independent learning, resilience, conflict management, stress tolerance and flexibility (ASEAN Share 2021; Broom 2021).

The concept of "skill" is often associated in academic literature with knowledge, skills, capacities and attributes that enable individuals to perform and complete a task or activity successfully (Bester 2014; Organisation for Economic Co-operation and Development (OECD) 2020a, 2020b, 2021). Skills are key elements that directly contribute to economic growth through increased productivity, and indirectly by creating improved human capacity to engage with new ways of working and adopting new innovations and technology (Bester 2014). As Wheelahan and Moodie (2011 p.1) emphasised, "governments around the world are concerned with skills, namely skill development, skill shortages, and skills mismatches" which

[1] *ASEAN is an intergovernmental body of ten Southeast Asian countries namely Malaysia, Brunei, Cambodia, Indonesia, Laos, Myanmar, Philippines, Singapore, Thailand, and Vietnam, aimed at promoting economic integration among its members.*

evolve around global labour market changes, lower the economic growth of countries and impact negatively on individual lives. Industry leaders ascribe skills mismatches mainly to prevalent weaknesses of the university education system, thus, advocating continuous evaluation and assessment of undergraduate curricula to meet the evolving workplace requirements (Bester 2014; Patabendige 2008; Rook 2015, 2017). Assessment of skills development in the curriculum as a strategic learning outcome helps reduce the skills mismatch gap leading to skills shortages (Bosco & Ferns 2014) which underpins the scope of this study, mentioned earlier. Therefore, global curricular strategies which enhance graduate employability are first surveyed. Next, an assessment of conditions and which potential models or frameworks can be customized for use in Malaysia is carried out.

2.3 Defining graduate employability and employability skills

A clear understanding of employability skills, knowledge and abilities to enhance employment outcomes is imperative to guide what are the learning outcomes that higher education needs to pursue. The issue of graduate employability has been at the forefront of global Higher Education policies for the past two decades (Cranmer 2006; Crebert et. al. 2004; Rae 2007; Tomlinson 2005, 2007) and remains an ongoing subject of research and debate today (Alam, Keiichi & Islam 2022; Azman, Sirat & Abdul Razak 2014; Bridgstock & Jackson 2019; Campbell et al. 2021; Hwang 2017; Lim et al. 2020; Minocha, Hristov & Reynolds 2017; Nuxamalo 2022; Seow & Pan 2022; Wehr & Trede 2022; Wheelahan, Moodie & Doughney 2022). In the UK, much of the early policy discourse on graduate employability centered on the need to create a highly qualified and skilled workforce in order to compete in the global 'knowledge economy' (UK Department for Education (DfE) 2017), which was still echoed in both the ASEAN Share Dialogue 2021 and World Economic Forum 2020. Thus, the emphasis on employability and the pivotal role of policy to regulate future ‘knowledge workers’ at UK universities is an ongoing preoccupation (Atkinson 2015; Cameron & Orrell 2021; Chartered Institute of Personnel & Development (CIPD) 2017a, 2017b; Cranfield & Taylor 2008; Minocha, Hristov & Reynolds 2017; Vargas et al. 2019).

Likewise, in other developed countries such as Australia and Singapore, government policies have placed a strong emphasis on the role of higher education in fulfilling economic functions, through the production of highly skilled and capable graduates for the workforce (Billet 2015; Brown, Lauder & Sung 2015; Jackson 2018, 2019; Lim et al. 2020; Pan et al. 2020; Seow & Pan 2022; Rook 2015; Rowe & Zegwaard 2017; Wardle 2014). The Australian Chamber of Commerce and Industry (ACCI) and Business Council of Australia (BCA) define graduate employability as the possession by graduates of ‘skills required not only to gain employment

but also to achieve one's potential and contribute successfully to enterprise strategic directions' (Australian Council for Educational Research (ACER) 2002, p.3). According to Rook (2015), the importance of developing work-ready skills to enhance employability continues to resonate with numerous reports from the Australian governmental and academic research centres namely the Australian Collaborative Education Network (ACEN 2017), Committee for Economic Development of Australia (CEDA 2015), and Quality Indicators for Learning and Teaching (QILT 2019). Similarly, in Singapore, several employability skills models were reviewed against its undergraduate programs in order to identify 'common' employability skills using Cole and Tibby's (2013) Higher Education Academy document on curricular review and the joint Confederation of Business Industry/National University of Singapore (CBI/NUS) Report 2011 as a point of reference for the creation of CEUP[2] (2015) as a national driver of academic development.

Correspondingly, developing countries like South Africa according to Rukuni (2018), have experienced an increase in the number of unemployed graduates while enrolment at institutions of higher learning is growing at a tremendous rate. Labour market specialists recommend an assessment of employability factors within the academic curriculum and streamlining the curriculum according to employers' expectations (Dwesini 2017; Govender & Taylor 2015; Govender & Wait 2017; Nxumalo 2022; Rukuni 2018). Likewise, in Sri Lanka, studies on factors influencing graduate unemployment revealed that undergraduates' exposure to the world of work is a critical element in securing graduate employability (Karunaratne & Perera 2019). In Ghana similarly, Damoah, Peprah and Brefo (2021) highlight significant gaps between what universities are offering their students versus industry expectations and requirements which results in ongoing graduates unemployability concerns. As a developing country, Malaysia needs to compare and consider the different capacities to introduce a suitable curricular intervention strategy against the type of current education system and policies in Malaysia. In Chapter Three, some initiatives being introduced by a few private and public universities to enhance their students' work skills are discussed. However, these initiatives which were introduced within existing policies, have not been assessed against specific learning outcomes and have not addressed the concern of graduate work readiness, evidenced in an increasing number of unemployable Malaysian graduates.

[2] *CUEP - Committee on University Education Pathways Beyond 2015*

2.3.1 The concept of graduate employability, work-ready competencies and the future of work

Work-ready competencies are expressed as an integration of knowledge, skills and attitudes which are aligned to a professional context (Hanna et al. 2015; Kelder, Carr & Walls 2017a, 2017b), encapsulating both technical and professional skills which are integral for work readiness and enhanced employability outcomes. Additionally, a future-ready curriculum according to Fleming and Haigh (2017) emphasizes skills and attitudes which are critical competencies across diverse jobs and work settings, which requires a more employability-oriented focus and aligned learning outcomes.

The World Economic Forum's Future of Jobs report (WEF 2020) indicates that the complexity of graduate employability will be increasing, and advanced competencies will be required of fresh graduates entering the workforce. The WEF 2020 report cited that 21st-century competencies are classified into technical expertise and character qualities or "talents". Over the past two decades, global scholars have laboriously discussed the concept of graduate employability relating to the development of work-ready skills in addition to technical knowledge in higher education curricula (Billet 22011; Cranmer 2006; Dean et al. 2020; Doolan et al. 2019; Fleming & Haigh 2017; Hughes & Barrie 2010; Jackson 2013, 2015, 2017a, 2017b; Kelder, Carr & Walls 2017a, 2017b; Lim et al 2020; Nguyen 2020; Nguyen, Yoshinari & Shigeji 2005; Rook 2015; Rosten & Drummond 2005; Sachs, Rowe & Wilson 2016; Seow & Pan 2022; Venville, Lynch & Santhanam 2018; Venville et al. 2021).

Another conceptualization of graduate employability focuses on 'talent' rather than skills (Brown, Lauder & Sung 2015). Talent is rooted in an applicant's character qualities and their general orientation to the world, and there is a growing body of evidence to suggest that multi-national companies now tend to seek graduates with 'talent' rather than a focus on technical skills or capabilities (Brown et al. 2019; Brown, Lauder & Sung 2015; Lauder 2014; Scott & Ali 2013; Yahya & Kaur 2010). Malaysia's neighbour Singapore, a nation with a robust economy, attracts thousands of global talents to its shores each year (Hawksford Report UK 2021). As a strategy to source and secure both new graduates and early professionals for their workforce, Singapore sources talents not only locally, but also from multi-national companies in the UK, Europe, and North America. Investing in human capital as a constant talent pipeline is viewed by its government as an inherent source of competitive advantage to boost its economy (Brown, Lauder & Sung 2015) which has led to the creation of customized WIL frameworks to equip their undergraduates for labour market challenges (Seow & Pan 2022).

For the past decade, studies examining the work readiness of new graduate recruits from employers' perspectives (ACNielsen Research Services 2007; Brown, Lauder & Sung 2015; Lim et al. 2020; Hart 2008) indicate that most graduates entering the workforce lack the preparedness and readiness that is expected of them by employers, particularly in the areas of relational and personal competencies which are not directly taught in the classroom. The discrepancy between employers' and universities' perspectives on expected learning outcomes suggests that readiness for employment is a criterion that is not being examined effectively in graduate assessments, if at all (Hart 2008). Considering the importance of work competencies as a selection criterion by employers, the emphasis is to systematically assess work readiness as a learning outcome (Brown, Lauder & Sung 2015; Hart 2008). Having said that, recent articles do indicate that government policies in several developed countries continue to place a strong emphasis on the structured assessment of work competencies and professional development in higher education learning outcomes (Advance Higher Education UK (AdvanceHE) 2016-2021; Brown et al. 2019; Campbell et al. 2021; Chartered Institute of Personnel & Development, UK (CIPD Report) 2017; Dalrymple et al. 2021; Hawksford Report UK 2021; Higher Education Research and Development Society of Australasia (HERDSA) 2017; Jackson & Bridgstock 2019; The Teaching Council Strategic Plan 2022-2027; Trede & Wehr 2021). Selected global studies and the role of stakeholders including the government as a policymaker will be discussed in ***Section 2.6***. The studies whilst showcasing the positive learning outcomes also highlight the challenges faced in introducing workplace competencies development in undergraduate curricula with consideration of different cultures and education systems.

From the employers' perspective, professional recruiters note a dozen core competencies and personal attributes expected of new graduates (Chesworth 2012 cited in O'Leary 2016). Communication, achievement-driven, flexibility, customer focus, teamwork, problem-solving, leadership, analytical thinking and interpersonal skills were outlined, highlighting the balance that graduates need to achieve to meet employers' expectations (O'Leary 2016, 2021). Given this review of existing research on the definition and concept of graduate employability from the different stakeholders, successful graduate employability hinges on the learning outcomes that an employability curricular program needs to achieve. One of the advantages of a structured intervention like WIL in the curriculum is that it provides experiential learning opportunities, which is particularly useful for helping students to develop knowledge, skills and abilities which describe qualifications and personal attributes that are needed for successful employment outcomes (Kolb & Kolb 2005; Kolb & Kolb 2009).

On the other hand, Gibson (2014) in his study on curriculum suitability for the workplace, postulates that employability skills may sometimes be better learnt in the workplace rather

than confined within classroom settings, thus advocating an employer collaboration or a focus on a work-placement and feedback model as an alternative consideration. He suggested that inter-disciplinary approaches can work well if they are managed carefully together with employer involvement and feedback in the curriculum design (O'Leary 2016, 2021). Different WIL forms and frameworks as a curricular strategy to develop employability skills are deliberated in ***Section 2.5.***

A few Malaysian universities initiated several components in their curriculum as well as introduced extra-curricular activities, to develop employability skills (Azman, Sirat & Karim 2010; Ali et al. 2016; Fahimirad et al. 2019; Md. Yunus et al. 2006; Nair & Fahimirad 2019; Singh & Singh 2008; Singh, Thambusamy & Ramly 2014; Yassin et al. 2008). These initiatives were however, not measured nor assessed to gauge their effectiveness in enhancing employability skills and competencies. Moreover, Malaysia is still experiencing an overall increase in unemployment in 2021. Thus, recognising the weaknesses of unstructured attempts, it is imperative to develop a structured learning and assessment framework in Malaysia as an effective intervention strategy. In order to identify the conditions that need to be met for successful learning outcomes, different learning theories are scrutinized in the next section, to understand learning, not only in different contexts (communities, classrooms and workplace) but also how these theories support individuals' learning as a process of developing employable talent (Brown, Lauder & Sung 2015; Rook 2015).

2.4 Learning Theories – How do students learn?

Developing graduates as future workforce talents requires a clearly outlined learning process (Brown, Lauder & Sung 2015). Early scholars developed learning theories to outline and guide the process**.** The theories define different ways of understanding how individuals learn in different contexts. Traditionally, it is one or more of these learning theories that guide the teaching styles and assessment methods at universities (Buckley 2015; Busaidi & Tuzlukova 2021; Doolan et al. 2019; Nirmala & Kumar 2018; Patrick et al. 2008; Rook 2015; Saunders & Zuzel 2010). This includes developing a curriculum that is cognizant of divergent students' learning styles and different cultures and education systems (Buckley 2015; Doolan et al. 2019; Fry, Ketteridge & Marshall 2009; Jackson 2013, 2016, McIlveen et al. 2011; Nguyen 2020; Seow & Pan 2022; Tanaka & Zegwaard 2019; Wickramasinghe & Perera 2010; Wilton 2012) which is an integral consideration when evaluating potential WIL models in Malaysia.

In extant scholarly research on work integrated learning and graduate employability, the educational theories of Cotton's higher-order thinking, Wenger's communities of practice,

Kolb's experiential learning, and Nonaka's spiral of knowledge are used to understand how students learn and acquire knowledge on graduate employment skills (Busaidi & Tuzlukova 2021; Dhanaraj et al. 2004; McShane & Travaglione 2003; Fahim & Eslamdoost 2014; Farnese et al. 2019; Fry, Ketteridge & Marshall 2009; Hughes, Jewson & Unwin 2013; Jackson 2013, 2016); Nirmala & Kumar 2018; Rook 2015, 2017; Saunders & Zuzel 2010; Wickramasinghe & Perera 2010).

These theories are relevant to qualitative research on how students learn and acquire knowledge to enhance graduate employability skills due to the following reasons:

1. **Cotton's Higher-Order Thinking**:

Cotton's theory focuses on developing students' problem-solving, critical thinking and analytical skills. These higher-order thinking skills are critical for students to resolve complex challenges and make informed decisions in the context of graduate employment (Busaidi & Tuzlukova 2021; Cotton 2001, Nirmala & Kumar 2018). Research on how students develop and apply these skills can provide crucial insights into effective strategies and interventions that enhance new graduates' employability outcomes (Fahim & Eslamdoost 2014; Saunders & Zuzel 2010; Wickramasinghe & Perera 2010).

2. **Wenger's Communities of Practice**:

Wenger's theory places emphasis on the social dimension of learning and the importance of communities in enhancing knowledge acquisition and skill development (Haradhan 2017; Wenger 1998, 2004). Research exploring communities of practice that relate to graduate employment sheds light on how students engage in knowledge sharing, collaborative learning, and the formation of professional identity (Cox 2005; Illeris 2005, 2014; Jackson 2013, 2016). Understanding how students participate in communities that promote skill acquisition and career development can inform educational and curricular interventions and the support systems that are critical for effective graduate work readiness (Hughes, Jewson & Unwin 2013).

3. **Kolb's Experiential Learning**:

Kolb's theory postulates that learning is a cyclical process that involves concrete experiences, reflective observation, abstract conceptualization, and active experimentation (Kolb 1994; Kolb & Kolb 2005, 2009; Shoulders & Myers 2013). Research on how students engage in experiential learning related to graduate employment skills provides insights into the effectiveness of internships, cooperative education programs, simulations, and other practical experiences. This research can inform pedagogical approaches, curriculum design and assessment methods to enhance students' ability to apply knowledge and skills in real-world

work contexts (Buckley 2015; Fry, Ketteridge & Marshall 2009; Jackson 2016, Rook 2015, 2017; Wilton 2012).

4. **Nonaka's Spiral of Knowledge**:

Nonaka's theory focuses on the creation and sharing of knowledge within organizations. Research that applies this theory to graduate employment skills explores how students acquire tacit and explicit knowledge, through interactions with professionals, peers, and mentors in the field (Farnese et al. 2019; Nonaka & Takeuchi 1994). Understanding the dynamics of knowledge creation and transfer guides educational practices that facilitate the development of industry-specific knowledge and expertise among students (Dhanaraj et al. 2004; McShane & Travaglione 2003; Rook 2015; McIlveen et al. 2011).

By investigating these four(4) educational theories within the context of graduate employability skills, researchers are able to gain insights into effective learning approaches, instructional strategies, as well as interventions that foster students' acquisition and application of knowledge, skills and attributes in preparation for their professional careers (Fahim & Eslamdoost 2014; Faith & Seeam 2018; Haradhan 2017; Bergsteiner, Avery & Neumann 2010; Hughes, Jewson & Unwin 2013; Kolb & Kolb 2005, 2009; Shoulders & Myers 2013).

These theories, and their implications, are outlined in **Table 2.1** which differentiates each theory, its application to learning, its strengths and weaknesses and its reference in employability studies.

Table 2.1 – The summary of Learning Theories

Learning Theories/ Scholar	Description	Application to Learning	Strengths/ Limitations
Higher-Order Thinking (HOT) skills Cotton (2001)	Consists of: **Basic skills** (oral and written communication), **Higher-order skills** (strategic thinking, problem-solving, decision-making), **Affective skills** (dependability and responsibility, a positive attitude, interpersonal skills and self-discipline)	HOT skills have a significant impact on employability, especially creative and critical thinking, self-motivation, communication and presentation skills. (Used in employability studies by Busaidi & Tuzlukova 2021; Cassidy 2006; Nirmala & Kumar 2018; Saunders & Zuzel 2010; Wickramasinghe & Perera 2010)	***Strength*** HOT skills enlist the generic competencies expected of entry-level graduates rather than a focus on technical knowledge and skills. (Busaidi & Tuzlukova 2021; Nirmala & Kumar 2018)

Communities of Practice (COP) Wenger (1998, 2004)	Learning by being part of a community, which includes different stakeholders' interests. Knowing is being a part of, and participating in social learning systems. Social learning systems are where relationships are formed within communities. Relationships enable sharing and mutual acquisition of knowledge.	The process of learning is the interplay between developing competencies and gaining experiences. The different roles and responsibilities of each group assist in developing a productive, adaptable and transformative outcome. (Used in WIL and employability studies by Cox 2005; Illeris 2005, 2014; Jackson 2013, 2016; Patrick et al 2008)	***Strength*** Recognises the critical need for partnerships among stakeholders within the community of WIL namely the students, the academics, the employers/industry and the government. (Patrick et al. 2008 – The Australian National Scoping Study) Academics and program heads reported improved student learning and engagement and described WIL as a link to the community to achieve mutually agreed outcomes. Recognises the different motivations of stakeholders within a community. (Patrick et al. 2008) ***Limitation*** The strengths of COP in the context of WIL are not clearly defined. (Cox 2005) The ambiguity in the terms 'community' and 'practice' have different applications of COP in the context of WIL. (Illeris 2005)

Experiential Learning Theory (ELT) Kolb 1994 Kolb & Kolb 2005 Kolb & Kolb 2009	Learning is a process where knowledge is created through a transformation of experience. Knowledge results from the combination of gaining experience and transforming it. Kolb's cycle has four stages: concrete experience, reflective observation, abstract conceptualisation and active experimentation.	ELT views learning as a continuous process where students bring their own knowledge, ideas, beliefs and practices; at varying levels, according to their understanding and interpretation of new information. ELT is a holistic philosophy of learning based on the notion that an individual's life experiences, education and work, play a central role in their learning and understanding of new knowledge. (Used in WIL and employability studies by Buckley 2015; Fry, Ketteridge & Marshall 2009; Jackson 2013, 2016, Rook 2015; Wilton 2012)	***Strength*** It is not a predetermined set of tools and techniques to provide students with a range of experiences. Instead, ELT weighs heavily on the individual examining an experience. (Buckley 2015; Fry, Ketteridge & Marshall 2009; Rook 2015).
Spiral of Knowledge Nonaka & Takeuchi (1994)	Knowledge is created through an ongoing process between tacit and explicit knowledge. Tacit knowledge is personal knowledge that is difficult to express in words. Explicit knowledge is expressed in words and can be taught and assessed through specific steps and precise sequences in the learning process.	While individuals generate new knowledge, organisations play a critical role in articulating that knowledge because the relationships develop communities of interaction. The spiral of knowledge supports lifelong learning and enhances employability opportunities. (Used in WIL and employability studies by Dhanaraj et al. 2004; McShane & Travaglione 2003; Rook 2015 McIlveen et al. 2011)	***Strength*** The spiral of knowledge underlies WIL practices because it has the capacity to enhance a student's ability to form relationships or professional partnerships through an ongoing dialogue across various stakeholders. Dhanaraj et al. 2004; McShane & Travaglione 2003; McIlveen et al. 2011; Rook 2015)

A WIL curriculum embraces experiential learning where learning is not a predetermined set of tools and techniques to provide students with a range of experiences. Instead, experiential

learning weighs heavily on the individual examining an experience, which is crucial for skills development (Esters & Retallick 2013; Fry, Ketteridge & Marshall 2009; Kolb 1994; Kolb & Kolb 2005; Rook 2015). Each of the learning theories overlaps with each other in the context of interaction, building relationships, acquiring knowledge, reflecting, gaining experience and developing work skills (Batistic & Tymon 2017), all of which are components of a WIL curriculum, which is deliberated next.

2.5 Investigating Work-Integrated Learning (WIL) in curriculum

Learning in formal education is different from learning at work or 'on-the-job' for several reasons. The former is prescribed by a formal curriculum and assessments where learning outcomes become more predictable, with an emphasis on teaching content, whereas the latter involves an application of the formal education in the workplace resulting in experiential learning and reflection (Dean et al. 2020; Kolb & Kolb 2009; Trede & Wehr 2021; Tynjala et al. 2006). Despite these differences, there are similarities that narrow the gap between learning in formal education and learning 'on-the-job' where work-ready skills and competencies can likewise be developed. Gibson (2014), explored earlier in ***Section 2.3.1***, reiterates that these skills and competencies can sometimes be better developed while at work versus in a formal classroom setting due to employer-student collaboration. This blurring of lines between learning in formal education and learning at work has resulted in the increase of curricular strategies like WIL (Jackson & Bridgstock 2018, 2019; Rook 2015; Wardle 2014). For clarity, WIL terminology encompasses an assortment of approaches and strategies focused on offering experience and linking theory and practice to deliver work-ready graduates. This definition includes Practicum, Cooperative and Work-Integrated Education (WIE), Work Placement, Internships, Apprenticeship, and many others (Australian Learning & Teaching Council (ALTC) 2008; Patrick et al. 2008; Tanaka & Zegwaard 2019; The World Association for Cooperative Education (WACE) 2013). It is a structured educational strategy that integrates classroom studies with learning through productive work experiences, thus enabling a progressive experience in integrating theory and practice (Wardle 2014).

In addition to the sizeable literature supporting WIL in undergraduate outcomes, Jackson (2015) stresses that WIL builds student confidence due to a better understanding of industry-required skills and a better appreciation of the world of work. There is supporting evidence of undergraduates acquiring a range of employability skills like team working, problem-solving, communication, information literacy and professionalism upon completing a WIL curriculum (Ferns, Russell & Kay 2016; Freudenberg, Brimble & Cameron 2010, 2011; Jackson 2016,

2018; Jackson & Bridgstock 2019; Venville et al. 2021). These employability skills, among others, are critical enablers to function effectively in the workplace and their development is considered integral to undergraduate education, recognized by the Malaysian government in the ten strategic thrusts of the Blueprint (MEB 2015-2025), which will be deliberated in Chapter Three.

Billet (2009, 2011) in his ongoing research into WIL in curriculum and the pedagogic properties of practice-based experiences, identifies several key elements for incorporating WIL effectively into the university setting. He emphasises integration, where learning in the workplace is integrated with on-campus curriculum learning so students can make links between their learning in the different settings against targeted work skills and knowledge. Billet's (2009, 2011) studies reflect what learning theorists like Kolb and Kolb (2005) and Nonaka and Takeuchi (1994) have advocated as a 'knowledge spiral' of learning, gaining experience and reflection on learning outcomes. McIlveen et al.'s (2011) study resonates with Billet (2011) stating that WIL encourages undergraduates to understand expectations and reflect on their own learning, thus learning how to conduct themselves in different contexts. Additionally, Patrick et al.'s (2008) national scoping study posits Australian WIL students as being more employable through a better understanding of the different roles and responsibilities of the WIL community for a transformative outcome.

On the assessment of skills outcomes, studies by Smith (2012) and Smith et al. (2018) emphasise the need to have a structured assessment framework to systematically evaluate the success and challenges of using WIL as a curricular strategy. They progress their research on WIL in Australia with a comparison with UK universities to determine the impact of culture and different education systems on WIL designs and assessment framework, as cautioned by Jackson and Chapman (2012). WIL in relation to employability has become increasingly important for more than a decade and is a topic of interest across multiple stakeholders in the UK (Yorke 2005, 2006, 2011). Government policies that focus on productivity gains, employer demands for employable graduates and students' awareness of the need for work-ready skills, are causing universities to seriously engage with the WIL agenda (Harvey 2000, 2003; Yorke 2011). As tertiary institutions engage with the WIL agenda, research on peripheral issues around providing the best learning through WIL in curricula is an ongoing process in the UK (Duignan 2003; Orrell & Bowden 2004; Thacker 2002; UK Department for Education (UK Dfe) 2017; Yorke 2011).

According to Bunney, Sharplin and Howitt (2015), effective assessments of learning outcomes for WIL are more challenging to implement compared to the traditional curriculum design which is focused on technical skills and capabilities. This challenge is prevalent due to a lack of

curriculum considerations and alignments where traditional academic practice does not correspond or is a mismatch of employers' expectations of graduates (Selvadurai et al. cited in Bunney, Sharplin and Howitt (2015). Notwithstanding, the problem of skills mismatch (mentioned in ***Section 2.2***), which is a result of discrepancies between the intellectual orientation of universities and the practical goals of employers, can be overcome by scaffolding the teaching and learning tasks over a period of time (Dean et al. 2010; Larkin & Beatson 2014).

A scaffolded approach includes introducing work placement during the course of studies, as studies have noted improvements in certain skill outcomes following periodic student placement in the industry (Eames & Coll 2010; Freudenberg, Brimble & Cameron 2010a, 2010b; Lim et al. 2020; Seow & Pan 2022; Yorke 2011). In addition, Lightfoot (2009) highlights that industry placements provide an opportunity for practicing skills that may not otherwise be available to students during the course of their studies. Wilton's (2012) longitudinal study of UK graduates, while in agreement with Lightfoot's comments when reporting a greater fit between jobs and students with placement experience, nevertheless, cautions that placements do not consistently translate to enhance skill outcomes. Knight and Page (2007) also assert that practitioners must be mindful of the difficulties in assessing employability skills, which are achievements that cannot be clearly pre-specified and which take time to develop and assess.

The comparative study on WIL in Australia and UK conducted by Smith et al. (2018), highlights that similar challenges are faced in both countries when implementing an assessment structure that is aimed at enhancing graduate employability. These comments reinforce the importance of a scaffolded WIL approach with a structured assessment process as a strategic curricular intervention which is a key consideration for a WIL framework in Malaysia. In addition, cultural considerations and a different education system are important factors in determining a best-fit customised WIL design in Malaysia.

The above findings reinforce the need for a paradigm shift in the assessment methodology as academics in Malaysia are likewise more comfortable assessing disciplinary and technical content, as seen in Yasin and Liu (2016) and Yaacob's (2012) research in Malaysia, which will be discussed in the next chapter. As Yorke (2011) acknowledges, for WIL to be considered synonymous with formal on-campus learning, WIL assessments must be incorporated into the curriculum as a compulsory criterion. Skill performance and assessments should clearly define the precise nature of the skill, or behaviours, and the expected level of performance for undergraduates at various stages of their studies (Yorke 2011). In addition, incorporating 'real-world contexts' into university learning cannot be taught solely in the

classroom. It is a learning process that is inclusive of work placement, an ongoing employer/student dialogue, a reflection of experiences and assessment to facilitate improved skill development, workplace performance and effective employment outcomes (Jackson 2016, 2017; Wilton 2012).

2.6 The concept of Work Integrated Learning (WIL)

Work Integrated Learning (WIL) is an educational approach that integrates academic learning with practical work experiences in authentic work settings (Patrick et al. 2008). The aim of WIL is to bridge the gap between theory and practice by providing students with opportunities to apply their knowledge and skills in real-world work environments. WIL programs typically involve apprenticeships, internships, cooperative education, industry projects, or similar work-based experiences (Billett 2009).

The concept of Work Integrated Learning develops multiple aspects of employability, going beyond skills development to encompass industry engagement in the following ways:

1. **Skills Development**: WIL programs offer students a chance to develop and refine a wide range of skills that are essential for employment. These skills include both technical skills specific to their field of study, as well as transferable skills such as problem-solving, communication, teamwork, and critical thinking (Jackson & Bridgstock 2018, 2019; Jackson & Tomlinson 2021; Teng et al. 2019). By engaging in real work tasks and projects, students are able to apply and develop these skills, making them more job-ready and enhancing new graduates' overall employability (Seow & Pan 2022; Tanaka & Zegwaard 2019).

2. **Industry Engagement**: One of the key aspects of Work Integrated Learning is the direct involvement of students with industry professionals and organizations. Through WIL programs, students can engage with employers, mentors and industry experts, who can provide feedback, guidance and industry-specific knowledge (Rook 2015, 2017; Rook & Sloan 2021). This engagement also exposes students to workplace realities, professional networks, and industry trends. It helps students understand the expectations and requirements of different industries and enhances their industry-specific knowledge and connections (Palmer, Young & Campbell 2018).

3. **Professional Identity Development**: WIL contributes to the development of students' professional identities by immersing them in real work settings (O'Leary 2017, 2021).

By working alongside professionals in their field of study, students can gain insights into the values, practices and norms, of their chosen profession. They subsequently acquire a deeper understanding of professional expectations, ethics, and standards (McRae 2015; McRae, Pretti & Church 2018). The authentic experience helps shape their professional identity, fosters a sense of belonging to their chosen industry and enhances their understanding of career pathways (McRae et al. 2019).

4. **Employability Attributes**: WIL programs not only focus on the development of skills but also cultivate employability attributes. Billett (2009, 2011, 2012) posits that WIL, besides developing skill like adaptability, time management and effective communication, also develop attributes such as work ethics, resilience, and self-confidence, which are valued by employers. These aspects contribute to the holistic development of students' employability, making them well-rounded and competitive in the job market (Atkinson 2016).

By combining practical work experiences with academic learning, WIL equips students with a clear and comprehensive understanding of their chosen field and equips them with the knowledge, skills development, professional identity, attributes, and industry engagement, all of which are necessary for successful employment (Lim et al. 2020; Seow & Pan 2022). It enhances their employability by integrating multiple dimensions that align with the demands and expectations of the workforce (Bui, Nguyen & Cole 2019; Campbell et al. 2021; Doolan et al. 2019; Nguyen 2020).

2.7 Global studies on effective delivery of WIL programs

The investigation into WIL in the curriculum has revealed that as a concept, there is no universally accepted definition of WIL. The ambiguity of defining WIL exists in the understanding of whether learning that occurs in the classroom or workplace irrespective of formal structures such as curriculum-designed objectives can be called WIL (Rook 2015). In addition, research into formal WIL programs by numerous scholars indicates ambiguity in the interpretations and elements of teaching and learning among the stakeholders themselves (Billet 2012; Jackson 2013, 2016; Patrick et. al. 2008; Rook 2015; Rook & Sloan 2021), as evidenced in the following global studies. In view that Malaysia is a developing country, the studies are segregated into WIL practices in developed countries and WIL practices in developing countries for clarity and comparison.

2.7.1 WIL in developed countries

For almost two decades Australia has been a forerunner for WIL in higher education with substantial research by scholars as well as strategic initiatives by national bodies in collaboration with the government, industry and universities (ACEN 2018, 2019; ALTC 2008; Billet 2000, 2003, 2009; Bennet 2019, 2020; Campbell et al. 2021; CEDA 2015; Dean et al. 2020; Doolan et al. 2019; HERDSA 2009, 2017; Jackson 2016, 2017; NCVER 2011; Nguyen 2020; Patrick et. al. 2008; Rook 2015, 2017; Rook & Sloan 2021; Rowe & Zegwaard 2017; Trede & Wehr 2021; Universities Australia 2018, 2019; Wheelahan & Moodie 2011; Zegwaard, Ferns & Rowe 2021). Graduate attributes have been a fundamental component of Australian higher education curricula and there is a general agreement among Australian universities regarding what graduate skills are most sought after by employers (Smith et al 2014a, 2014b; Smith, Ferns & Russell 2014; Patrick et al. 2008).

The Foundation for Young Australians (FYA 2017) examined the recruitment requirements of 4.2 million job advertisements and notes that enterprise skills sought by employers among others are problem-solving, communications, critical thinking, analytical thinking, creativity, teamwork, conflict resolution and presentation skills (Jackson & Bridgstock 2019). While universities are not solely responsible for ensuring that graduates are employed and employable, they need to embrace changes to curricular and pedagogical approaches that are conducive to graduates' capabilities and responsive to the requirements of the world of work (Jackson & Bridgstock 2019). In addition, some contrary views assert that work-ready skills can be developed as an additive approach or acquired while 'on-the-job', rather than integrating skills development into higher education curricula at the expense of a focus on technical skills development (Wheelahan, Moodie & Doughney 2022). Notwithstanding, findings from extensive research in Australia identify positive impacts on employability following WIL experiences with consistent new innovative strategies and research on WIL frameworks and employability outcomes (ACEN 2017, 2021; Ferns, Campbell & Zegwaard 2014; Campbell et al. 2021; Dean et al. 2020; Freudenberg, Brimble & Cameron 2011; Jackson 2016, 2017; Sachs & Rowe 2016; Trede 2012; Universities Australia 2018, 2019; Trede & Wehr 2021; Zegwaard, Ferns & Rowe 2021). To progress ongoing research on WIL, Doolan et al's (2019) study was to investigate earlier research advocating Embedded WIL (EWIL) program as effective in enhancing students' employability skills, thus augmenting their work-ready status.

Doolan et al.'s (2019) study found EWIL programs as providing authentic learning experiences for undergraduates. Students engage in real-life settings including work placement and

extracurricular work-related activities, recognised as characteristics of a good quality WIL (Jackson 2015; Patrick et al. 2008; Smith et al. 2014), as students have the opportunity to implement theoretical concepts in a practical setting (Ferns & Zegwaard, 2014). The ability to target specific skills and shape assessment tasks to ensure learning, understanding and development is a significant feature of EWIL which also allowed an in-depth, research-based reflection of their experiences as positioned by Kolb and Kolb (2005, 2009) in their experiential learning theory. Doolan et al. (2019) remark, however, that the most common challenge or barrier to effective teaching and learning with EWIL placements relate to coursework and timetable restrictions which need to be managed collaboratively. Thus, both industry partners and academics indicate the value of collaborative communication, adaptability and forward planning in maintaining good rapport and fulfilling EWIL objectives for mutual benefits (Doolan et al 2019). The significance of students developing these skills via EWIL is that all stakeholders benefit. Students themselves are more employable, industries benefit from a more highly skilled workforce, and while using students to resource their own initiatives, the industry gains satisfaction from increased productivity which contributes to the overall economic prosperity of the nation (Doolan et al. 2019; Universities Australia 2018, 2019). EWIL programs done well also enhance the university's reputation, producing quality graduates, meeting teacher education accreditation objectives and national policy standards. The relationship and close collaboration between universities and industry partners are crucial to successful EWIL implementation. While this study involved an education degree, Doolan et al (2019) maintain that multi-disciplinary programs could consider adopting and adapting the EWIL model to add value to their students' learning experience.

Work placement programs encourage collaboration and build relationships between business, industry and university and ultimately develop students' skills capability and attributes prior to graduation (Choy & Delahaye 2011; Doolan et al. 2019; Universities Australia 2019). Every university, therefore, has a list of graduate attributes for each discipline, consisting of quality, skill and understanding, that are agreed upon by the academic community as being desirable to be developed (Nguyen 2020). Among the strategic measures is the embedding of WIL initiatives in their curricula. This emphasis on WIL is perceived as the key strategy underlying curriculum development and contributing to the long-term economic well-being of Australia (Russell, Ferns & Smith 2015). It is a shared notion that WIL can be introduced into almost all disciplines to enhance learning and enhance graduate skills and universities have displayed their commitment to WIL by adding work-related components to their strategic directions (Universities Australia 2018, 2019). Nguyen's (2020) study collected data from 39 Australian universities on all forms of work placements, namely internships, fieldwork, industry projects and simulations. His findings revealed that approximately half a million students participated

in 555,403 workplace experiences (Universities Australia 2019). This involved 357,806 Australian students, 93,126 international students, 5,486 indigenous students and 67,116 students from regional and remote Australia, thus, establishing the extent of focus in Australia on a work-placement WIL as a strategic employability intervention.

Buckley's (2015) study in the UK focuses on Independent Work Placements (IWP) in the context of WIL and reflects on how a collaborative partnership between employers, universities and students provides a successful learning experience while enabling a smoother transition from university to the world of work through the development of academic and work-ready skills. The role of the university provides a structured learning framework with constant support, at a logistic and pastoral level. Buckley's (2015) study started with a purposeful selection of jobs, after which the collaborative efforts of academics and industry for work placement and assessment were investigated. Students' reflective portfolios were discussed to help students understand the value of their placements as transition periods between study and work. Positive feedback on the IWP experience relating to improved work readiness was received from undergraduates. Buckley (2015) adds that the mandatory IWP portfolio allowed students to reflect on practical experiences against learning in class. The Experiential Learning (EL) approach encourages students to go through the cycle of the four EL stages, which Kolb & Kolb (2005) identified in their Experiential Learning Theory (ELT) as "the process whereby knowledge is created through the transformation of experience" (p. 38).

In response to increasing demand from both universities and employers over the past years in the UK (Brinkley & Crowley 2017; Buckley 2015; Dacre, Pool & Sewell 2007; Daly 2013; Jones & Warnock 2015; Rae 2007, 2009), the Teaching Excellence Framework (TEF) was introduced by the UK government in 2017 which focuses on the improvement of quality teaching at universities (Gunn 2018a, 2018b; THE Learning Summit 2021). The achievement of positive learning outcomes and learning gains includes the acquisition of knowledge, work-based skills and attributes necessary to compete for a graduate-level job (Gunn 2018b; UK Department for Education (DfE) 2017). The TEF incorporates an industry placement-based module for students in the second year of their undergraduate program, supported by revised education policies. By including a work placement opportunity through local partners, the term 'sandwich program' was introduced in the UK in 2017, for students to benefit from the WIL experience while simultaneously focusing on scaffolding such a transition in their undergraduate program (Gunn 2018b; THE Learning Summit 2021). This approach showcases the importance and implications of embedding WIL as a curricular strategy to develop work-ready competencies. Importantly, this strategy also addresses the collaborative efforts needed among the stakeholders (Crosling & Martin 2005), including the government as the policymaker, as critical conditions that need to be met for WIL to be successfully

implemented in the curriculum (DfE 2017; Gunn 2018b). This strategy addresses an important criterion for WIL implementation in Malaysia.

In a study involving Malaysia's closest neighbour, Singapore, its top public university, the National University of Singapore (NUS[3]) was investigated. Several employability skills models were reviewed against its undergraduate programs (across disciplines) in order to identify 'common' employability skills using Cole and Tibby's (2013) Higher Education Authority document as a point of reference. The employability skills that featured most prominently were communication skills, problem-solving, teamwork, self-management and computer literacy. Other related skills were adaptability and flexibility, the ability to work independently, decision-making, self-initiative and leadership skills. Developing skills that are valued in the workplace supports students to be engaged and eases their transition into employment upon graduation (CBI/NUS 2011; Cole & Tibby 2013). Singapore's graduate employability statistics over the past 3 years 2018-2020 have consistently registered above 90% employment. The annual Autonomous Universities Graduate Employment Survey which was conducted on Nov 1, 2020, with 11,800 fresh graduates, against the backdrop of the Covid-19 restrictions and challenges, only saw a slightly more than 10% dip in full-time employment at 69.8%, down from 81.7 per cent in 2019 (Singapore Ministry of Manpower February 2021 Report).

NUS in responding to the challenges of Industry 4.0 and as an active contributor in the 13th ASEAN Share dialogue 2021, has introduced periodic curricular reforms which are student centric. The objective is to develop future-ready graduates through an innovative education model embedding 21st-century work skills and competencies to enhance their employment outcomes (Busaidi & Tuzlukova 2021; Lauder 2014; Oliver & de Jorre 2018). The curricular reforms in close collaboration with major employers of NUS graduates have embedded a six-pillar education reform that incorporates elements of cultural adaptability, critique and expression, listening and communication, computational thinking and interpersonal engagement (NUS 2021 report). Skills Future Singapore (SFS), a body formed under the purview of the government (Ministry of Education (MOE) Singapore) as a key stakeholder, was tasked to develop an integrated education framework to meet industry needs. SFS was commissioned to have constant 2-way feedback with the industry to improve the Singapore Work-Study Program as a mainstream pathway to facilitate a strong link between curriculum and the needs of the workplace. These strategic initiatives driven by the government via funding and policy changes are aimed at boosting the nation's economy via a strong link

[3] *(NUS is No.1 in Asian University rankings, No. 11 in QS World University rankings and No. 24 in Global Graduate Employability 2021 rankings)*

between stakeholders (ASEAN Share 2021). Using Singapore as an example assisted me in addressing the concept of cultural influence on education strategies and learning outcomes, as Malaysia and Singapore have similar cultures. However, despite cultural alikeness, the significant differentiator between Malaysia and Singapore is its education policies and curricular strategy which is robust and closely monitored and driven by its national associations CSEP, SFS and other governing bodies. The success of NUS's initiatives have spurred other Singapore universities to customise WIL models in their curriculum since 2020 which are currently being monitored to gauge the learning outcomes against intended objectives which will be discussed in Chapter 6.

2.7.2 WIL in developing countries

A study on graduate employability and the role of stakeholders in China by Xie and Ma (2014) reveal that employability is an ongoing challenge for Chinese undergraduates even beyond cultural differences and education systems. The study echoes an earlier job market research in China by Bagley (2009). The job market upon graduation is exponentially more competitive than graduates from other countries as China produces over 5 million graduates every year, 25% of whom remain unemployed (Bagley 2009). The statistics are similarly reported after a decade, in a study by Li, Clothey & McCommons (2020) on WIL and the challenge of implementing effective internships in a Chinese university. China's education system, one of the largest in the world, reports an intake of more than 5 million undergraduate enrolments every year (Xie & Ma 2014). Though graduate supply is plentiful, the collaboration between university and industry is lacking despite government policies promoting industry-university cooperation. Thus, not meeting labour market expectations in tandem with an innovation-driven economy in China (Li, Clothey & McCommons 2020; Xie & Ma 2014). To address the challenge of stakeholder collaboration, an initiative has been introduced through government policies encouraging close collaboration between universities across China for knowledge sharing of best practices to improve graduate employment outcomes (Times Higher Education (THE) Learning Summit 2021).

Graduate employability is a key performance indicator for universities in China and is a direct concern for individual schools as rankings are published annually and are linked to government funding (Chen 2006; Xie & Ma 2014). Based on the research participants' observations, reflections and interventions, Bagley's (2009) findings reveal valuable feedback on the weaknesses of higher education programs in China and the overall program curriculum despite the national concern towards graduate employability. Both Xie and Ma's (2014) and

Li, Clothey and McCommon's (2020) studies go beyond the students as the stakeholder, and reveal a lack of cooperation between universities, employers and students due to different stakeholder interests. Universities' preferred attention to theory versus the skill requirements of industry in the areas of production, management and services, is an ongoing battle (Xie & Ma 2014) which is also experienced in Malaysian universities, deliberated in the next chapter.

Research by Busaidi and Tuzlukova (2021) reveals that the focus on skills development of its undergraduates for 'jobs of the future' is similar to the focus areas deliberated during the ASEAN Share dialogue 2021, introduced at the beginning of this chapter. Regardless of being in a region with a very strong cultural background, higher education in Oman recognises the need for its undergraduates to be equipped with effective skills (Cotton 2001), with particular attention to how critical thinking, communication and problem-solving skills can be integrated into the curricula. To assist students to "realise their higher potential in relation to the job market" (Busaidi & Tuzlukova 2021 p.1), a project was initiated and funded by the government and conducted by several researchers, with the objective to provide information and recommendations. The key stakeholders namely the policymaker, academics, students and employers, were tasked to collaborate and identify educational initiatives, approaches, techniques and strategies to enhance students' skills as well as to upskill and reskill academics' professional development and training (Busaidi & Tuzlukova 2021).

The above review of global studies reveals similar approaches to building work capabilities in undergraduate curricula. As mentioned in ***Section 2.5***, the concept of WIL is ambiguous and exists in the understanding of whether learning that occurs in the classroom or workplace irrespective of a formal curriculum design can be termed WIL (Rook 2015). Studies in Malaysian universities are discussed in Chapter Three to establish an insight on graduate employability challenges and the initiatives introduced by a few universities to address this ongoing challenge in Malaysia. The underpinning consideration as seen in the studies above, revolves around clear engagement, collaboration and ongoing dialogue by all the stakeholders. The role of WIL in equipping learners with essential attributes for their employment pathways is well perceived as the primary incentive for enhancing WIL (Dean et al. 2020; Gibbs & Garnett 2007; Garnett 2012; Gunn 2018b; Li, Clothey & Commons 2020; Nguyen 2020; Zegwaard, Ferns & Rowe 2021). Having considered how individuals learn differently, the concept of WIL as a curricular intervention, with a clear structure and assessment mechanism (Li, Clothey & Commons 2020) emerges as an effective solution.

The next section explores the different designs and types of WIL models used globally to understand their application toward improved learning outcomes to enhance employability.

These models will then be mapped against the findings of the data analysis in Chapter Five and deliberated in the concluding Chapter Six.

2.8 The different forms and frameworks of WIL

This section explores the learning mechanisms derived from the different forms and frameworks of WIL. The intent is to understand their application toward improved learning outcomes to enhance employability and to establish whether the introduction of a customized WIL framework in Malaysia will enable the stakeholders to collaborate and propose curricular adjustments with measurable learning outcomes to develop workplace competencies.

The Australian National Strategy on WIL in university education was developed to increase students' participation in WIL activities so that WIL can serve as a tool for economic development (Campbell et al. 2019). The strategy emphasises that WIL facilitates the transition between preparing for and operating in a high-skill work environment. It empowers students to understand, adapt to and apply skills in the workplace, and "WIL experiences such as placements and work-oriented projects which can make a real difference to their skills and capacity" (Campbell et al. 2019, p. 19).

The growing popularity and diversity of WIL programmes have led to widespread use of WIL terminology including both precise and expanded definitions, despite its ambiguity as observed earlier in ***Section 2.6.*** The World Association for Cooperative Education (WACE), as an example, adopted the term work-integrated education (WIE) to address the broad and comprehensive nature of WIL, comprising teaching and learning activities (Tanaka & Zegwaard 2019; Universities Australia 2019; Zegwaard, Ferns & Rowe 2021). The different nature of partnerships and collaboration in WIL can be addressed by offering these programs either as an autonomous model with separate responsibilities, in collaboration between the university and the workplace, or in an institution-led partnership where universities define WIL learning and assessment (Campbell et al. 2019, 2021; Ha 2021; Nguyen 2020; Tanaka & Zegwaard 2019; Wehr & Trede 2022; Zegwaard, Ferns & Rowe 2021; Zegwaard et al. 2019). A focus on the defining features of WIL in a structured form or framework allows for easier identification of appropriate curricular strategy and expected learning outcomes has been addressed by researchers such as Campbell et al. (2019, 2021), Dean et al. (2020) and Wehr and Trede (2022) as well as Advance HE UK (2021) in their WIL models and frameworks.

Advance HE UK's (2021) Employability Report 2016-2021 developed by The Quality Assurance Agency for Higher Education UK (QAA), presents a WIL model with focal points

on student experiences of work within the curriculum undertaken in partnership with the industry, business or community partner, and where the learning experiences are assessed. The framework presents a holistic representation of quality WIL practice with an emphasis on all aspects of the framework, collectively, rather than different parts in isolation (Advance HE UK 2021; Karunanayaka & Naidu 2021). The main element of this framework is that employability should be embedded into all learning and teaching policies, and considered throughout the student lifecycle, from the start to the end of their studies. Building on the findings of scholars working across different educational settings (Dean et al. 2020; Larkin & Beatson 2014; Seow & Pan 2022), this study seeks to evaluate the effectiveness of a scaffolded WIL framework which is customised for a Malaysian education setting, as a contribution to knowledge.

The AdvanceHE UK's (2021) framework outlines a cyclical process to assist in addressing current employability policies and practices in different settings. "The framework is evidence-based and provides a national reference point to enable universities to develop its own approach according to local circumstances as well as benchmarking performance" Universities UK (2016), p.73. The detailed 10 steps and 4 stages of the framework are summarised in ***Table 2.2*** as guidelines for the researcher during the data analysis and findings in Chapter 5. The models and frameworks by Wehr and Trede (2022), Campbell et al. (2021), Tanaka and Zegwaard (2019) and Advance HE UK (2021) will be assessed collectively to propose a customised WIL model as a strategic curricular invention in a Malaysian context.

Table 2.2 – Guidelines for a WIL model

Domain	Student Experience	Curriculum Design	Institutional Requirement	Stakeholder Engagement
Guiding Principle	A quality WIL experience should provide students with a scaffolded, connected and supported pedagogical experience.	A quality WIL curriculum should contain embedded, accessible and transformative learning and assessment within an intended and enacted curriculum.	Quality WIL activity across institutions should be evidenced by the proper management of staff, risk management and reporting around WIL experiences supporting continual improvement.	Quality WIL experiences are supported by engagement, connection and responsiveness to the dynamic expectations of diverse stakeholders (industry, community, government, higher education sector, professional bodies and students).

Source: Adapted from the AdvanceHE UK (2016-2021) Employability Report

2.8.1 Benefits of WIL programs

WIL students benefit by experiencing work placements in as much as it equips them with skills applicable to academic learning on campus. WIL increases students' research and analytical capabilities, critical thinking, and time management skills, similar to Cotton's model of Higher Order Thinking Skills used across countries as a WIL model (***Section 2.5***). Many WIL practitioners note that after completing work placements, students return with renewed enthusiasm for their studies (Freudenberg et al. 2011, Jackson 2016). Mentally visualising on-campus learning in a relevant workplace helps students understand why those subjects have been included thus improving student engagement in the classroom (Jackson 2016). These students tend to be able to isolate and determine the essential features in problem-solving (Freudenberg et al. 2011) and have improved subjective or nominative thinking (Fleming & Eames 2005). To draw direct links between WIL and increased academic performance is complex due to the difficulty of clearly demarcating the inherent elements of course influence (Zegwaard, Ferns & Rowe 2021). However, many WIL students tend to perform better in their end-of-degree results (Fleming & Eames 2005; Freudenberg, Brimble & Cameron 2011; Tanaka & Carlson 2012; Tanaka & Zegwaard 2019; Zegwaard, Ferns & Rowe 2021).

Various studies have confirmed that besides academic grades, the personal and interpersonal skills of participating WIL students are improved as a result of their WIL participation (Billet 2012; Eames & Coll 2010; Ferns et al. 2014; Fleming and Eames 2005; Gunn 2018a; Jackson 2016; Nguyen 2020; Zegwaard & McCurdy 2014). Importantly, an improvement in interpersonal communication skills with learning agility and making knowledgeable decisions has been noted (Eames & Coll 2010; Nguyen 2020) as well as undertaking teamwork and organisational skills have been attributed, in part, to WIL participation (Ferns et al., 2014). As well as these positives, work placements provide students with the freedom to develop professional identity (Trede 2012; Trede & Wehr 2021) and accustom themselves to professional workplace ethics and values (Campbell & Jackson 2011; Gunn 2018a; Nguyen 2020; Zegwaard, Ferns & Rowe 2021).

While recognising the academic as well as benefits of professional development with WIL in curriculum, both Peach and Gamble (2011) and Zegwaard, Ferns and Rowe (2021) highlight the need for a clear structure and learning process to enable consistent measurement and assessment of WIL outcomes. They concur that whilst numerous challenges arise in implementing clear components and assessments of learning outcomes of WIL in curriculum, these challenges arise due to different university focuses as well as differences in policies, cultural and education systems (Campbell & Jackson 2011; Nguyen 2020; Zegwaard & McCurdy 2014), which are likewise recognised in a Malaysian context.

2.9 Challenges for WIL implementation and assessment of learning outcomes

The essence of WIL programs as being resource-intensive and reliant on industry collaboration has resulted in the following challenges often expressed by stakeholders. First, the financial commitment to the development and implementation of WIL programs is a persistent challenge (Patrick et al. 2008). Financial-related challenges range from the increased workload and time pressure for both academics and employers to financial costs to employers and students' obligations to participate in WIL placements (McLennan & Keating 2008; Patrick et al. 2008). Among the institutional costs are administrative and time-related costs to maintain partnerships with employers, sourcing WIL opportunities, developing and evaluating of WIL curriculum and obtaining the support of the student body (McLennan & Keating 2008; Patrick et al. 2008).

Another barrier to mainstream WIL is the entrenching of WIL in pedagogy and curriculum. For academics, this means adjusting to different teaching and learning styles; for students, it is about realising the importance of applying WIL experiences to their future careers (McLennan & Keating 2008). Scrutiny of the implementation of WIL reveals instances of ad hoc, ill-structured and sometimes, irrelevant content to students' curriculum to boost work readiness (Universities Australia 2015, 2018). The universities may have control over the content and kinds of learning activities and outcomes that serve the interests of the university, but these may fall short of adequately meeting the needs of both the students and the industry (Patrick et al., 2008; Rowe, Winchester-Seeto & Mackaway 2012). This disparity between institutional capability and industry expectations constitutes a significant obstacle to effective collaborations between stakeholders for mutual benefits (Forde 2000; Gribble 2014; Jackson & Greenwood 2015; Universities Australia 2018) which is also experienced in Malaysia. The conclusion to be drawn is that a "one size fits all" model is unworkable for WIL and keeping good relationships among stakeholders is a vital consideration (McLennan & Keating 2008; Patrick et al, 2008; Rowe Winchester-Seeto & Mackaway 2012), in the customisation of a WIL model in Malaysia.

2.10 Chapter summary

The development of graduate attributes and employability or work-ready skills covered in this chapter is the main motivation of WIL programs. From the perspectives of universities and employers, WIL is recognised as an educational imperative that allows universities to be responsive to workplace expectations through a strong collaborative network with employers

and industry feedback, which benefits teaching and learning outcomes (Doolan et al. 2019; Nguyen 2020). From the perspectives of students, WIL in the curriculum has been highlighted as a means of enhancing students' professional, academic, and personal qualities (Ajjawi et al. 2020; Doolan et al. 2020, Nguyen 2020) aimed at a successful employment outcome (Venville et al. 2021). Thus, the critical need for harmonisation of stakeholder roles for mutual benefits rather than individual interests irrespective of differences in culture or education systems to address the future of work as emphasised during the ASEAN Dialogue 2021 (ASEAN Dialogue 2021; WEF 2020 Future of Jobs Report) is an integral consideration.

The literature on WIL is rich and covers different aspects relating to the delivery of WIL programs. Successful WIL systems have been studied and principles of effective design and management of WIL have been introduced to guide and support WIL stakeholders. In such a climate of WIL research, scholarly discussions acknowledge that language, cultural, and social differences need to be recognised and taken into consideration (Jackson & Chapman 2012; Smith 2012) for embedding WIL as a curricular reform. The academic discourse on the concept of employability and the concept of WIL in the curriculum by non-Malaysian scholars using global research has also been discussed, drawing on key theories about how people learn and develop work-ready skills, as it is these theories that can provide an understanding of the concepts underpinning WIL development in universities worldwide. Specific learning frameworks have been examined and proposed as tools to develop and define a WIL model to suit different learning requirements.

The subject of top skills or talents needed for jobs of the future and the concern around skills shortages and skills mismatches were introduced at the beginning of this chapter. Skills development is essential for increasing the productivity and sustainability of enterprises and the employability of new graduates. The International Labour Organisation (ILO 2013) defines employability skills as the skills, knowledge and competencies that enhance an undergraduate's ability to secure and retain a job, progress at work and cope with change. These skills enable them to adapt to changes in the world of work (ILO 2013). To address the development of skills to enhance workplace readiness, various learning frameworks, forms and guidelines for a structured WIL model to suit different learning environments and education systems were deliberated in ***Section 2.7***.

This chapter aimed to assess what conditions need to be met and which potential models or frameworks can be customized for use in Malaysia with explicit consideration towards differences in culture and the higher education system. Arguments for and against as well as challenges faced in implementing WIL in curriculum towards enhancing graduate workplace readiness have been reviewed after which, studies outlining the roles of stakeholders in WIL

in the curriculum in various countries were scrutinised. In conclusion, the evidence in this chapter affirms the need for a structured WIL design, customized and modelled on individual country needs according to learning culture and education systems. The different designs and types of WIL models used globally have been investigated to develop a summary in ***Table 2.2*** to define the guidelines to establish a model that will suit the Malaysian education system. A customized but flexible WIL model will enable the stakeholders to collaborate and deliberate on the existing education system and propose policy changes as well as university curricular reforms to introduce WIL with measurable learning outcomes for workplace readiness.

To understand the different learning culture and education system in Malaysia, the next chapter is focused on providing a clear and detailed overview of the Malaysian higher education system, its centralized policies, as well as a review of Malaysian literature on graduate employability and some of the initiatives pursued and being pursued by Malaysian universities to address this ongoing concern.

Chapter 3

The Malaysian Context

3.1 Introduction

To understand how an intervention in higher education in Malaysia might operate, an understanding of the history and operations of the Malaysian higher education system needs to be established. Furthermore, to evaluate the potential of WIL in Malaysia, a recognition of the current state of employability teaching within the higher education curricula and the governing policies is required. In Chapter 1, an overview of the Malaysian education system and the importance of employability was given to introduce the context of this study. The Ministry of Higher Education (MoHE) launched several policy documents as catalysts to drive the initiatives to achieve the said goal. These policy documents and several employability review documents will be elaborated on in this chapter, guided by this study's research objectives and questions.

This chapter begins with an examination of the Malaysian higher education system with an emphasis on its history and its strategic plans which relate to regulation and autonomy. This examination is followed by a detailed presentation of three strategic policy documents and three employability review documents that provide an informed perspective of Malaysia's governing education policies. Next, the employability skills needed for work readiness in Malaysia relating to its culture and education system are discussed with an investigation of initiatives undertaken by various Malaysian universities. Finally, the policies and the different universities' initiatives are reflected against the current Malaysian employability statistics to gauge their effectiveness in meeting the intended objectives of the government.

3.2 Higher education in Malaysia

Developing the country's education system has been an important priority in the national agenda in Malaysia since the nation gained independence in 1957. Successive Malaysian governments have formulated many policies and initiatives to ensure that the national education system develops in line with the requirements of the national mission of producing first-class human capital for the purpose of economic development (Ahmad 2013; Kamogawa 2003; Lee 2003; MoHE 2007). Recognising the importance of education in the overall national agenda, the MoHE has taken many initiatives to transform the education system in line with the National Education Philosophy outlined in the Education Act 1996 (Parliament Malaysia

1996). According to the ongoing initiatives, the government has stipulated that universities have a collaborative responsibility to promote social, economic and technological progress. Universities are also expected to contribute to a high-income economy by producing Malaysian graduates with high competence and advanced skills to secure high-paying jobs in the market or produce innovative enterprises (Economic Policy Unit (EPU) 2010). To move towards these goals, universities were tasked to work with the government, students and industry.

Under the EPU 2010, universities were designated as a driving force that advances new avenues in social and economic progress by boosting national innovation and producing valuable research and development output (Ahmad 2013, EPU 2010). The EPU (2010) direction was premised on an earlier study by the World Bank in 2007 which revealed that four important factors impeding the development of Malaysian universities into higher education institutions (HEIs) of global standards are: (1) governance and financing; (2) quality of research and teaching; (3) unemployment; and (4) research and collaboration between university and industry. Three policy documents that progressively emerged which cut across the above four factors are deliberated on later in this chapter.

The Malaysian education system is centralised and heavily shaped by the government, through its policies. It is, therefore, crucial to understand the delivery of employability teaching and learning in Malaysia relative to current government policies. The MoHE, under the jurisdiction of the government, has been tasked to restructure the education system following the ten thrusts of the Malaysian Higher Education Blueprint (The Blueprint 2015-2025) to enhance the employability of Malaysian graduates. The Blueprint is the overarching document developed by the MoHE to reposition universities to undertake curricular reforms and strategies, necessary to equip undergraduates with the skills needed in the 21st century (Malaysian Education System 2014, https://www.mohe.gov.my).

3.2.1 Regulations and autonomy

The Universities and University Colleges Act (UUCA) Malaysia was enacted in 1971 as a mechanism to regulate the establishment of higher education institutions (HEIs) and are an important instrument through which the government maintains its control over HEIs in Malaysia (Lee 2003; Sirat et al. 2009). The UUCA gives the government full authority to enact policies on HEIs' student enrolment, financing, staff appointments, educational programs and curriculum design (Lee 2003; Sirat et al. 2009). Since the UCCA's inception, it has been revised several times and Hambali, Faruqi and Manap (2008) note that the amendments were

geared toward promoting good governance in HEIs. However, Muda (2008) argues that the amendments are merely cosmetic and in practice, the amendments have not resolved the issues of wider autonomy which is a contentious debate. Indeed, autonomy in Malaysian HEIs has been much deliberated and Abdul Razak et al. (2011) state that the HEIs' struggle for autonomy remains one of the biggest challenges in higher education. The ideal strategy for enhancing higher education according to Mohd. Zain et al. (2017) is to give more autonomy to HEIs to manage, evaluate, structure and deliver their program outcomes, rather than to be strictly regulated by government policies.

In settings analogous to that of Malaysia, the pursuit of any teaching and learning intervention requires government support, as has been evidenced by governments in other Asian countries like Hong Kong, Singapore, Taiwan, South Korea and Japan (Kamogawa 2003; Yeung et al. 2003). These governments have progressively reviewed their education policies and have introduced different reform measures periodically, to improve the overall education quality to enhance their competitiveness in the global market (Yeung et al. 2003). In his early research on higher education reforms in Asian countries, Kamogawa (2003) had sought to determine how Malaysian higher-educational policies have changed by looking at socioeconomic backgrounds and investigating case studies in three Malaysian public universities. His focus was, however, more on the use of digitalisation towards a knowledge society in the higher education institutions. More recent studies by Malaysian scholars, focus on the impact of government support towards higher education policies on curriculum and a review of learning outcomes, which are deliberated in ***Section 3.4***. In their research, the Malaysian scholars propose to lessen government control in HEIs and instead, strengthen the collaboration between the industry and HEIs to equip undergraduates to meet the challenges of the 21st century (Abdul Razak et al. 2011; Aida, Noralis & Rozaini 2015; Al-Hudawi et al. 2014; Azman, Sirat & Abdul Razak 2014;; Chang, DW, Sirat, M & Abd Razak D 2018, Fahimirad et al. 2019; Law 2018; Mohd. Zain et al. 2017; Nair & Fahimirad 2019; Sirat et al. 2009).

3.3 The Malaysian National Higher Education policy and employability review documents

To understand the policy direction of the Malaysian government with regard to employability teaching, the work done to evaluate the success of such policies, and what initiatives may be possible to be pursued within Malaysia, a detailed understanding of Malaysia's policy documents and their related review documents is imperative. The policy documents, which are accessible from the official websites of the MoHE and the Department of Statistics

Malaysia (DoSM), are critical to surveying and appraising existing curricular strategies used to promote employability teaching in the higher education sector. In addition, having a clear comprehension of both the policy and employability review documents determines how critical policy documents are understood individually and holistically. This process is crucial to identify major themes and sub-themes (Creswell 2012) relating to existing higher education curricula and their learning outcomes, with a focus on enhancing graduate employability in Malaysia. Specifically, a clear understanding of the documents enables an evaluation and assessment of the potential for certain WIL models to be used as intervention tools aimed at developing work-ready competencies.

The three policy documents are:

1) The National Higher Education Strategic Plan 2007-2020 (NHESP)

2) The Malaysian Higher Education Blueprint 2015-2025 (The Blueprint)

3) The 11th Malaysia Plan 2016-2020 (Education) (11th MP)

Three related review documents provide information drawn from the policy documents and their outcomes on employability teaching:

1) The Employability in Malaysia: Selected Works 2017 (ESW)

2) The Malaysian Public Universities Graduate Employability Policies 2018 (GEP): A review

3) The Malaysian Graduates Tracer Study 2019 (GTS)

The three policy documents were developed in four phases by the MoHE, in its effort to drive strategic approaches to improved employability, including the collaboration between HEIs and industry and the measurement of outcomes. To reposition the HEIs for affirmative action, the MoHE first introduced the NHESP in 2007, followed by the Blueprint in 2015. The 11th MP, together with the review documents, the ESW, the GEP, and the GTS were then incorporated throughout the four phases of the strategic plan with the following objectives:

(1) To lay the foundation for higher education (2007-2010)

(2) To strengthen and enhance the initiatives (2011-2015)

(3) To work towards excellence through review and reflection (2016-2020)

(4) To go beyond excellence and ensure sustainability (2020-2025)

The first three phases until 2020 are grounded in “end-state” objectives, “thrusts” and strategies. The fourth phase (2020-2025) is based on the accomplishment of the three phases and new challenges circa 2020 (MoHE 2007).

3.3.1 Implication of each document

To establish the four phases of the MoHE's strategic plan, the policy and employability review documents are presented sequentially. As guided by Edward and Welch (2011), to facilitate a clear understanding of each document, the researcher considered the following two questions about the objectives of this study:

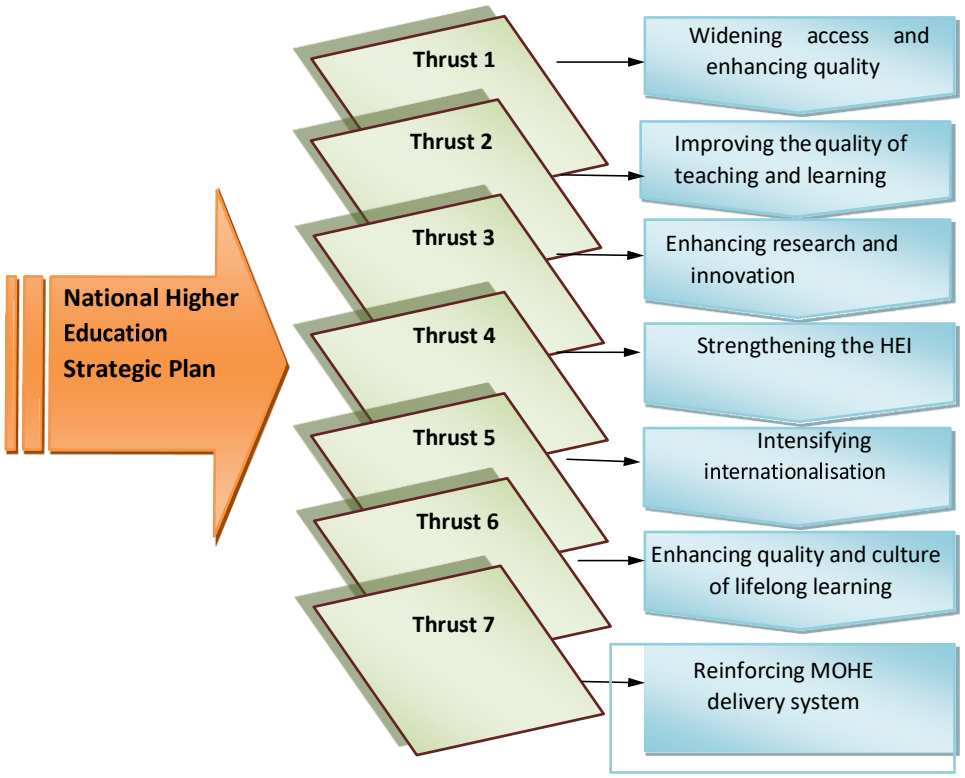
1) What are the key policy drivers in the existing MoHE policies to support and drive graduate employability concerns?
2) How do the structure and context support the plans or action statements? What are its enablers? Are there any possible obstacles?

Policy 1) The National Higher Education Strategic Plan 2007-2020 (NHESP)

The 14-year NHESP has seven thrusts to establish whether the MoHE's strategies or specific action steps since 2007 have enabled undergraduates to develop workplace attributes at public and private universities in Malaysia. Based on the NHESP, the first stage involved interview sessions with employers and academics to establish a link between academia and industry to obtain input and skills required for graduates within their particular work area. In this phase, HEIs are required to have their graduate programs based on each HEI's context to provide knowledge and technical weightage to the relevant program. In the second stage, input and information from the industry were accepted as elements to enhance the program, and link graduates with the industry and the community (***Figure 3.1***).

The NHESP's objectives run concurrently and complement the subsequent Blueprint's thrusts which run from 2015 to 2025.

Figure 3.1 National Higher Education Strategic Plan (NHESP) 2007-2020



Policy 2) The Malaysian Higher Education Blueprint 2015-2025 (The Blueprint)

The MoHE launched the 10-year Blueprint in 2015 (MEB 2015–2025) as a strategic roadmap towards a transformational journey for its undergraduates to gain specific competencies that will equip them for the workplace. The analysis revealed that the MoHE developed the Blueprint through a collaborative and consultative process driven by over 1000 participants from different stakeholder groups providing input and engagement. The stakeholder groups encompassed 'Malaysian and global education experts, university administrators, university Boards, the academic community, unions and associations, Ministry staff, industry bodies and employers, relevant agencies, parents, students, and members of the public' (The Blueprint 2015 p. 2).

The focus on education and human capital development is encapsulated in three of the ten strategic thrusts (***Figure 3.2***) of The Blueprint, which is to improve graduate employability, labour productivity and create more job opportunities for new graduates; specifically,

Thrust 1: Holistic, Entrepreneurial and Balanced Graduates

Thrust 2: Talent Excellence and

Thrust 10: Transformed Higher Education Delivery.

The above 3 thrusts define the joint collaborative efforts needed by the MoHE together with the industry and HEIs for a holistic curriculum aimed at learning outcomes that enable graduates to display talents and skills that meet industry expectations.

Figure 3.2 - The 10 Thrusts of the Blueprint (MEB 2015-2025)

Tahir et al. (2018) investigated whether graduates have enhanced their work competencies since the development of The Blueprint and the NHESP by re-examining Malaysian HEIs graduates' employability from the perspectives of graduates and employers in Malaysia. The discussions were prompted by the persisting issues of unemployment and low employability rates (Tahir et al. 2018). The findings indicate that local graduates still lack most work-ready skills, with communication skills being a major weakness, especially in presenting and writing in languages other than the Malay language. In addition, other skills identified were leadership skills such as motivating and encouraging team members to jointly achieve team objectives,

critical and analytical thinking and problem-solving skills *(numbers not disclosed)* (Tahir et al 2018).

The above findings as well as recent studies, discussed in ***Section 3.4,*** reveal that while collaborative initiatives have been developed by the MoHE through the policy documents, nevertheless the extent of embedding workplace competency development and more importantly, the assessment of its effectiveness and learning outcomes as a curricular strategy is still lacking based on the feedback from both industry/employers and the graduates themselves (Tahir et al. 2018).

Policy 3) The 11th Malaysia Plan 2016-2020 (Education) (11th MP)

The Blueprint's strategies are aligned with the 11th MP, where there are four similar focus areas:

Focus 1 *- To enhance the efficiency of the labour market to accelerate economic growth;*
Focus 2 *– To focus on technical and vocational education to meet industry demand;*
Focus 3 *- To strengthen HEIs' curricula towards employability competencies as well as provide for lifelong learning for skills enhancement; and*
Focus 4 *- To raise the quality of the education system for better student outcomes and institutional excellence*
(Source: The Blueprint 2015 p. 18)*.*

The four areas in both documents relate to the importance of integrating work-related components in higher education curricula to enhance graduate employability which contributes to a country's economic progress (Bui, Nguyen & Cole 2019). However, while the strategies appear to be focused and graduate-centric, four years after the inception of The Blueprint and three years since the launch of the 11th MP, the Malaysian media reported, *"…millennials are discovering that a degree is insufficient to compete in the labour market" (Source: The NST Malaysia March 28, 2019).* Literature in support of this statement is discussed in ***Section 3.4.***

Given that the 11th MP is an economic plan which incorporates education strategies to boost the nation's economy, the focus on education appears to be driven by an economic impetus. Three of the four focus areas are explicitly devoted to the concern of labour market efficiency, the relevance to industry and lifelong learning for skills enhancement, all of which are

addressing economic needs and the relevance of education. Even the fourth focus aimed at improving the quality of education is concerned with the economic perspective in terms of the expected quality of output that meets industry needs and the financial aspects of HEIs. Notwithstanding a strong economic focus on education and human capital is relevant for the future development of Malaysia, there appears to be some conflict with the aims of the National Philosophy of Education (NPE) which is cited in the NHESP.

The NPE aims to develop a holistic person intellectually, emotionally and physically. Conversely, the economic plan has mainly centered on producing competent, skilled and efficient graduates for the Malaysian labour force. Thus, as observed by Malaysian scholars, Chang, Sirat and Abd Razak (2018), finding a balance between a holistic education in an economic-driven context is challenging.

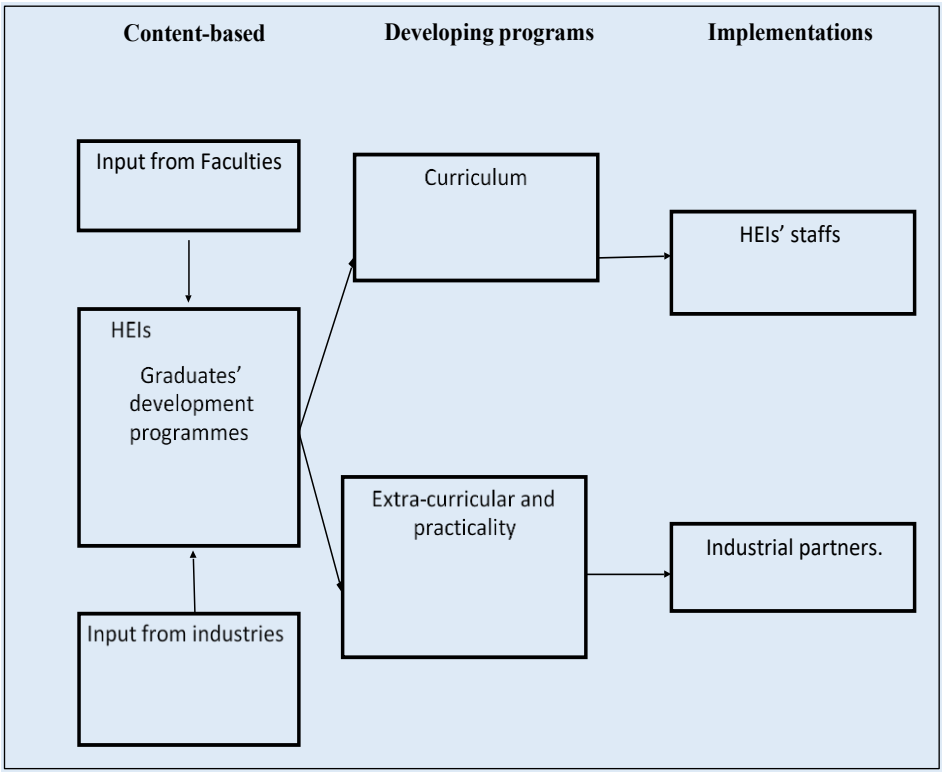
Review 1) Employability in Malaysia: Selected Works 2017 (ESW)

The ESW review was conducted by Rahmat, Ayub and Buntat (2017) and edited and published by the MoHE in 2017. Based on the scholars' analysis of higher education documents and expert interview protocol in the ESW, the MoHE introduced the Employability Skills Based Work Performance Prediction (ESWPP) framework *(**Figure 3.3***). The ESWPP was introduced as an antecedent of the Blueprint initiatives and outlines core attributes which consist of academic, personality management, exploration, and connectivity. These attributes were gathered from interviews with three stakeholder groups, namely the employers, academics and the MOHE (*numbers not disclosed*) by Rahmat, Ayub and Buntat (2017), and are summarized as follows:

- graduates should possess good academic achievement, active involvement in extra-curricular activities and exposure within their area of expertise through practical approaches as preparation for actual working entry*;*
- graduates to be ingrained with ethical values through the attributes of responsibility and positive attitudes. Leadership skills are a crucial element together with adaptability skills;
- In the exploration attributes, graduates are to be highly imaginative, innovative, and critical thinkers, beneficial in the working situation;
- In the final attribute, graduates are to be trained in communications and teamwork and interpersonal skills. Added to these attributes is the awareness of technology integration to boost their knowledge and performance. Commercial awareness is aimed to increase the graduates' acquaintance with their prospective careers (ESW 2017).

Figure 3.3 - Employability Skills-Based Work Performance Prediction Framework

(Source: MoHE ESW 2017 www.mohe.gov.my)



Review 2) The Malaysian Public Universities Graduate Employability Policies 2018 (GEP)

The GEP review was conducted by Law (2018) to evaluate the thrusts of the Blueprint which was launched three years earlier in 2015. Law (2018) in his review, noted that Malaysian graduate unemployment and underemployment issues were still on the rise despite the Blueprint initiatives to improve graduate employability, labour productivity and create more job opportunities for new graduates. In 2015, 27.9% of Malaysian graduates were unemployed, and in 2016, 26.3% were unemployed (Department of Statistics Malaysia (DoSM) 2015, 2016).

Law (2018), based on a quantitative survey with new Malaysian graduates and employers *(numbers not disclosed)*, postulates that many factors contribute to the graduates' employability outcomes. The graduate factors would depend on their academic results, their work-ready skills, as well as their ability to communicate and meet the expectations of

employers. However, Law (2018) emphasises that demand and supply factors in the labour market do impact the competitive environment in which graduates may have to contend with. Another factor is the role of employers, where the job demand and the corresponding compensation would impact the employability outcome for new graduates. Law's analysis was derived from the quantitative survey data as well as from secondary data gathered from the Malaysian Graduate Tracer Study (2007- 2016), the ESW (2017) and the DoSM reports (2015, 2016).

Law (2018) concludes his review with several recommendations, which are: 1) to encourage periodic national teaching and learning forums to enable the sharing of best practices on employability teaching, 2) to position employability skills as a driver of quality, where universities' curricula review and modification includes a focus on employability outcomes, and 3) support the transition of undergraduates from year 1, to year 2 and year 3, to determine whether employability skills and being developed progressively for future work life, which advocates a scaffolded approach to employability teaching.

Review 3) The Malaysia Graduates Tracer Study 2019 (GTS)

The MoHE Graduates Tracer Study (GTS) is a periodic survey conducted by the MoHE among new graduates for the purpose of knowing their job status and also for getting their feedback on various aspects of their respective HEIs. The purpose of conducting this study, which is inclusive of employability teaching practices, is 7-fold, as follows:

1. It serves as a good indicator of the effectiveness and efficiency of the HEI's delivery and management system.
2. For improvement of the HEI's employability teaching and career support system.
3. It helps to monitor graduates' progress in the working world.
4. It provides information for curriculum review and updates with a focus on enhancing graduates' employability outcomes,
5. It is a platform to build partnerships with various agencies and institutions for sharing strategies for developing human capital.
6. To improve graduates' knowledge of employers' expectations.
7. For transparency and accountability improvement of all HEIs.

Findings from the GTS are shared on the MoHE website and are accessible by individual HEIs for the purpose of enabling every HEI to undertake the necessary action steps that will

enhance good practices and areas of strengths as well as review areas of improvement towards better employability teaching.

Collective data from the three employability review documents, the ESW (2017), the GEP (2018) and the GTS (2019) were used by scholars, Chang, Sirat and Abd. Razak (2018), Tahir et al. (2018) and Suppramaniam, Siew and Ainara's (2019) studies on the Blueprint (2015 – 2025) and the NHESP (2007 – 2020) as the policy documents are interrelated and progressively introduced by the MoHE. Tahir et al (2018)'s and Chang, Sirat and Abdul Razak's (2018) research corresponds with studies by Law (2018) and complements Suppramaniam, Siew and Ainara's (2019) review of the GTS (2019) which aimed to elicit industry feedback on the importance of integrating work-ready skills within academic courses. Employers' opinions were sought on their newly hired graduates' competencies and attributes and their overall performance in the workplace. Analysis revealed relatively low ratings in assessing the graduates' employability skills, especially in leadership, critical thinking and decision-making. The lack of leadership competencies was stressed as the persisting factor causing graduates to face difficulties in securing employment. Communication skills are the skills least grasped by graduates despite employers' constant feedback that good communication skills are imperative for graduates to interact with colleagues. The employers emphasised that while graduates were keen to learn and enjoyed working together, they generally lack creativity in solving problems, prioritising given tasks, and lack critical thinking which are stumbling blocks in their careers (Suppramaniam, Siew & Ainara 2019; Tahir et al. 2018). The results echo the 2020 Malaysian Graduate Statistics reports which are deliberated in ***Section 3.4.***

While few studies in Malaysia have reported the successful implementation of graduates' employability skills from the perspectives of the graduates themselves through a self-assessment process (Abd Aziz & Abdullah 2012; Azman, Sirat & Karim 2010), most studies have, on the other hand, revealed similar findings as the ESW (2017), the GEP (2018) and the GTS (2019) reports, with unsatisfactory feedback from employers on the work readiness of graduates and their inability to work independently, discussed in the next section. The findings of these studies by Malaysian scholars Tahir et al. (2018), Chang, Sirat and Abdul Razak (2018) and Suppramaniam, Siew and Ainara (2019) are relevant to the researcher's effort to investigate whether there was an improvement in graduates' employability, four years after the implementation of the revised policies in the Blueprint (2015-2025) from two major stakeholder viewpoints: (1) the employers and (2) the new graduates who have experienced the revised policies on employability.

3.4 Graduate employability and employability skills in a Malaysian context

Comprehensive research carried out on graduate employability in Malaysia over the past decade (Azman, Sirat & Abdul Razak 2014; Buntat et al. 2013; Fahimirad et al. 2019; Husain et al. 2010; Jusoh, Khalid et al. 2014; Lim, Soon & Duan 2021; Simun & Siong 2011; Law 2019; Mohd. et. al 2013; Osmani et al. 2015; Pillai et al. 2012; Sumanasiri, Ab Yajid & Ali Khatibi 2015; Suppramaniam, Siew & Ainara 2019; Tahir et al 2018) reveal that employers' expectations of students to develop work-ready competencies before graduation, do not differ significantly from those of their counterparts in other countries (discussed in Chapter 2). An additional requirement, however, was noted by Wye and Lim (2009), on developing fluency in spoken and written English as one of the key elements that contribute to enhancing the employability of Malaysian graduates, similar to Tahir et al (2018)'s comments in the preceding section. Wye and Lim's (2009) study is also consistent with Gurvinder and Sharan's (2008) and recent Malaysian studies (Azmi, Hashim and Yusoff 2018; Fahimirad et al. 2019; Suppramaniam, Siew & Ainara 2019) that Malaysian graduates are lacking in communication skills, but often highly competent in technical areas related to their degree or the subject-specific knowledge required for their vocation.

The Malaysian scholars' (Aida, Norailis & Rozaini 2015; Anas & Hamzah 2017; Azmi, Hashim and Yusoff 2018; Fahimirad et al. 2019; Ken & Cheah 2012; Lim et al. 2016; Mohd et al. 2013; Rahmah, Ishak & Wei Seng 2011; Tahir et al. 2018; Yaacob 2012) discussion on the application and assessment of competencies in higher education resonate with global research, reviewed in the previous chapter. As Mohd et al. (2013 p. 5) point out, 'A future-ready curriculum emphasizes skills and attitudes which are necessary across diverse jobs and work settings'. A future-ready curriculum develops work-ready competencies and prepares graduates for jobs of the future. An excerpt from the 13th ASEAN Share Policy dialogue held in November 2021, discusses jobs of the future, Industrial Revolution 4.0 (IR4.0), employer engagement and graduate employability. One of the keynote sessions emphasised the 'uneven state of development on graduate employability focus' in universities across ASEAN[4] countries, some details of which were discussed in Chapter Two.

Malaysia's TalentCorp (an organisation under the purview of the Human Resources Ministry), revealed another government initiative called "My Career Roadmap 2021" during the dialogue, as a journey toward industry-ready graduates. Unfortunately, the initiative did not indicate clear milestones that aim to build upon and progress the initiative to meet its intended objectives

[4] *Malaysia is a member of the 10 ASEAN countries. ASEAN is an intergovernmental body aimed at promoting economic integration and collaborative efforts among its members.*

(ASEAN Share Policy 2021). Curriculum adjustments being undertaken as well as being explored by a few universities in Malaysia are discussed next.

3.4.1 Initiatives undertaken by Malaysian universities to develop workplace competencies – studies by Malaysian scholars

Based on studies by Ali et al. (2016), Azmi, Hashim and Yusoff (2018), Md. Yunus et al. (2006), Suppramaniam, Siew and Ainara (2019) and other Malaysian scholars on graduate employability concerns, Fahimirad et al. (2019) conducted a study on several public and private universities' course curriculum in Malaysia to validate these findings. Their study reveals that while there are components of practicum and work placement in a few courses' curriculum, some teachers perceive that developing students' generic skills are not their responsibility. Especially, since the practicum and work placement components are electives and are thus, reliant on students to deliberate and make choices accordingly (Fahimirad et al. 2019). The scholars' study sought to evaluate the earlier findings by Md. Yunus et al. (2006), that teachers are unwilling or reluctant to take innovative teaching approaches to build students' generic skills due to an added requirement and responsibility to pursue professional development courses to equip themselves. Fahimirad et al.'s (2019) findings are also consistent with Yaacob's (2012) study on Universiti Kebangsaan Malaysia (UKM), a public university in Malaysia. Yaacob (2012), investigated students' and lecturers' perspectives on integrating generic competencies into compulsory courses in UKM. The two compulsory courses were Islamic and Asian Civilizations and Ethnic Relations.

Three key issues relating to the integration of generic skills such as operational context, integration ability, and assessment mechanism, were measured. Yaacob (2012) aimed to first, identify whether generic skills were 'naturally occurring' within the current course programs, as observed by Hughes and Barrie (2010), and second, whether methods could be developed to record and assess those competencies explicitly. Third, he examined the level of integration of these competencies into the courses throughout the planning, implementing, and assessing phases, similar to Cranmer's (2006) study which revealed that generic skills have been developed and included in the curricula of higher education in different countries. Lastly, Yaacob's (2012) study sought to identify the challenges of developing, implementing, and assessing generic skills responding to Rosten and Drummond's (2005) claim that even though universities sometimes embed generic skills into curriculum, these skills are seldom assessed as separate learning outcomes. Instead, they are often assessed more holistically in the

discipline knowledge. As a result, students may naturally and unconsciously develop these competencies since those capabilities are hidden in the curriculum (Hughes & Barrie 2010).

Yaacob's (2012) findings reveal that lecturers maintained that integrating generic skills is less likely to be incorporated into compulsory courses and those competencies are not 'naturally occurring' nor assessed within the current courses. Furthermore, they believe that UKM as a teaching university and not a research university has not appropriately provided the operational context for developing generic skills. They opposed the statement that lecturers can identify the appropriate mechanism to evaluate students' generic skills. Moreover, Yaacob (2012) posits that global universities are cognizant that the lack of non-academic work experience among many academic staff has deprived students of a holistic learning outcome due to a singular focus on technical components rather than embedding personal work experiences in the teaching process. As a result of this awareness, Ali et al. (2016) in their quantitative study involving 300 undergraduates from various public and private universities in Malaysia, reveal that several universities have instead sought to hire external 'professors of practice' who have both the experience and qualification in industrial sectors, to introduce relevant and well-aligned generic skills, thus, 'bringing the industry into the class'. Nevertheless, the scholars contend that the development of these skills is, nonetheless, not measured as an expected learning outcome (Ali et al. 2016).

Amidst early concerns about the employment outcomes of graduates and the expansion in the size and diversity of the student population in Malaysia, Yassin et al. (2008) conducted a study on a public university, Universiti Malaysia Terengganu (UMT), where co-curriculum activities were added to the academic curriculum to enhance generic skills, aimed at generating holistic and versatile graduates to improve employment outcomes. UMT offered sports and martial-arts activities, optional industrial training (in any field of work), and cultural, and leadership activities. This holistic curriculum framework was aimed to increase soft skills and emotional spiritual quotient, content skills based on industrial training and real knowledge through connecting with the community (Yassin et al. 2008). The research findings likewise revealed that the learning outcomes are not measured or assessed and appear to be "loosely" put in place as optional activities. Correspondingly, in a later study by Fahimirad et al. (2019), Taylor's University, a private university in Malaysia, in its 2019 curriculum framework, introduced the development of generic skills. However, the mode of delivery, evaluation and assessment of developing those skills as a learning outcome has also not been clearly outlined.

The three key issues highlighted by the above scholars shall be intentionally incorporated into this qualitative research to identify whether generic skills were already 'naturally occurring' or unconsciously embedded within the current curriculum. Alternatively, are they consciously and explicitly incorporated into the curriculum and most importantly, are the skills assessed as a learning outcome during studies? These issues are noted as part of the first research question of this study. Additionally, the use of co-curricular activities to enhance generic skills, as revealed in Yassin et al.'s (2008) study is explored with the stakeholders to assess its suitability as an alternative intervention as part of the second research question.

The evidence reviewed above affirms that while several Malaysian universities have attempted for more than a decade to incorporate generic skills in undergraduate studies, the initiatives have been fragmented with minimal if any, significant or measurable learning outcomes. On curriculum development, Fahimirad et al. 2019 have raised questions on the optimal amount of learning hours needed for generic skills development given competing requirements for content and other technical skills. Moreover, it remains to be ascertained what are the aspects of generic skills that employers deem to be critical, as evidenced in UMT's curriculum (Yassin et al. 2008). Likewise, Suppramaniam, Siew and Ainara (2019) reiterate that the ultimate measure of a quality university education rests in the richness of the students' learning experience and its application in the workplace, together with positive feedback from employers. Additional context is achieved in a study by Azmi, Hashim and Yusoff (2018) on Malaysia's top public university, Universiti Malaya (UM). Reviewing the perspectives of students as stakeholders, the study reveals that students are becoming increasingly aware of the need to develop generic skills through life experiences outside of the university. In response to students' feedback, the MoHE had encouraged UM to provide opportunities for undergraduates to develop workplace competencies during their studies as outlined in the Blueprint. Notwithstanding, however, Azmi, Hashim and Yusoff (2018) highlight that clear engagement and collaboration by all the stakeholders are needed to drive this initiative, as some academics are reluctant to shift their focus away from technical skills and instead, criticize the inclusion of generic skills development in the higher education curriculum.

In summary, the scholarly articles present substantial evidence that whilst universities have attempted to address the acquisition of generic skills or workplace competencies, there remains a gap or an ambiguity in assessing and measuring the intended learning outcomes (Ali et al. 2016; Azmi, Hashim & Yusoff 2018; Fahimirad et al. 2019; Yaacob 2012; Yassin et al. 2008). Furthermore, there is little if any, alignment between teaching pedagogy and students' personal experiences and self-reflection, which promote employability skills development (Suppramaniam, Siew & Ainara 2019). My research seeks to

address the abovementioned gap or ambiguity, where the objective is to first survey existing curricular strategies used to promote the development of employability skills in the higher education sector; after which, to evaluate and assess potential WIL models to be used towards enhancing the employment outcomes of Malaysian graduates. The summary findings are intentionally linked to the researcher's questions on curricular strategies and learning outcomes to justify the research undertaken.

The various efforts by individual universities in Malaysia to attempt an inclusion of generic skills development do not appear to yield the desired improvement in employment outcomes as attested in Chapter One on the current unemployment challenges in Malaysia, evidenced in the annual Department of Statistics (DoSM) reports. The report had revealed that despite a slight decline of 0.6% in the unemployment rate in 2022, as the Malaysian economy recovers from the pandemic, 17.3% of the employed Malaysian graduates are either daily income earners or self-employed as small retailers and hawkers (DoSM 2022), which are not commensurate with their qualifications.

The challenges faced by graduates to secure employment of choice that correspond with their qualifications indicate that the unemployment concerns in Malaysia are ongoing. These challenges and the contemporary initiatives by the MoHE in response to these challenges have not been focused on addressing the "root cause" or underlying cause of undergraduates' lack of readiness before entering the workforce. Thus, my argument is that Malaysian stakeholders need to review existing policies as well as present curricular strategies to identify the weaknesses and causal factors of graduates' lack of work readiness leading to high unemployment statistics. Failure to focus on strategising the acquisition of skills needed for the current workforce and re-skilling for jobs of the future may contribute to the escalation of the unemployment rate among new graduates.

3.5 Chapter summary

This chapter provides a contextual background about the Malaysian education system and its cultural considerations to outline the challenges faced by undergraduates to acquire work-ready skills. Chapter Two reviewed global curricular strategies aimed at addressing graduate employment concerns, their strengths, weaknesses and challenges. The critical success factors include the structured implementation and assessment process as well as the recognition of different education systems and cultures. The evaluative stage in both Chapters Two and Three and later in the data analysis in Chapter Five, will eventually enable the

identification of alternative curricular interventions together with policy considerations as a potential means of addressing this ongoing concern with employment outcomes. The progressive stages of this study are imperative as a step-by-step holistic approach versus a "piecemeal" approach to achieve the desired end-state of graduates' work readiness in Malaysia.

The Malaysian education system affects both public and private sector universities in its curricular taxonomy and key result areas. These areas are also subject to annual government audit review as an accreditation process. Thus, this chapter is crucial to establish the present governance of Malaysia's education system and its impact on learning outcomes, with a focus on graduates' readiness for employment which is the aim of this research. The three policy documents are clear on their thrusts, objectives and desired outcomes individually as well as in relation to each other. However, as revealed by the three employability review documents, the policies lack assessment protocols and structured measurement of expected learning outcomes. In ***Section 3.3,*** five questions were considered, and the employability review documents reveal that most action statements across the policy documents appear to lack enforcement and a clearly defined implementation process as key drivers to enhance employability teaching to equip graduates before they enter the workforce. Fundamentally, the absence of milestone tracking against the thrusts of the policy documents, especially the Blueprint, reveals a significant inadequacy in the present education system.

These policy weaknesses are corroborated by evidence in ***Section 3.4.1***. Comprehensive literature by Malaysian scholars on graduate employability was discussed and the initiatives undertaken by a few Malaysian universities to develop workplace competencies were scrutinized. Curriculum adjustments were attempted, and extra-curricular activities were introduced as a strategy to develop generic skills as a complement to technical skills. However, these "loose" initiatives attempted over the past decade, were not measured to gauge their effectiveness as the mode of delivery, evaluation and assessment of skills development was not clearly outlined. The literature review concludes that a clear focus on embedding work-ready components in curricula to increase employability outcomes remains to be seen.

Fahimirad et al.'s (2019) study concluded that further research needs to be conducted in Malaysia to investigate and address the gap between the existing fragmented efforts to build work-ready capabilities versus introducing a structured framework and teaching pedagogy which includes the assessment of workplace competencies as the desired learning outcomes. Both the policy and employability review documents have identified and outlined the current policy enablers and inhibitors which has yielded the information necessary to

establish the focus areas and to progress this study. The information will be used to craft the focus group and interview questions in a data triangulation effort. Having outlined the prevalent challenges, both in the education system as well as cultural differences in Malaysia, Chapter Four proceeds with the methodology that is to be adopted for this research.

Chapter 4

Methodology

4.1 Introduction

This thesis uses qualitative research methods to evaluate i) stakeholders' experiences of current employability teaching and learning and ii) stakeholders' perceptions regarding the viability of WIL as a means of enhancing graduate employment outcomes. This chapter draws upon the conceptualisation of WIL developed in the literature review in Chapter 2 and the review of policy documents in Chapter 3 to detail a method by which I can investigate existing employability teaching and learning practices and the potential viability of WIL in Malaysian higher education. This process is essential to satisfy the data requirements to answer the research questions, presented in the Research Methodology Process (***Figure 4.9)*** at the conclusion of this chapter.

The review of documents was carried out to determine their influence on possible curricular strategies in Malaysian universities that promote graduate employment outcomes. A substantial body of literature was reviewed to understand scholars' various approaches, methods and findings to address graduate employability concerns in Malaysia and globally. I've argued that graduates' readiness for employment is a major challenge and that initiatives to improve student outcomes have been both limited in scale and effectiveness and constrained by the centralised nature of the Malaysian HE system. To understand whether or not WIL could be implemented in order to develop students' employability skills, I need to understand whether or not the stakeholders that would have to support such an initiative would indeed do so. This requires an investigation of stakeholders' attitudes and perceptions regarding existing employability initiatives and the potential value of WIL.

This thesis therefore draws on a social constructivist approach as the context of inquiry to understand how people understand their world and share meanings about their lived experiences (Rubin & Rubin 1995). Social constructivism as noted by Crotty (1998) posits that individuals play an active role in the process of learning by constructing their own understanding of the world through personal experiences, interactions with others, and alignment with cultural norms and values. The fundamental premise of this theory is that knowledge is a human construction, and that the learner is an active participant in the learning process (Thomas et al. 2014). Within this perspective, learners are proactive participants in the journey of acquiring knowledge, as articulated by Thomas et al. (2014), where embracing a social constructivist paradigm places the individual at the center of the process of making

sense of the world. By acknowledging the central role of social interactions and cultural context in the learning process, this theory provides valuable insights into how individuals come to understand and navigate the complexities of the world around them (Rubin & Rubin 1995; Tebogo 2014; Thomas et al. 2014).

In summary, a social constructivist approach is an inductive approach to qualitative research, through which realities are dependent on the experiences of individuals (stakeholders/participants) where researchers and participants interact and create knowledge (Antoine 2011; Moustakas 1994). Drawing on a constructivist approach, the introduction of using a qualitative methodology is revealed in this chapter as well as the ethical considerations. A detailed description of the participants' profile, sampling options and the research instruments employed is deliberated. Lastly, the use of a qualitative data analysis software (CAQDAS) is mentioned where NVivo 12 ® is used to code and analyse both the transcripts and documents thematically (Brandao 2014). The detailed findings are presented in Chapter Five.

4.2 Introducing a qualitative research methodology

This research utilises a qualitative methodology and employs interviews and focus groups to gather data regarding stakeholders' experiences and perspectives on the existing curricular structure and learning outcomes and its applicability towards graduate workplace readiness. Feedback is also sought to establish industry expectations of newly hired Malaysian graduates and their ability to assimilate with work requirements and related competencies.

A wealth of scholarly literature defines the principles and practices of scientifically sound and rigorous qualitative methods in social research. Qualitative methods involve the systematic collection, organization, and interpretation of data by widely accepted techniques for research strategy, sampling, data collection, and analysis (Creswell 2003, 2007, 2011; Creswell & Plano Clark 2007; Creswell & Poth 2018; Denscombe 2007, 2014, 2015; Denzin 1994; Denzin & Lincoln 1994, 2000, 2001; Devotta et al. 2016; Graneheim, Lindgren & Lundman 2017; Grbich, 2013; Guba & Lincoln 1994; Huberman & Miles 2011; Miles & Huberman 1994, 2002; Miles, Huberman & Saldana 2014; Patton 1999, 2002; Saldana 2011; Teherani et al. 2015). Qualitative methods should be considered when the research aim, according to Curry, Nembhard and Bradley (2009), is one or more of the following: to investigate a problem that is difficult to measure quantitatively; to generate data necessary for a comprehensive understanding of a problem, and to understand and gain insights into potential causal mechanisms (***Table 4.1***).

Data gained through qualitative research can then be used, if needed, to develop sound quantitative measurement processes or instruments for further research. To gain a comprehensive understanding of the stakeholders' perceptions of the undergraduate experience and learning outcomes in the context of workplace readiness, quantitative survey instruments are insufficient to gather in-depth data and induce correct interpretations (Curry, Nembhard & Bradley 2009). Instead, as Creswell (2007) emphasises, investigating problems or phenomena involving organizational processes, organisation culture and change processes, as well as social and team-based interactions may be difficult to measure quantitatively.

Table 4.1 - When to Consider Using Qualitative Methods

Research Aim	Examples of Contributions of Qualitative Methods
Investigate complex problems/issues/phenomena that are difficult to measure quantitatively	Characterize organizational processes, dynamics, and change over time; describe social interactions; elicit individual attitudes and preferences
Generate data necessary for a comprehensive understanding of a problem	Provide detailed descriptions of individual perceptions and experiences; enhance quantitative measures of phenomena
Gain insights into potential causal mechanisms	Generate hypotheses about why a given intervention has a specific impact, how the impact occurs, and in what organizational context it occurs
Develop sound quantitative measurement processes or instruments	Identify specific measures of research-related constructs; assess cross-cultural equivalency of existing tools
Study special populations (those traditionally underrepresented in research, those with low literacy)	Improve methods for recruitment, retention, and measurement

Source: Curry, Nembhard & Bradley 2009

Creswell's (2007) emphasis is supported by evidence gathered by Curry, Nembhard and Bradley (2009) from a large qualitative study using one-to-one interviews conducted at Yale Global Health Leadership Institute, USA. The outcome of the study complements the in-depth qualitative literature reviewed in Chapter 2, where a qualitative component can similarly provide detailed perspectives and experiences of individuals in undergraduate studies and workplace readiness, thereby ensuring a more comprehensive understanding of the area of interest. A qualitative methodology permits the collection of qualitative and subjective data with inherent flexibility to pursue emerging trends and themes (Huberman & Miles 2011; Kamal & Lin 2019), which allow the researcher to seek an explanation of responses during both the

focus groups and interviews with the three groups of participants, elaborated in the upcoming sections.

Qualitative methodology adheres to an inductive approach concerned with delving beneath the observable to uncover meaning and answer 'what', 'why' and 'how' (Wardle 2014) with an end-product of rich descriptions, meanings and explanations (Maylor & Blackmon 2005). The selection of data instruments such as focus groups and interviews in this study, allowed the respondents to not only qualify and explain responses in depth but also to seek clarification with the researcher, when necessary. This data collection process reinforces the belief in qualitative research that participants are in the optimum position to describe and explain their perspectives and experiences and should have the opportunity to do so without the constraint of a pre-determined researcher-imposed framework (Rook 2015; Veal 2011; Wardle 2014). By providing insights into problems and the varying perspectives of stakeholders, the selection of focus groups and interviews, as well as related policy documents review, satisfy the data requirements to answer the research questions, presented in the Research Methodology Process (***Figure 4.9)*** at the conclusion of this chapter.

4.3 Participant sampling in qualitative studies

To understand existing employability teaching and learning, as well as to evaluate the potential value of WIL, it is necessary to engage with all the stakeholder groups that are involved in the processes of graduate employment. Three stakeholder groups were identified, and participants were sought for each: final year business undergraduates/newly employed graduates, academics and Heads from Business programs, and employers. This study used a purposive type of non-probability sampling with the intent to seek rich data (***Table 4.2***). According to Neuman and Wiegand (2000), purposive non-probability sampling is described as making use of experts who work with the prospective subjects to get informative cases. This is to ensure that the experiences and statements by each stakeholder group are reflective of personal experience (Palinkas et al. 2015). Qualitative researchers often want to explore the diversity of individual experiences, so, they may specifically look for people with demographic or other differences who have shared a common experience (Denzin & Lincoln 2008; Miles, Huberman & Saldana 2014) and is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources (Patton 2002).

The selection of participants in this study was guided by two principles: (i) All participants must have experienced the area of study and (ii) they must be able to articulate what it is like to have lived that experience (Miles, Huberman & Saldana 2014; Polkinghorne 1989). Malaysian participants were selected based on their knowledge, relationship, and expertise which in this study, are the areas of workplace competencies, curriculum design, learning outcomes, policy direction for higher education institutions and readiness for employment. Most qualitative studies aim to discover meaning and uncover multiple realities from the stakeholders' perspectives and experiences (Huberman & Miles 2011). Qualitative researchers ask sampling questions such as, "Who would be an *information-rich* data source for my study? Whom should I talk to, or what should I observe, to maximize my understanding of this area of study?" As the study progresses, new sampling questions emerge, such as, "Whom can I talk to or observe, or Who would confirm, challenge, or enrich my understandings?" (Huberman & Miles 2011 p. 56). As with the overall design, sampling design in qualitative studies is an emergent one that capitalizes on early information to guide subsequent actions taken by the researcher (Huberman & Miles 2011). As opposed to larger, more random sampling in quantitative research, qualitative researchers avoid random samples because they are not the best method of selecting people who are knowledgeable, articulate, reflective, and willing to talk at length with researchers about the problem or phenomenon that is being investigated (Graneheim, Lindgren & Lundman 2017).

A sample size of five to ten participants is a guideline to encourage better interaction and freedom of speech according to Curry, Nembhard and Bradley (2009), as a large focus group makes it very difficult for the moderator to keep the discussion moving and flowing well and for each participant to have enough time to express substantively their view on a given topic. Sample size in qualitative research is usually based on informational needs with a focus on data saturation which involves sampling until no new information is obtained and redundancy is achieved (Denzin & Lincoln 2008; Graneheim, Lindgren & Lundman 2017). The number of participants needed to reach saturation depends on various factors, for example, the broader the scope of the research question, the more participants will likely be needed. Data quality also affects sample size: If participants are insightful and can communicate effectively, saturation can be achieved with a relatively small sample (Graneheim, Lindgren & Lundman 2017; Palinkas et al. 2015). Qualitative methods are, for the most part, intended to achieve a depth of understanding and place primary emphasis on saturation (Miles, Huberman & Saldana 2014) where Polkinghorne (1989) recommends an average sample size between 5 to 25 participants for an interview or focus group sessions. Details of the sample size for this research are indicated in ***Table 4.3***.

According to Neuman and Wiegand (2000), the focus of a qualitative researcher is on the selected participants' ability to clarify and deepen the understanding of a social problem rather than its representativeness. They indicated that qualitative researchers should be concerned with obtaining cases that can enhance the learning process in a specific context, thus, the tendency to use a non-probability sampling method. In non-probability sampling, subjects are chosen according to their relevance to the research topic because the aim is to gain a deeper understanding than to generalize to a larger population (Neuman & Wiegand 2000). The design of a qualitative study is emergent and flexible, responding to changing conditions of the research in progress (Kamal & Lin 2019). Hence the focus group and interview questions were reviewed and re-worded to learn, gauge and collect as much information as possible across the different participant groups. A qualitative researcher spends a substantial time during the data collection process, usually with an intense conversation with groups of participants to seek rich data and clarify areas of ambiguity (Creswell 2013; Creswell & Creswell 2018).

The purposeful sampling approach was supplemented with new participants from all the three stakeholder groups through snowballing (Adu 2019; Creswell 2013, 2014; Miles, Huberman & Saldana 2014) which contributed to the rich and diverse views of participants from both private and public universities and employment backgrounds. Qualitative researchers call their sample *purposive* simply because they "purposely" selected people who experienced the area of interest. Purposive sampling implies an intent to choose exemplars or types of people who can best enhance the researcher's understanding of the problem or phenomenon (Miles, Huberman & Saldana 2014). The researcher was, however, cognizant of the notion of insider researcher (Brannick & Coghlan 2007; Fleming 2018) during the process of purposive selection of participants from the researcher's faculty.

Table 4.2 – Purposive sampling of the 3 groups of stakeholders

Stakeholders/ Participants	Final-year business undergraduates and newly employed graduates	Academics from business undergraduates' programs and Heads of Program	Employers
Selection Protocol	Work experience: casual/internship/family business involvement	From both private and public HEIs	Involvement with undergraduates in work placement and internships

Expected Outcomes	Specific comments on actual experiences	Specific feedback on curriculum and students' assessment	Specific feedback and expectations

Table 4.3 – Details of sample size for the 3 groups of stakeholders

Stakeholders/ Participants	**Group 1 – Final year business undergraduates, newly employed graduates***	**Group 2 – Academics from business undergraduates' programs**	**Group 2 – Heads of Program**	**Group 3 – Employers**
Private & Public HEIs	**21 participants** (5 sessions)	**19 participants** (4 sessions)	**6 participants**	**11 participants**
Research Instrument	*Focus Groups*	*Focus Groups*	*Semi-structured Interview*	*Semi-structured Interview*
Programme	*Business*	*Business*	*Business*	*Business*
Location	*On-Line***	*On-Line***	*On-Line***	*On-Line***

**New graduates with less than 1 year of employment*

The location decision is explained in **Section 4.5

4.3.1 The challenges of being an insider researcher

The data collection process using focus groups in this study included one group of academics and one group of students from the researcher's organisation. This type of research can be described as endogenous research (Trowler 2011) or more commonly, insider research. Fleming (2018), whilst acknowledging the challenges faced by academic staff members involved in conducting research in their own faculty, postulates a unique advantage in such a circumstance. The advantage is that the researchers are familiar with the culture of the organisation which enables a deep level of understanding and interpretation during their interaction with participants in a qualitative research methodology. However, some of the challenges faced by being an insider researcher may include minimizing the potential for

implicit coercion of the participants, ensuring tacit patterns and regularities are not taken for granted and awareness of the potential conflicts of being an academic and researcher within the same context (Dwyer & Buckle 2009; Fleming 2018). On the other hand, insider research provides a valuable contribution to the theory and practice of WIL from a different perspective than may be obtained by someone not deeply embedded and involved. Researchers need to be wise of the impact their position, as an insider, has on the interview process and plan appropriately to ensure that any bias is minimized (Brannick & Coghlan 2007; Fleming 2018). Insider research is often open to criticism and subjected to scrutiny. Therefore, it is particularly important to establish 'trustworthiness' in the research design. Trustworthiness parallels the concepts of validity, reliability, and objectivity (Creswell 2013, 2014; Lincoln & Guba 1985).

In addition to observing the considerations highlighted by both Fleming (2018) and Creswell (2013, 2014), the researcher was also conscious of 'power ramifications' as an ethical concern when collecting data from those who lack power relative to the researcher (students) or peers (academics). Notwithstanding, as argued by Dwyer and Buckle (2009), the converse can also apply, as the insider researcher may be able to gain more through having a rapport with the participants and being comfortable to 'open up' (during the focus group sessions), so that there may be greater depth to the data gathered. To manage the perception of implicit coercion during the recruitment of participants in both groups, the researcher requested the assistance of the Head of the Program to make an open invitation across all academics and all final-year students for expressions of interest, to establish 'trustworthiness' in the research design (Creswell 2013) and to ensure that any bias is minimised (Brannick & Coghlan 2007; Fleming 2018).

Another real advantage of being an insider researcher is during the analysis and interpretation phase of the research process. Brannick and Coghlan (2007) emphasise that a key advantage of being an insider researcher is that the researcher does not need to spend time getting to know the nuances of the context of the research. They are normally familiar with the language, jargon and acronyms used by the participants and it is less likely that the participants' responses are misunderstood. An outsider researcher is potentially at risk of not noticing interesting data because of a lack of understanding of the specific context that the comments are made from (Brannick & Coghlan 2007; Dwyer and Buckle 2009).

Notwithstanding the challenges of being an insider researcher, this research purposefully selected participants external to one's own institution, the benefits of which are deliberated next.

4.3.2 The benefits of investigating external participants

Investigating the perspectives of students and academics external to one's own institution can significantly enrich qualitative research, leading to more robust findings, increased validity, and a broader understanding of the research topic. It is an essential aspect of conducting comprehensive and meaningful qualitative research (Creswell 2013, Denzin & Lincoln 2011; Patton 2014).

Both credibility and dependability are crucial criteria in qualitative research which were carefully considered by the researcher to establish confidence in the truth of the findings from the three participant groups. The importance of rigor and quality to develop the trustworthiness of a qualitative inquiry is discussed in this chapter.

Overall, this study recognises the importance of identifying and managing the risks, challenges and ramifications during the research process to ensure ethical and trustworthy insider research is conducted to achieve credibility and trustworthiness of the desired outcomes (Creswell 2013, 2014). As advocated by early researchers, Lincoln and Guba (1985), confirmability, reliability and authenticity are scrutinised during the methodological triangulation of findings (Fusch & Ness 2015) across different instruments (focus group and interview transcripts) to reflect the participants' voices in both and not the researcher's biases.

4.3.3 Data instruments – Focus groups and Interviews

Qualitative research is concerned with the nature, explanation and understanding of a specific topic of interest. Unlike quantitative data, qualitative data are not measured in terms of frequency or quantity but rather are examined for in-depth meanings and processes (Labuschagne 2003). Interviews are widely used as a data collection tool in qualitative research. They are typically used as a research strategy to gather information about participants' experiences, views and beliefs concerning specific research questions or a problem or phenomenon of interest (Labuschagne 2003; Lambert & Loiselle 2007). In addition, Sandelowski (1995, 2002) purports that one-to-one interviews are the most used data collection tools in qualitative research. Focus groups are another form of an interview; these are in-depth open-ended discussions that address a predefined topic of common interest to both the researcher and the focus group participants (Ryan, Coughlan & Cronin 2009). According to Morgan (2002), in a less rigid and structured focus group approach that has emerged in the social sciences, the participants are encouraged to talk to each other while

answering the moderators' questions. Hence, the researchers facilitate discussion, rather than direct it and seek to understand the participants' meanings and interpretations (Liamputtong 2012). The group is focused because it involves a collective activity that debates a specific social issue, reflecting on common perspectives or experiences.

Premised on the clearly defined intended outcomes of interviews and focus groups described above, I used two data instruments in the data collection process: 1) focus groups and, 2) semi-structured interviews. Since this is an exploratory study, the use of both focus groups and semi-structured interviews allowed me some flexibility in crafting the questions for each participant group. It also allowed me to probe for more information and clarification which according to Neuman and Wiegand (2000), is an essential skill for qualitative researchers to ensure the collection of rich data from both individuals as well as a group of 5-6 people from similar social backgrounds or who have similar experiences or concerns (Liamputtong 2012). Neuman and Wiegand (2000) reminded that for exploratory research, open-ended questions are the most effective. This view supports that of Riessman (2002, p.54) when he pointed out that it is useful "…to ask questions that open up the topic and allow respondents to construct answers in collaboration with the listeners, in ways they find meaningful".

Curry, Nembhard and Bradley (2009) reiterate the use of interviews as a strategy for the systematic collection, organisation and interpretation of textual information which is used as an inductive approach to generate novel insights into problems or phenomena that are difficult to measure quantitatively. As evidenced in this study, I was in continuous interaction with the participants throughout both the focus group and interview sessions as indicated in the interview and focus group transcripts, to discover the participants' interpretation and meaning of their different experiences (Neuman & Wiegand 2000), as an undergraduate or a new graduate, an academic or Head of Program, and as an employer. Adopting a qualitative methodology facilitates the generation of a comprehensive description of processes, mechanisms (how an intervention results in a certain outcome) or settings (Bradley & Curry, 2013; Curry, Nembhard & Bradley 2009).

4.4 Rigour in qualitative research

Researchers need alternative models appropriate to qualitative designs that ensure rigour without sacrificing the relevance of the qualitative research (Guba 1978, 1981; Krefting 1991). To establish rigour, Lincoln and Guba (1985) proposed a model for assessing the trustworthiness of qualitative data based on a methodological framework.

4.4.1 Establishing a methodological framework of quality criteria

The “gold standards” for qualitative research as outlined by Lincoln and Guba (1985) suggested four criteria for developing the trustworthiness of a qualitative inquiry: credibility, dependability, confirmability, and transferability. In later writings, responding to criticisms and their evolving views, a fifth criterion more distinctively aligned with the constructivist paradigm was added: authenticity (***Table 4.4*** sourced from Lincoln & Guba 1985). **Credibility** refers to confidence in the value of the data and its interpretations. Credibility cannot be attained in the absence of dependability, just as validity in quantitative research cannot be achieved in the absence of reliability. **Dependability** refers to the stability (reliability) of data over time and conditions. The dependability question is: Would the study findings be repeated if the inquiry were replicated with the same (or similar) participants in the same (or similar) context? (Lincoln & Guba 1985). Both credibility and dependability are crucial criteria in qualitative research which were carefully considered by the researcher to establish confidence in the truth of the findings from the three participant groups. Data was collected from different groups of participants across 24 sessions over 32 days (Nov 19th to Dec 20th, 2020) using similar sets of questions. Analysing the data enabled the researcher to establish the reliability of data collected due to similar feedback and experiences from participants across private and public universities and industries as well as final-year undergraduates and new graduates with and without work experiences.

Confirmability refers to objectivity, which is the potential for congruence between two or more independent people about the data’s accuracy, relevance, or meaning which represents the information participants provided and that the interpretations of those data are not imagined by the inquirer (Lincoln and Guba (1985). **Transferability** is the extent to which qualitative findings have applicability in other settings or groups. Lincoln and Guba (1985) noted that the investigator’s responsibility is to provide sufficient descriptive data so that readers can evaluate the applicability of the data to other contexts. **Authenticity** refers to the extent to which researchers fairly and faithfully show a range of different realities. Authenticity emerges in a report when it conveys the feelings and tone of participants as they are lived. A text has authenticity if it invites readers into a vicarious experience of the lives being described and enables readers to develop a heightened sensitivity to the issues being depicted.

Confirmability and transferability were both closely scrutinised in the findings across the different instruments (focus group and interview transcripts) to reflect the participants’ voices in both sessions as well as documented evidence and not the researcher’s biases. The findings in the data analysis strive to convey the actual feelings conveyed by participants, where readers can consider its applicability in future research in a similar context.

Triangulating the data collected, discussed in the next section, also strengthened the focus on authenticity and the researcher's intent to establish rigour as advocated by Lincoln and Guba (1985).

Table 4.4 – Methodological Framework of Qualitative Criteria Source: Lincoln & Guba 1985

TABLE 17.1 Quality-Enhancement Strategies in Relation to Lincoln and Guba's Quality Criteria for Qualitative Inquiry

Strategy	Credibility	Dependability	Confirmability	Transferability	Authenticity
Throughout the Inquiry					
Reflexivity/reflexive journaling	×				×
Careful documentation, audit trail		×	×		
Data Collection					
Prolonged engagement	×				×
Persistent observation	×				×
Comprehensive field notes	×			×	
Audio recording and verbatim transcription	×				×
Triangulation (data, method)	×	×			
Saturation of data	×			×	
Member checking	×	×			
Data Coding/Analysis					
Transcription rigor/data cleaning	×				
Intercoder reliability checks	×		×		
Triangulation (investigator)	×	×	×		
Search for disconfirming cases/negative case analysis	×				
Peer review/debriefing	×		×		
Inquiry audit		×	×		
Presentation of Findings					
Documentation of quality-enhancement efforts	×			×	
Thick, vivid description				×	×
Impactful, evocative writing					×
Documentation of researcher credentials, background	×				
Documentation of reflexivity	×				

4.4.2 Triangulation

Triangulation refers to the use of multiple referents to conclude what constitutes truth. Triangulation aims to 'overcome the intrinsic bias that comes from single-method, single-observer, and single-theory studies' (Denzin, 1989, p. 313). The overall purpose of any study is to answer the research question and one approach to mitigate bias is through triangulation

using multiple sources of data. When one goes back to the seminal source and looks at Denzin's (1989) definitions, one would find that "data triangulation has three subtypes: (a) time, (b) space, and (c) persons," whereas "methodological triangulation can entail within-method and between-method triangulations" (p. 237), although the generally understood type is within a method, such as multiple sources of data found within one design. In qualitative research, methodological triangulation adds depth to the data that is collected, and this rich, in-depth data supports a direct link between triangulation and data saturation (Fusch & Ness 2015), which is the approach used in this research.

For example, triangulating the data from multiple data collection methods (e.g. interviews and focus groups) as carried out in this qualitative research would be classified as a within-method triangulation, whereas triangulating the data from a combination of quantitative and qualitative techniques in a mixed-methods study would be between method (or across method) triangulation (Denzin 1989, 1994). In qualitative studies, researchers often use a rich blend of unstructured data collection methods (e.g. interviews, focus groups, and documents) to develop a comprehensive understanding of a specific topic of interest or phenomenon. These diverse data collection methods, which were adopted in this study, guided by learning theories underpinning a social constructivist methodology, provided an opportunity to evaluate the extent to which a consistent and coherent picture of the topic of interest emerges (Denzin 1994).

In dissertations and doctoral studies using more than one data collection method, too often, students focus on just the interview data and neglect to demonstrate methodological triangulation by discussing document analysis, direct observation, focus group interview data, or other data sources that are separate from the participant interview data (Denham & Onwuegbuzie 2013). Instead, to better understand and apply methodological triangulation (within a method) in a study, Stavros and Westberg (2009) illustrated this approach in their research by conducting semi-structured interviews along with observation of key personnel together with notations, and finally, a review and analysis of secondary documents across a purposive sampling of six cases. Likewise, Wardle's (2014) thesis on an assessment of WIL in hospitality tertiary education conforms to a methodological triangulation (within a method) using multiple data-collection tools for rigour and depth, thus enhancing overall comprehension to inform, verify and complement other aspects of the research design.

4.5 Data collection process and ethical considerations involving human participants

Due to the 2020/2021 Covid-19 pandemic worldwide, changes were made to the initial face-to-face data collection process plan, and an alternative proposal was submitted to and approved by the VUHREC on October 6, 2020. Face-to-face sessions with the three groups of stakeholders were replaced with online focus groups and interview sessions via Microsoft Teams and were audio recorded.

Initial contact was made with 12 Heads of Business Programs in both private and public higher education institutions/universities. Letters of intent were sent individually to them explaining the research aims and requesting assistance to obtain the sample of participants required (undergraduates, newly employed graduates/alumni and academics). Some Heads of the Program, however, did not respond despite the follow-up emails, whereas others were willing to assist but did not have participants who met the selection protocol as described earlier in ***Table 4.2***. In other instances, two Heads from public universities who initially agreed to assist withdrew due to time constraints. Eventually, after many attempts over seven weeks, the targeted sample sizes for the two stakeholder groups as per ***Table 4.3*** were obtained and the schedule of sessions was confirmed from Nov 19 to Dec 20, 2020. Similarly, for the third stakeholder group, 18 employers across government offices, government-linked companies (GLCs) and private companies were contacted to obtain their expression of interest to participate. After four weeks, and several declines, as well as postponements, 11 employers **(*Table 4.3*)** from both private as well as government-linked companies, agreed to the one-to-one online interview sessions which were scheduled from Dec 1 to Dec 20, 2020.

Before each scheduled session, an email stating the purpose of the study, together with the VUHREC-approved Information Sheet and Consent Form, was sent to all the participants in the three stakeholder groups. These measures were aimed at addressing concerns if any, on Confidentiality and Anonymity, and ensuring Informed Consent from all participants. Consent to record the online sessions on Microsoft Teams was also obtained before the commencement of each session. It was also explained that the audio records will be deleted upon completion of the study and that the findings would be kept in the VU Research Repository (VURR) as stipulated in VU's ethics policy (VU HREC 2013). In addition, in the event of publication, no names nor reference to specific workplaces were to be used. Instead, as clearly stated in the Information Sheet and Consent Form, only a unique number was assigned to each participant in every group.

Participants were also invited to request to view the transcripts before publication. Additionally, the researcher prepared a set of information slides before the commencement of each online

session to explain the aims of the study and re-emphasise the confidentiality and anonymity measures undertaken. At the start of each session, a reminder was made to all participants to switch off their cameras throughout the recording. Participants were also encouraged to clarify any areas of ambiguity or concerns before each session. All the interviews were conducted personally by the researcher, to ensure accurate dissemination of information to the participants, as well as accurate probing and clarifying, were done, where needed.

The nine focus group sessions involving a total of 40 participants, took an average of 50-75 minutes per session. The one-to-one interview sessions with 17 participants took between 60-100 minutes. The duration of both sessions depended on the amount of probing done by the researcher to enable each participant to reflect on his/her experiences. All the sessions involved personal interaction between the researcher and the participants, which eliminated non-response rates. It also allowed for a set of guiding questions that were used as prompts to increase the continuity of questions thereby developing narratives (Creswell 2012, 2013). Focus group sessions enabled the researcher to elicit collective views and allowed interaction to ensure comprehension and provide clarity where needed (Creswell 2012, 2013) while enabling a free flow of expression and comments.

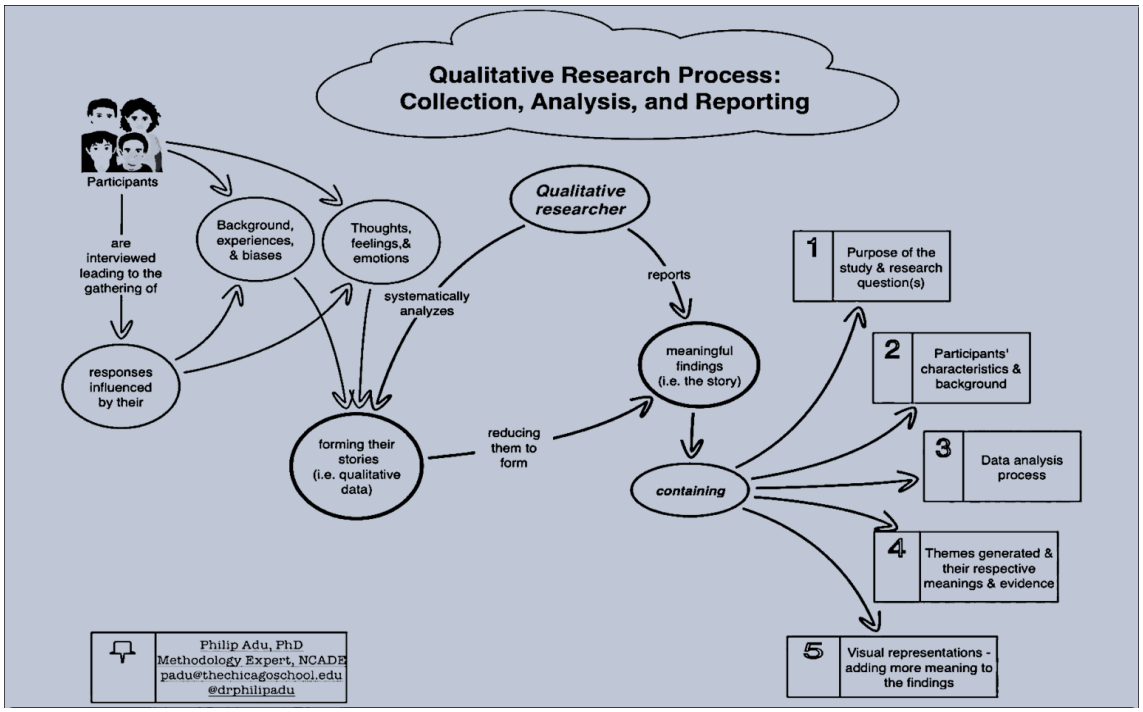
Multiple sessions across the stakeholder groups generated narrative data in a focused discussion where the interaction and the group dynamics were essential. In addition, recognising the current practice in the social sciences mentioned by Morgan (2002), the researcher encouraged a less rigid and structured focus group approach where the participants were encouraged to talk to each other while answering the researcher's questions. The interaction among individuals widened the range of responses collected from individuals with a common experience in the areas of workplace competencies, curriculum design and readiness for employment, despite offering differing individual perspectives and views. Also, as reiterated by Curry, Nembhard and Bradley (2009) and Moore and Morton (2015), group dynamics and interaction activated forgotten details in the course of the discussion which was keenly observed by the researcher. Very importantly, the group exchange helped to release initial inhibitions, thus making participants comfortable in describing their experiences. Another benefit of the focus group sessions observed by the researcher was that the interaction generated insights that might have been overlooked or missed in a one-to-one session. The sessions which were conducted in English were all audio-recorded and transcribed by the researcher to ensure no pertinent data was eliminated as well as to capture all the data accurately. After each session, participants were invited to contact the researcher to seek debriefing, if needed.

Notwithstanding, the disadvantage of both focus groups and interview sessions is the extensive time involved in making contacts, following up with each individual, scheduling, rescheduling and administering multiple online sessions across three groups of stakeholders in different settings. However, the clear advantage to the researcher was the opportunity to look at the different ways the stakeholders firstly, understand the concept of employability, and secondly, consider how these understandings are common or different so that appropriate interventions can be proposed and designed.

4.6 Analysing the data

This study set out to determine the existing strategies used to promote graduate employability in Malaysian higher education and investigate its outcome. Thereafter, to examine the stakeholders' perceptions regarding the viability of WIL as a structured curricular intervention to develop employability skills. As mentioned, an examination of three MoHE policy documents and three employability review documents was undertaken earlier in Chapter Three. This review was done to understand the key policy enablers and inhibitors to achieve graduate work readiness towards improved employment outcomes. The findings empowered the researcher to proceed with the data collection and analysis, which is reflected in ***Figure 4.5***. The data analysis process *(step 3),* and *e*mergent themes (*step 4)*, complemented by visual representations (*step 5* - tables and charts) in relation to the research questions are examined.

Figure 4.5 – Qualitative Research Process (Adu 2019)



4.6.1 Data analysis process

The process of data analysis can be described as breaking data into meaningful parts (Savin-Baden & Major 2013). At the onset, the researcher recognised that an analysis of the three stakeholder groups namely, (1) the students and newly employed graduates/alumni, (2) the academics and heads of program, and (3) the employers, would require firstly, an exploration of perceptions and experiences relating to the present curriculum design and its preparation towards developing workplace competencies before graduation. Secondly, an investigation of the implications of introducing WIL in the curriculum includes expected and possible unexpected learning outcomes. Thirdly, and of equal importance, is the deliberation of the proposed intervention and the investigation of policy empowerment and policy inhibitors to introduce WIL in the higher education curricula. These three steps, which address the research objectives and questions were carefully observed during the analysis to ensure an integrated and holistic outcome.

This analysis is framed under the view that deep and meaningful interpretations of curricular strategies and WIL implementation in Malaysia can be drawn out and extrapolated to other contexts in different countries where graduates' readiness for employment in different settings and cultures are the topic of research. The analysis adopted Guba's (1978) early research and Nguyen's (2020) recent views based on his research on WIL and learning outcomes for Chinese students. Both scholars posit generalisability as a 'continuum rather than an absolute which is a 'working hypothesis, not a conclusion (Guba 1978 p. 125), which is to be 'tested again in the next encounter and again in the encounter after that' (p. 70).

4.6.2 Conducting the data analysis

All 24[5] focus groups and interview sessions with a total of 57 participants were conducted by the researcher and likewise, all transcripts were coded personally by the researcher to ensure accurate interpretation and classification. A CAQDAS software, NVivo 12 ® was used to code this data, the advantage of this being that this coding uses participants' own words (Adu 2019), thus eliminating any possibility of misinterpretation or presumptions. While Campbell et al. (2021), have highlighted the advantage of having more than 1 coder for intercoder reliability or reproducibility across coders and to minimise single coder 'bias', prominent early researchers like Miles and Huberman (1994) acknowledged otherwise. The scholars

[5] *The 24 interviews and focus group sessions over a period of 5 weeks, involve interviews with employers and Heads of Program and focus group sessions with academics and students (undergraduates and new graduates)*

emphasise that intercoder reliability or reproducibility while predominant is nevertheless subject to the coder(s) being more importantly, knowledgeable about the subject matter, especially when working with in-depth semi-structured interviews or focus groups (Miles & Huberman 1994). Coding these types of data involves interpreting accurately what respondents mean in their answers to questions which were confidently observed in the researcher's personal capacity. The overarching goal is, therefore, to ensure that a single knowledgeable coder must be convinced that his or her coding is rigorous and reliable and would be reproducible by other equally knowledgeable coders, if they were available (Braun & Clarke 2013; Miles & Huberman 1994). Furthermore, the concerns on reliability and single coder 'bias' has been addressed by the researcher using 'methodological triangulation' of data (Denzin 1989, 1994; Fusch & Ness, 2015; Miles & Huberman 1994) across the 24 transcripts and its relatedness across stakeholders in the thematic analysis.

Having all 24 transcripts alongside each other during the coding, aided comparative analysis which enabled the researcher to remain consistent in emphasizing the key points. One disadvantage in the data analysis process which was observed by Bazeley and Jackson (2014) was the accuracy of simple coding. If not careful during this process, a researcher may assign incorrect code names to units, thus mislabeling and potentially losing important information. By diligently observing these coding disadvantages during the data analysis process, the researcher avoided having to backtrack and clean up the coding deficiencies. Lichtman (2006) postulates that most qualitative research in education generates an average of 80–100 codes at the first stage, which is then organized into 15–20 categories and eventually synthesized into five to seven major themes or concepts. In support, Creswell's (2014) process of 'lean coding', suggests no more than 25–30 categories which are combined into five to six major themes. Likewise, in this study, after 3 levels of coding, the researcher synthesised the categories into a Codebook of 7 main themes and 2 sub-themes presented in the next section. The vigorous data analysis took approximately 6 months from January to June 2021 to enforce the 'gold standards' of qualitative research, outlined by Lincoln and Guba (1985) which was discussed in ***Section 4.4.1.***

4.7 The rationale for using thematic analysis

This research used thematic analysis to ensure that the data content is not simply summarised, but instead, the key features of the data are identified and interpreted using codes and themes (Saldana 2011), guided by the research questions. Thematic analysis is an accessible, flexible, and increasingly popular method for generating codes and themes from qualitative data (Bazeley & Jackson 2014; Braun & Clarke 2013; Saldana 2011, 2014). Codes are the smallest units of analysis that capture interesting features of the data which are

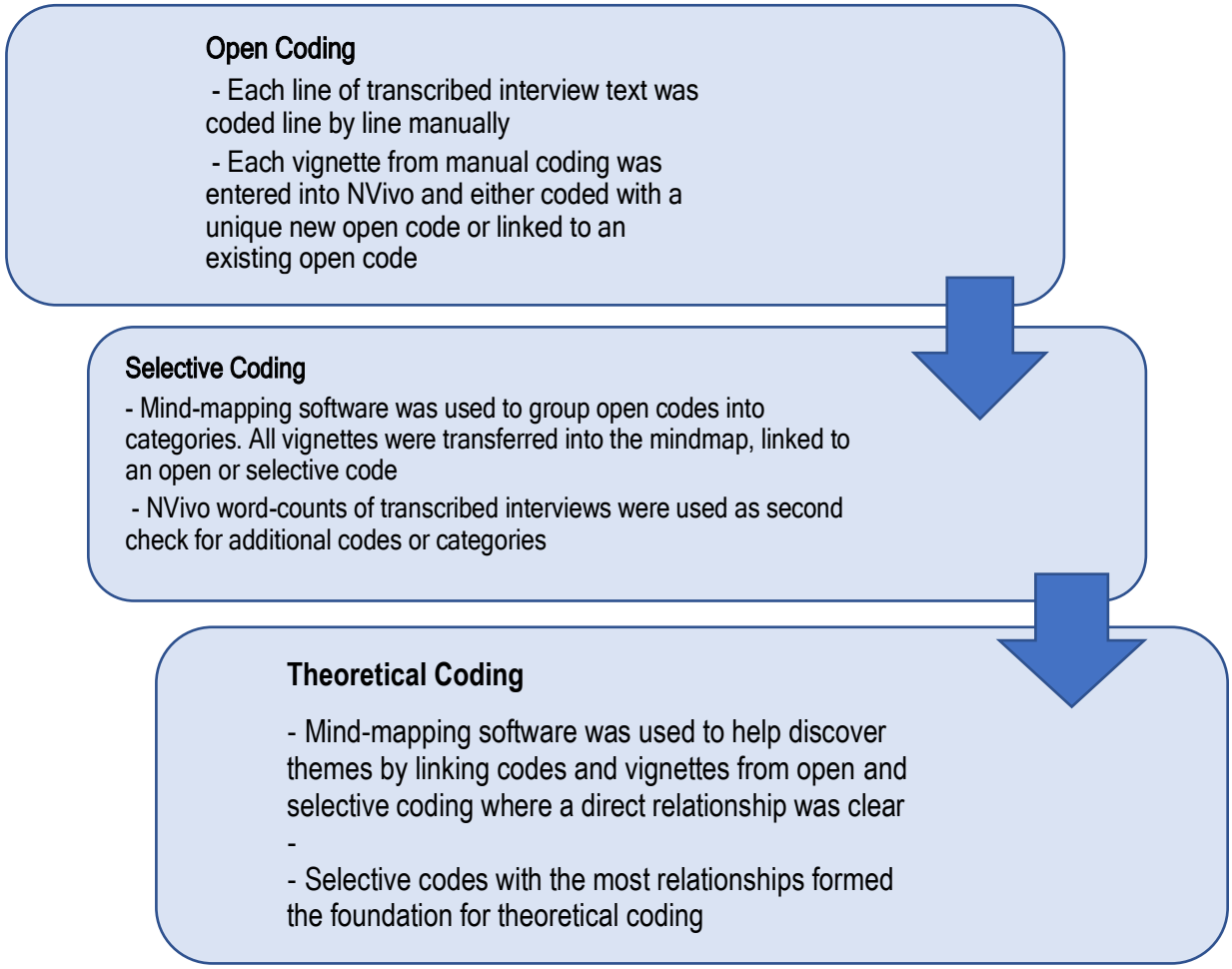
potentially relevant to the research questions (Braun & Clarke 2013). Themes provide a framework for organizing and reporting the researcher's analytic observations by assigning a word or phrase (a concept) that best represents the relevant information (Bazeley & Jackson 2014). This study explores the themes, individually and their inter-relativity, relevant to understanding Malaysian undergraduates' current workplace readiness and the concept of introducing WIL in the curriculum to enhance their employability skills. Additionally, the emphasis on using thematic analysis is to produce rigorous and high-quality analysis using a two-stage review process where themes are reviewed against coded data and the entire data set (Braun & Clarke 2013).

To ensure a collection of diverse perspectives surrounding the discussion of introducing WIL components in undergraduate curricula, the participants were purposefully selected as outlined in ***Table 4.2***. Both the Cotton and Kolb models' definitions, were used to first, construct the semi-structured interviews and focus group questions and second, to guide the social constructivist lens during the data analysis process. The data analysis is presented in the next chapter by themes, followed by stakeholder groups so that clear comparisons can be made between individual responses and across stakeholder groups. Significantly, at the end of each group of themes (clustered according to research questions), a synthesis of the stakeholders' responses is provided.

As advocated by Saldana (2011, 2014), three levels of thematic analysis were executed in this study[6]: (a) open coding, (b) selective coding, and (c) theoretical coding (***Figure 4.6***). At each level of analysis, a constant comparison was used to distil the data further, until themes emerged from the data. In support of Saldana, Campbell et al. (2019) emphasise that multiple coding levels are necessary to authentically capture meaning in complex data instruments such as semi-structured interviews and focus group sessions, both of which were used in this research. The length of the data analysis chapter in qualitative analysis is usually between 25-50 pages, using patterns and themes to present findings where the data is the 'star' of the show as the researcher summarises the themes/sub-themes and adds counts/percentages in a narrative format (Creswell 2014). Likewise, this research uses verbatim quotes from the individuals, as well as tables and graphics to present thematic data which is used to emphasize the resultant findings (Adu 2019), which is discussed in the next section.

[6] The 3 levels of thematic analysis were personally conducted by the researcher using computer-aided qualitative data analysis software (CAQDAS), NVivo 12 ®, and described in Figure 4.7

Figure 4.6[7] - Data Analysis Process (Saldana 2014)



4.7.1 Analysing the characteristics of each theme

This research uses NVivo 12 ® for categorising the themes and findings of this research. NVivo 12 ® is a Computer Assisted Qualitative Data Analysis System (CAQDAS) used by researchers to aid in the coding of data (Bazeley & Jackson 2014). A CAQDAS offers the researcher the possibility of a more efficient way of storing, coding and managing data. Coding data means gathering all the references to a specific theme or topic and storing them as a node in a thematic analysis of recurring themes, topics and keywords (Daw 2012; Hilal & Alabri 2013). The most significant benefit of using a CAQDAS like NVivo 12 ® is that whilst it is a

[7] *The details of the 3 levels of coding described in Figure 4.7 is presented in a 136-page detailed thematic coding summary by stakeholder groups (analysed using NVivo 12 ® CAQDAS) which is available as a supplementary document.*

lengthy process that took the researcher more than 6 months to familiarise with and complete the analysis, nevertheless, it is robust and allows for accurate coding of data and the generation of specific nodes in the thematic analysis (Hilal & Alabri 2013).

The focus of thematic data analysis is the exploration of the levels of understanding within each of the stakeholder groups and the relationship between them, with a focus on similarities and differences (Saldana 2014; Saldaña & Omasta 2016). The stakeholder groups were explored in turn and data was purposefully gathered independently using a pre-determined list of questions to guide the focus group discussions and individual interviews. Pre-determined questions were used to consciously minimise or eliminate the possibility of being influenced or biased by earlier comments from participants in different stakeholder groups during each step of the data collection process. Badenhorst (2019) posits that some dissertations present data in different chapters to differentiate policy analysis (document review) against focus group and interview analysis. Accordingly, in this research, the examination of 3 policy documents and 3 employability review documents in Chapter Three was an integral step prior to the focus group and interview sessions. The findings are consolidated and presented in the next chapter.

Upon completing the coding process[8], the themes that emerged were assessed based on their meaning (what does each code mean), frequency (how many chunks of relevant information are assigned to this code), generality (how many participants' responses are connected to this code) and very importantly, what each theme represents (***Table 4.7***) relative to the research questions (Adu 2019). As emphasised by both Adu (2019) and Saldana (2011, 2014), researchers need to engage in a structured and systematic process when conducting qualitative coding to maintain consistency in the analysis, promote repeatability of the qualitative coding steps and essentially, ensure believability of the qualitative findings, which was attentively observed.

Table 4.7 - The Codebook - 24 Transcripts and 57 participants

Summary of Thematic Analysis

Name	Description	Files	References
Anticipated Obstacles and Challenges		23	156
Attitudes and Perceptions		24	440

[8] *Both the coding and analysis processes were carried out by the researcher, using computer-aided qualitative data analysis software (CAQDAS), NVivo 12 ®, similar to the document review process in Chapter 3*

Name	Description	Files	References
Experiences and Sentiments		24	420
Learning Outcomes LO		0	0
Expected Learning Outcomes		24	191
Unexpected Learning Outcomes		23	204
Policy	Ministry of Higher Education (MOHE)/Government	0	0
Policy - Empowerment		19	86
Policy - Hindrance		5	14
Proposed Interventions		24	239
Role of Stakeholders		0	0
Academics	Group 2	22	113
Employers	Group 3	21	282
Heads of Program	Group 2	24	213
Students and Fresh Graduates	Group 1	24	409
TOTAL			**2,767**

The frequency of references or mentions of each theme and sub-theme across the transcripts reflects the focus areas of stakeholders during the discussions. Some mentions are however not classified or minimal, not due to a lack of focus, but instead, due to a lack of awareness or knowledge of the particular theme.

As discussed in Chapter Two, WIL programs "integrate theory with the practice of work" (Patrick et al. 2008 p.9); thus, this study used a combination of Cotton (2001)'s Employability Skills model together with Kolb (1984)'s Experiential Learning Theory to guide the constructivist lens during the data analysis process. This enabled the integration of both the acquisition of employability skills as a learning outcome followed by the reflective action derived from practical experience and collaboration to ensure a holistic education outcome (Kolb & Kolb 2005). This research used Cotton's model to analyse and identify the impact of

the three categories of skills on the work readiness of graduates in a Malaysian context. In addition, the strength of Cotton's (2001) model is the enlisting of all the generic competencies required by employers in their employment assessment and is not industry-specific; instead, the focus is on skills expected of entry-level graduates rather than a focus on technical knowledge and skills (Nirmala & Kumar 2018). Communication skills both spoken and written (basic skills), remain one of the challenges faced by Malaysian undergraduates due to English being a second language coupled with their preference to converse in their first language (TalentCorp Malaysia 2017). Employers' feedback during networking sessions initiated by the MoHE between ministry officials, universities and employers has constantly highlighted professional communication skills as sadly lacking which is central to the smooth operations of all work environments (TalentCorp Malaysia 2017).

I combined Cotton's Employability Skills model ***(Figure 4.8 (A))*** with Kolb's experiential learning theory ***(Figure 4.8 (B))*** to ensure that its limitation in evaluating the importance of the HOT skills through experience, collaboration and reflection is overcome; where data is analyzed holistically to determine whether the acquisition of HOT skills in the curriculum will result in a positive employability experience. Experiential education is a philosophy where educators engage with learners in direct experience and focused reflection to increase knowledge, clarify values and develop skills and learners' capacity to contribute to their communities (Kolb & Kolb 2005, 2009). Cotton's model was used together with Kolb's theory in ***Figure 4.8 (C)*** to craft both the focus group and interview questions used in the data collection**,** which was analysed to address both research questions.

Figure 4.8 (A) Cotton's Employability Skills Model (Source: Nirmala & Kumar 2018)

BASIC SKILLS	HIGHER-ORDER THINKING SKILLS	AFFECTIVE SKILLS
Oral Communication (speaking, listening)	Problem Solving and Decision Making	Dependable, responsible, positive attitude towards work, conscientious, efficient
Reading (understanding and following instructions)	Strategic Thinking	Flexible, adaptable, motivated
Basic Numeracy	Creative Thinking	Interpersonal, cooperation, working in teams, self-confidence
Written Communication	Innovative Thinking	Self-management, honesty and integrity, ability to work without supervision

Figure 4.8 (B) Kolb's 4-Steps Experiential Learning Theory (Source: Kolb & Kolb 2005)

Stage 1	Active Experimentation
Stage 2	Concrete Experience
Stage 3	Reflective Observation
Stage 4	Abstract Conceptualisation

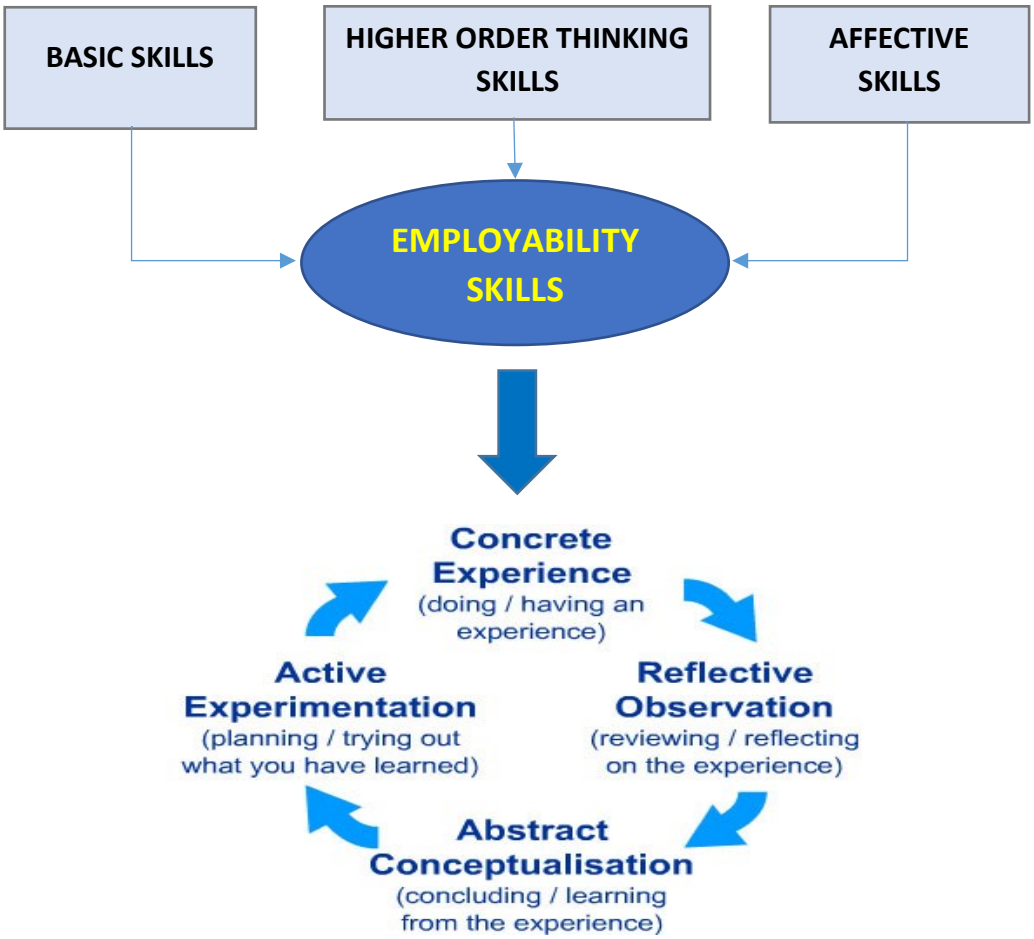


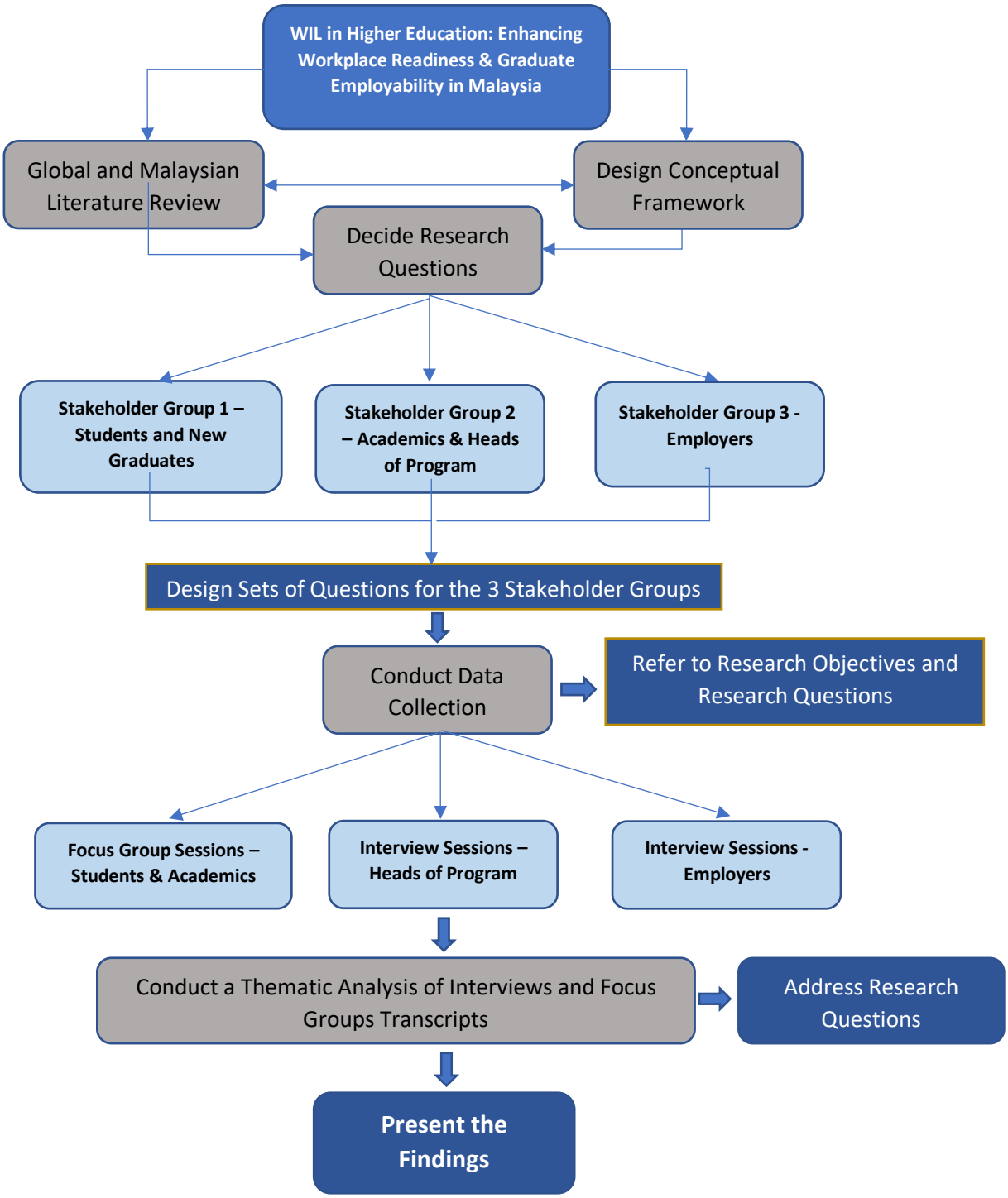
Fig 4.8 (C) A synthesis by the researcher of Cotton and Kolb's ideas

4.8 Chapter summary

This chapter focused on the methodology that was used in this research. A detailed explanation and justification of the use of qualitative research as a method for data collection was given, which has been outlined by the researcher in a Research Methodology Process

(***Figure 4.9)***. Measures followed during the data collection and ethical considerations were discussed and information about the sample selection and sample size was provided. Chapter 5 presents the findings of the research.

Figure 4.9 – The Research Methodology Process



Chapter 5

Data Analysis and Presentation of Findings

5.1 Introduction

This chapter analyses the data to understand i) stakeholders' experiences of current employability teaching and learning and ii) stakeholders' perceptions regarding the viability of WIL as a means of enhancing graduate employment outcomes. The policy considerations, intervention process and individual as well as collaborative roles of stakeholders, were also examined. The thematic analysis directly correlates to the research objectives and research questions of this study which are also deliberated on in this chapter.

As outlined in Chapter Four on the methodology of the data collection, a total of 24 focus group and interview sessions involving 57 participants were conducted with three purposive groups of stakeholders. This chapter presents the thematic findings of the 24 sessions, categorised by the different stakeholder groups. The focus group and interview questions were designed to inform a more rigorous discussion on what specific areas need to be addressed which included cultural considerations and students' learning preferences with reference to policy considerations. The findings from all three stakeholder groups individually and across each group, provide an understanding of the enablers and possible challenges to introducing a WIL framework that serves as a strategic curricular intervention to enhance undergraduates' work readiness in Malaysia.

The thematic clusters are explained before each analysis which uses direct quotations by individual participants in each stakeholder group. In social studies, verbatim quotes are research evidence used to enable participants to define the situation in their own words (Charmaz 2006). According to early researchers, Barter and Renold (1999) and Hughes (1998), direct quotes enabled researchers to elicit perceptions, opinions, beliefs and attitudes, used as important references in specified situations. Furthermore, they are used against the researcher's questions to "help preserve participants' meanings of their views and actions during the coding process" (Charmaz, 2006, p. 55) and are commonly used now by qualitative researchers like Jenkins et al. (2010), Hallet (2012), Kruikow (2021) and Rook (2015) in similar areas of study. Consequently, key extracts are imperative to preserve the context and authenticity of the participants' responses.

Subsequently, a comparative analysis is completed using methodological triangulation to elucidate relationships between the clusters (Denzin 1989, 1994; Fusch & Ness, 2015; Miles & Huberman 1994) as well as identify underlying concepts within and across stakeholder

groups. The findings are concurrently reviewed against the literature to analyse consistencies as well as inconsistencies in similar areas of study. Finally, the themes are summarised into categories that address the research questions which are then responded to in detail in the final chapter.

5.2 An overview of the themes and clusters

Seven themes and two sub-themes emerged after three stages of rigorous coding of the 24 transcripts[9], as advocated by Saldana (2014) and explained in Chapter Four. A detailed breakdown of each theme is provided next, to understand the rationale behind the categorisation of the seven themes and the related analysis. The seven themes are eventually classified into two broad clusters, discussed in **Section 5.2.2,** which correspond to the research objectives and research questions.

5.2.1 A detailed overview of each theme

Theme 1 – Anticipated obstacles and challenges

The theme of "Anticipated obstacles and challenges" captures comments made by the participants that referred to the potential difficulties and barriers that may occur during the implementation and adoption of WIL programs. Such obstacles are important because they can hinder the effectiveness of WIL initiatives and impact the overall employability outcomes for graduates (James et al. 2018; Patrick et al. 2014).

Participants comments related to this theme considered:

1. ***Industry-University Collaboration***: Participants recognised that establishing strong partnerships that align with the needs and expectations of both parties can be a complex task as different stakeholders may have different priorities, cultures, and ways of operating, which can create communication gaps and hinder the successful integration of WIL programs (Azman et al. 2018; BIHECC UK 2009; Stanley & Xu 2019; Tynjala et al. 2006; Venville et al. 2021).
2. ***Matching Students with Suitable Placements***: Some participants communicated an awareness that students may struggle to find relevant opportunities, while others may

[9] *The coding and thematic analysis processes were personally conducted by the researcher using computer-aided qualitative data analysis software (CAQDAS), NVivo 12 ®.*

face stiff competition for placements in popular industries (Ali, Gardner & Edmondson 2022).

3. ***Assessment and Evaluation***: Some participants' comments which related to obstacles and challenges noted that measuring the effectiveness of WIL initiatives can be difficult. It is also recognised in the broader literature that assessment criteria to evaluate the impact of WIL on graduate employability must be clear (Azman et al. 2018; Buchan et al. 2023; Larkin & Beatson 2014; Wardle 2014).

Theme 2 – Attitudes and Perceptions

A broad theme in participants' responses referred to "attitudes and perceptions" about WIL and its impact on graduate employability.

Further detail about this theme is provided below:

1. ***Students' Attitudes Toward WIL***: Comments from student participants expressed a variety of attitudes towards WIL, with some seeing WIL as an opportunity to gain practical skills, while others detailed concerns about participating in WIL because they were unclear about its benefits and whether it may conflict with their academic commitments (Khampirat, Pop & Bandaranaike 2019; O'Leary 2017; Stanley & Xu 2019; Tomlinson 2005, 2007).

2. ***Employer Perceptions of WIL Graduates***: Employers interviewed in this project recognised the value of the real-world experience and skills that WIL participants might bring into the workplace, but others had reservations about the effectiveness of WIL in preparing graduates for the workforce (Abas & Imam 2016; Ali, Gardner & Edmondson 2022; Hanna et al. 2015; Jackson et al. 2017).

3. ***Educators' Views on WIL Integration***: Educators expressed attitudes regarding the benefits of WIL but also the capacity of WIL programs to be aligned with academic curricula in order to contribute to graduate employability (Bester 2014; Jackson 2014; McManus & Rook 2021).

Theme 3 - Experiences and sentiments

The theme of "experiences and sentiments" refers to participants' comments describing their experiences of and feelings about being involved in WIL programs. Understanding their experiences and sentiments can provide valuable insights into the impact of WIL on employability outcomes and shed light on the overall effectiveness of these programs.

Topics addressed by participants in relation to this theme are discussed below:

1. ***Student Experiences with WIL***: Exploring students' experiences during their WIL placements is crucial, which includes interactions with fellow students and supervisors, the nature of the tasks assigned, the challenges faced, and the skills acquired. Understanding how WIL influences their professional growth and career aspirations can help assess WIL's impact on their employability outcomes. (Jackson 2017; Jackson & Meek 2021; Winborg & Hägg 2022)

2. ***Employer and Industry Mentor Perspectives***: Employers can share their impressions of WIL participants' performance, the value they bring to the workplace, and how WIL influences their hiring decisions. Learning about the benefits and challenges of hosting WIL students can inform the design of a more mutually beneficial partnership (Jackson 2014; Rook 2015; McManus & Rook 2021).

3. ***Educator Facilitation of WIL***: Understanding the experiences of educators or academics who facilitate WIL programs can offer insights into the planning and coordination aspects of these initiatives. Educators can share their observations of students' development during the WIL experience and how it aligns with academic learning objectives, which is crucial for future progress of WIL initiatives (Jackson 2014, 2017).

Theme 4 - Expected and Unexpected learning outcomes

The theme of "expected and unexpected learning outcomes" refers to participants' comments regarding both the anticipated as well as unforeseen knowledge, skills, and experiences gained by students during their participation in WIL programs. This theme also centres on participants' discussion of the additional benefits that can emerge from the integration of real-world work experiences with academic learning.

Sub-themes related to this broader theme are detailed below:

Expected Learning Outcomes: These are the defined learning objectives that academics and program directors anticipate students will achieve through their participation in WIL. For example, expected outcomes may include the application of theoretical knowledge to practical situations, which can assist in the development of industry-specific skills, problem-solving abilities, communication, teamwork and learning agility (Amadio, Opertti & Tedesco 2015).

1. ***Application of Theoretical Concepts***: WIL allows students to apply the concepts they have learned in the classroom to real-world situations to gain practical experience. Through these experiences, students can verify the relevance and practicality of their academic knowledge (Amadio, Opertti & Tedesco 2015, Anjum 2020).

2. ***Skills Development***: WIL programs enhance specific technical as well as soft skills that are in demand in the job market which may include technical skills related to a particular field of study, as well as interpersonal skills like time management, leadership and professional communication (Sharma 2021).

3. ***Industry Exposure and Networking opportunities***: Participating in WIL allows students to gain exposure and build professional networks in the industry they are interested in. This exposure can lead to potential references, job opportunities and a deeper understanding of career pathways (Jorre de St Jorre & Oliver 2018).

Unexpected Learning Outcomes: These are the unanticipated or unexpected experiences that go beyond the defined or anticipated learning objectives. Students may encounter challenges or opportunities during their WIL journey, leading to unexpected professional and personal growth (Amadio, Opertti & Tedesco 2015).

1. ***Enhanced Problem-Solving Abilities***: Dealing with real-world scenarios during WIL can present students with complex challenges they may not have encountered in a purely academic setting. Overcoming such challenges can improve their problem-solving and critical-thinking abilities (Khampirat, Pop & Bandaranaike 2019).

2. ***Adaptability and Resilience***: Unexpected situations can foster agility, adaptability and resilience in students as they learn to navigate new challenges, uncertainty and ambiguity in the workplace (Nguyen 2022).

3. ***Improved Self-Confidence***: Successfully completing WIL at the workplace and receiving positive feedback from employers can boost students' self-confidence and belief in their abilities and the benefits of WIL (Khampirat, Pop & Bandaranaike 2019; Nguyen 2022).

4. ***Understanding Organizational Culture***: Participation in a professional work environment allows students to understand the culture and dynamics of organizations, making them work-ready and preparing them for future assimilation in the workplace (Campbell et al. 2021).

Theme 5 - Policy empowerment and policy hindrance

Participants' comments that are captured here within the theme of "policy empowerment and policy hindrances" refer to the factors that either support or impede the effective implementation and success of WIL programs at the policy level. In particular, data related to this theme references the role of policies, guidelines, and regulations set by universities/educational institutions, government bodies/policymakers, and other stakeholders

in influencing the integration and impact of WIL on graduate employability (Chatterton & Goddard 2000; OECD 2020).

Participants' comments related to this theme referred to points detailed below:

Policy Empowerment: Policy empowerment may include clear directives from education ministries, funding allocations, and formal recognition of WIL as a valuable component of higher education (Campbell et al. 2021; Higdon 2016).

1. ***Government Support and Initiatives***: Policies established by governments and education authorities can significantly influence the prevalence and quality of WIL programs which can be demonstrated through funding schemes, grants, and partnerships with industries to create more opportunities for students to engage in WIL (Smith et al. 2018).
2. ***Universities Commitment***: Universities and colleges may have policies that encourage faculty engagement, create administrative support structures, and provide incentives for active participation in WIL initiatives (Melynk & Yablokov 2023).
3. ***Integration into Curriculum***: Examining how WIL is integrated into the formal curriculum reveals the extent to which policies empower educators to incorporate real-world experiences seamlessly into academic programs. Acknowledging WIL experiences in official academic transcripts can further empower students in their career pursuits (Birds 2020; Campbell et al. 2021).

Policy Hindrances: On the other hand, this aspect explores policies that may hinder the successful implementation and impact of WIL programs.

1. ***Regulatory Barriers***: Certain regulations and requirements might create obstacles for universities and industries seeking to establish WIL partnerships or programs (Campbell et al. 2021; Higdon 2016).
2. ***Funding Limitations***: Insufficient funding for WIL initiatives can restrict the scope and reach of such programs, limiting the number of students who can benefit from them (Brown et al. 2019; OECD 2020).
3. ***Assessment and Accreditation Challenges***: Policies related to the assessment and accreditation of WIL experiences might not align with the dynamic and diverse nature of real-world work settings, making it difficult to evaluate the learning outcomes effectively (Brown et al. 2019; Campbell et al. 2021).

Theme 6 – Proposed Curriculum Interventions

The theme of "proposed curriculum interventions" captures participants' references to the potential changes and enhancements suggested for the academic curriculum to better integrate WIL experiences and improve the overall employability of graduates.

Further elucidation of this theme is provided below:

1. ***Curriculum Redesign*:** This aspect explores proposals for redesigning the existing academic curriculum to incorporate WIL opportunities more effectively. Researchers may investigate the feasibility of integrating internships, cooperative education, or industry projects into the curriculum (Brent, Sanger & John 2017; Ferns, Campbell & Zegwaard 2014).

2. ***Identifying Learning Gaps*:** Qualitative research can identify areas where students may have learning gaps or lack certain practical skills that are essential for employability. Based on these findings, curriculum interventions can be proposed to address these gaps through WIL experiences (Hewitt, Owens & Stewart 2018; Jackson & Chapman 2012).

3. ***Alignment with Industry Needs*:** Researchers may suggest curriculum interventions that align academic programs with the current needs and demands of industries. This involves collaborating with employers and industry experts to identify the skills and competencies that graduates must possess for successful employment (Brent, Sanger & John 2017; Ferns, Campbell & Zegwaard 2014).

4. ***Enhancing Faculty Engagement*:** Curriculum interventions could involve strategies to encourage and support faculty members in integrating WIL into their courses. Faculty development workshops and resources might be proposed to enhance their ability to facilitate WIL experiences effectively (Brent, Sanger & John 2017; Ferns, Campbell & Zegwaard 2014).

5. ***Emphasizing Soft Skills Development*:** The research may highlight the importance of soft skills in employability and propose interventions that emphasize the development of communication, teamwork, leadership, and problem-solving skills through WIL (Khalid et al 2014; Nirmala & Kumar 2018).

6. ***Inclusivity and Diversity*:** Curriculum interventions should consider issues of inclusivity and diversity, ensuring that WIL opportunities are accessible and supportive for all students, regardless of their backgrounds or circumstances (Brent, Sanger & John 2017; Ferns, Campbell & Zegwaard 2014).

Theme 7 - Role of Stakeholders

The theme of "the role of stakeholders" refers to participants' comments regarding the involvement, perspectives, and contributions of various key actors in the successful implementation and impact of WIL programs. These stakeholders include students, program heads or program directors, academics, employers/industry, and the government/policymaker (Trede & Wehr 2021; Wardle 2014). The government as the policymaker, plays the role of a key driver and decision maker and the students, program directors, academics and employers play the role of active collaborators.

Sub-themes noted in participants' comments regarding this are considered below:

1. ***Students*:** Students are at the centre of the WIL experience. The research may explore students' motivations for participating in WIL, their expectations, and their perceptions of the value of WIL in enhancing their employability. Understanding students' perspectives can reveal how WIL influences their career choices, skill development, and overall readiness for the job market (Jackson 2014; Rook & Sloan 2021).

2. ***Academics and Program Heads*:** Program heads play a critical role in designing, implementing, and overseeing WIL initiatives. Their insights can provide information about the challenges they face in facilitating WIL opportunities for students, the strategies they use to engage employers, and their efforts to align WIL experiences with academic learning goals (Nombeko Felicity 2017; Vargas et al. 2019).

3. ***Employers*:** Employers are essential stakeholders in WIL programs as they provide real-world work experiences for students. Qualitative research can explore employers' motivations for participating in WIL, their expectations of student interns, and their perspectives on the benefits of hosting WIL participants (Clarke 2018). Understanding employers' feedback on students' performance and the relevance of WIL experiences can inform improvements in program design (Dwesini 2017).

4. ***Government/Policymaker*:** The government's role in promoting and supporting WIL initiatives is crucial. Researchers may investigate government policies and funding schemes that encourage WIL, as well as government-industry partnerships to create more WIL opportunities (Campbell et al. 2021; Higdon 2016). Government stakeholders can provide insights into the policy landscape and how it affects the integration of WIL into the educational system (Universities Australia 2018, 2019).

5. ***Collaboration and Communication*:** Understanding the dynamics of collaboration among these stakeholders is essential. How do program heads coordinate with employers to create meaningful WIL experiences? (Trede & Wehr 2021; Venville et al.

2021). What communication channels exist between higher education institutions and the government, as the key driver, to facilitate policy support for WIL? (Jackson & Bridgstock 2019). Exploring these interactions can reveal areas for improvement and effective practices.

6. ***Feedback and Continuous Improvement*:** Feedback loops between students, program heads, employers, and the government can drive continuous improvement in different stages to ensure that WIL experiences remain relevant and valuable (Trede & Wehr 2021).

The seven themes were eventually categorised into two broad clusters, as discussed below, which correspond to the research objectives and research questions.

The first cluster relates to Themes 1-3 and Theme 4.

Themes 1-3 and Theme 4 are imperative considerations that address this research's first objective and directly address the first research questions, as follows:

Research objective 1) *To survey existing curricular strategies used to promote employability in the Malaysian higher education sector.*

RQ1 *What curricular strategies have been used in Malaysian higher education institutions to promote graduate employability?*

RQ1 (a) *What evidence is there to support the use of the different employability-focused curricular strategies currently used in Malaysia?*

Themes 1-3 and Theme 4 collectively discuss stakeholders' experiences and perceptions of the existing curriculum and the expected learning outcomes. Challenges of the curriculum's focus areas and learning components to develop students' readiness for employment are also discussed in this cluster.

The second cluster relates to Themes 5-7.

Theme 5 focused on the present higher education policies that are deemed critical enablers or possible hindrances to introducing any form of curricular intervention strategy. Theme 5 enabled the researcher to conduct a methodological triangulation and authenticate the

findings (Denzin & Lincoln 2001; Guba & Lincoln 1994) from the policy documents' review as deliberated in Chapter Three.

Theme 6 investigated the concept of introducing WIL in the undergraduates' curriculum and their anticipated learning outcomes. The concept of WIL in the curriculum either as a final year component or as a scaffolded intervention strategy was deliberated to engage their views and possible concerns.

Theme 7 encapsulates Themes 1-6, with a focus on the critical roles of the stakeholders in this research, which are the students/newly employed graduates, the academics/Heads of Program and the employers.

Themes 5–7 collectively answer the second research objective and its corresponding research questions as follows:

Research Objective 2) *To evaluate the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates.*

RQ2 *What is the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates?*

RQ2 (a) *What conditions need to be met if WIL is to be implemented successfully within a curriculum? and*

RQ2 (b) *Are these conditions met or can they be met within the Malaysian higher education system?*

5.3 Participants' evaluation of the current curriculum (Themes 1-3) and its expected learning outcomes relating to readiness for employment (Theme 4)

As outlined in the introduction, the first consideration involves a general exploration of attitudes and perceptions as well as personal experiences relating to the present curriculum design and its preparation for developing workplace competencies. A clustered thematic analysis for Themes 1-3 was used as a 'value coding' (Saldana 2014; Saldana & Omasta 2016) as these questions collectively explore values, belief systems, and interpersonal and intrapersonal experiences which influence and "affect between and among each theme" (Saldana 2014 p.32).

Theme 4 addressed the curriculum learning outcomes to likewise, understand participants' views on the existing curriculum's focus areas, whether solely on technical competencies or whether there are elements of non-technical components that relate to work-ready competencies.

The stakeholder groups are thematically analysed next.

5.3.1 Themes 1-3 – Responses from students and new graduates

These themes explore the students' and new graduates' responses to the curriculum and how effectively its learning outcomes serve students' readiness for employment prior to graduation. Themes 1-3 engaged the respondents on their individual experiences and their suitability in preparing them for the workplace. Their perceptions of its relevance towards developing work-ready skills or its lack thereof were discussed to understand the prevailing education system and their experiences and challenges in meeting employer expectations.

The following questions were discussed with students and new graduates during the 5 focus group sessions:

Q1) *Preparing undergraduates with work-ready skills in the course of their studies are often discussed during career fairs and open day sessions between parents, students and academics.*

As a new graduate or soon-to-be graduate, how prepared do you feel now for entering a professional job?

Q2) *Can you identify any experiences in your studies that have been focused on helping you prepare for professional work?*

The representative responses (21 students and new graduates) are:

"…. because the course that I took is purely exam based, so it doesn't allow us to work as a team doesn't allow us to prepare for presentations to prepare slides and all that which will require it. Which will be required in the working world…." ***Speaker 2 (00:06:40)***

"…communicating with clients on a face-to-face basis during my work placement experience, which I feel that I'm not being exposed to it while I'm while I was studying because it's purely just study book based and everything…" ***Speaker 4 (00:20:51)***

"…curriculum perspective, I think they should include, um, probably one of the curriculum subjects could cover specifically soft skills that are needed in the workplace today…., most of these skills are not covered in the syllabus currently" ***Speaker 5 (00:15:51)***

The above comments reflect the sentiments of students towards the current higher education curriculum and their anticipated challenges prior to joining the workforce. ***Speaker 4 (00:20:51)*** also shares his/her challenge of communicating clearly with clients during his/her summer training. This challenge is similarly highlighted by employers (***Section 5.3***) as one of the main areas of improvement needed for new graduates. The importance of developing teamwork skills and other soft skills is likewise recognised as important.

Comments were likewise obtained from new graduates (less than 1 year of work experience) who were purposefully included in the focus group sessions to enable a holistic outcome between anticipation and actual experiences, as follows:

"...when I first entered my job right? I was like a little bit lost. because in real life I didn't know how to search for the things.... like in studies it's a very study-based course so we do a lot of paper-based examination. We don't have a lot of assignment base" ***Speaker 3 (00:13:09)***

"When I graduate, I was struggling a lot, ... as for employer point of view, they wouldn't base on your examination results. But rather what kind of jobs you did before and things like that" ***Speaker 4 (00:18:18)***

"Our course of study should develop this working really skills so that we can really be prepared for the working parts.... we should be able to learn them before we actually go into the workforce.... our course of study should integrate these skills, so that we would in a sense struggle less when we actually start working" ***Speaker 2 (00:43:36)***

New graduates shared their struggles adapting to the work environment as their undergraduate studies' learning outcomes were focused on technical knowledge. All 3 respondents emphasise incorporating work-related assessments in the curricula. ***Speaker 4 (00:18:18)*** made an interesting comment about employer expectations of new graduates versus the emphasis on academic results. This comment supports studies that Malaysian graduates lack work-ready competencies but are often highly competent in technical areas related to their degree or the subject-specific knowledge required for their vocation (Azmi, Hashim & Yusoff 2018; Fahimirad et al. 2019; Nair & Fahimirad 2019; Suppramaniam, Siew & Ainara 2019; Tahir et al (2018).

For emphasis, keywords that emerged during the discussion are presented as a word frequency cloud in ***Figure 5.1.*** A word cloud, also called a tag cloud, is a graphical representation of text data that gives greater prominence to words that appear more frequently in a source text (Tessem et al. 2015). Words like "think", "skills", "question" and "experience" showcase the main concerns of students and new graduates about acquiring employability skills through integrating work-ready competencies into the curriculum. The subject of skills

acquisition and gaining work experience is reviewed in ***Section 5.3.3.*** The frequency table with the number of words and paragraphs coded for each theme is outlined in a 38-page Thematic Analysis of Transcripts by Stakeholder groups[10]**,** to emphasise which words and themes appear to be the focus of different stakeholder groups in relation to their roles and experiences**.**

Figure 5.1 – Word Frequency Cloud for SG1 (students and new graduates) – Themes 1-3 Analysis

5.3.2 Themes 1-3 – Responses from academics and Heads of Program

The following questions were explored with both 19 academics and six Heads of Program:

(Q1) *Preparing undergraduates with work-ready skills in the course of their studies is often discussed during career fairs and open day sessions between parents, students and academics or Program Heads.*

Reflecting on the present curriculum, could you share what skills you believe your students will develop at the end of their undergraduate program?

(Q2) *Which skills or attributes would you describe are important for students to acquire prior to graduation and how can those skills be best developed?*

The academics were gathered in focus groups separate from the Heads of Program's interview sessions to enable an uninhibited sharing of perceptions, opinions and sentiments. Grouping the academics in focus group sessions also encouraged active discussions among peers while answering the researcher's questions which led to further insights and reflection (Liamputtong 2015; Morgan 2002; Rook 2015; Stewart, Shamdasani & Rook 2007). This

[10] *The 38-page detailed thematic analysis of transcripts by stakeholder groups (using NVivo 12 ®, CAQDAS) is available as a supplementary document.*

approach resulted in two focus group sessions ending after more than 60 minutes instead of the scheduled 45 minutes per session due to the lively discussions among the participants.

Representative responses are:

".. the most important is problem-solving skills and critical thinking skills… published as the top skills that employers are looking for in the market and those students with critical thinking and problem-solving skills are able to deal with the problem or issue at hand more efficiently" ***Speaker 2 (00:05:22)***

"...leadership skill and teamwork. Because in the outside world they need to work as a team, so how can they work? They got to do a very exciting presentation like marketing, so you know, they need to. have teamwork. And they need to have leadership skills as that is also important" ***Speaker 4 (00:19:11)***

".. people skills, because I work in in the commercial sector before and getting along with people, is one of the most difficult things…. you will need to inculcate an attitude that you can draw out the other person to work cooperatively with you… because when you go out to the world to work. You cannot choose who you work with" ***Speaker 2 (00:19:30)***

The above responses reflect the sentiments of academics towards the current curriculum and their anticipated challenges to students' work readiness. Extracts highlight their experiences when managing students from year 1 to year 3 and their perceptions of students' preparedness to enter the 'world of work'. Academics acknowledge that undergraduate curricula need to integrate the development of skills like problem-solving, critical thinking, leadership, and teamwork (Cotton 2001). ***Speaker 2 (00:19:30)*** also reflects on his/her previous experience as an employer and the importance of interpersonal skills to assimilate into the workspace.

The same questions were put forward to the Heads of Program in individual semi-structured interview sessions to obtain their perspectives as well as to enable comparative analysis, and some of the comments are:

"…to have the interpersonal skills and how to work in an intercultural organisation..to be able to work in different settings…to behave in an organization set up…to carry themselves, know how to behave with their colleagues with their peers in a new set up" ***Speaker 2 (00:02:46)***

"…. number one is flexibility….certain company has certain way of doing things.. to be flexible and adapt into that particular environment… students often lack self-motivation… education environment is slightly different but once you're in working environment that self-motivation can be so different…need to have initiative. They like to be told what to do" ***Speaker 2 (00:19:11)***

" we have a unit where the students will develop some soft skills…an opportunity to think out of the box and to improve themselves….however, our present structure is still in the development stage and it is

*also up to the lecturers on how they wish to manage their classes…but English is a big challenge and not at the expected level, so you find that they are not able to articulate..” **Speaker 2 (00:03:49)***

Significant quotations by the Heads showcase their perceptions and experiences in managing both academics and students while handling the program's curriculum and expected deliverables. Heads of Program appear to concur with the comments from the academics in their emphasis on the importance of soft skills before graduation. ***Speaker 2 (00:03:49)*** added an interesting comment about students' communication challenges which is similar to the students' personal reflections above. As deliberated in Chapter Three, new graduates' challenges with communications skills have been highlighted by numerous Malaysian scholars over more than a decade (Azmi et al. 2018; Fahimirad et al. 2019; Gurvinder & Sharan 2008; Nair & Fahimirad 2019; Suppramaniam, Siew & Ainara 2019; Tahir et al. 2018; Wye & Lim 2009) as one of the significant shortcomings expressed by employers.

A comment by ***Speaker 2 (00:03:49)*** is an example of a fragmented or unstructured effort initiated by several Malaysian universities, discussed in Chapter 3.4**,** that is not holistic but instead, on a piecemeal basis to address concerns on graduate work readiness.

5.3.3 Themes 1-3 – Responses by employers

The following questions investigate employers' attitudes and perceptions towards new graduates and their work-ready competencies at an entry-level. Their experiences supervising new graduates and why these skills are important were reviewed.

(Q1) *Preparing undergraduates with work-ready skills in the course of their studies is often discussed during career fairs and open-day sessions between parents, students and academics.*

As an employer, discuss your views of which work-ready skills are important for undergraduates to acquire prior to graduation and how can those skills be best developed?

(Q2) *As an employer, discuss what are the desired capabilities* for an undergraduate as a future employee in your organization.*

Representative responses across 11 interviews are:

*“.an important area is EQ... emotional intelligence is seldom students' focus because most programs emphasize good grades…will the student know how to mingle with the seniors in the working environment? ..need to emphasize on knowledge but a greater focus is needed on the practical aspects… fresh graduates, although they are smart, they lack EQ and face problems…also their ability to present and articulate and attract the attention of the audience**…” Speaker 2 (00:05:16)***

"..one of the important things we look for is their mindset related to their attitude… mindset plays a very important role. If they have a resilient mindset and a lot of grit, they can look at challenges as a positive thing…..which is hard to find in our new graduates….having a graduate that is positive and to look at challenges as an opportunity to learn is probably the main skill that I would look for if I were to hire a new graduate" ***Speaker 2 (00:10:13)***

"…communication skill. I think this is very crucial because they're actually moving from education environment to a corporate setting, so there's more in terms of communication which I think is very crucial….to conduct themselves or interact effectively within the work setting, their peers, their line manager or their superior. This is a challenge for most graduates that I hire and supervise" ***Speaker 2 (00:05:50)***

The above comments reflect the views of employers towards both undergraduates and new graduates and their personal experiences supervising them at the workplace. Extracts of the interview transcripts highlight varied challenges and their perceptions of the higher education curricula's focus (or its limitations) on developing graduates with work-ready competencies. Apart from the emphasis on work-skills development which is alike the comments from academics and Heads of Program, there were also a few thoughtful insights from ***Speaker 2 (00:05:16) and Speaker 2 (00:10:13)*** on graduate attributes like emotional intelligence, mindset and attitude. These attributes are included in Cotton's (2001) learning theory as affective skills (Chapter Three) which relates to the humanistic learning theory by early researchers like Maslow and Rogers (1979) which is a whole-person approach to education that centres on the individual learners and their needs, and that considers affective as well as cognitive aspects of learning.

The employers' perceptions correspond with the new graduate ***Speaker 2 (00:43:36)'s*** comments in ***Section 5.3.1*** on the challenges faced when he/she entered the workforce.

5.3.4 Theme 4 – Responses from students and new graduates

A comprehensive analysis would involve an investigation into the implications of introducing work-ready skills development in the curriculum, which includes expected as well as possible unexpected learning outcomes. To ensure an accurate understanding across all participants of what professional development or work-ready skills development entails, a brief description was given and participants were invited to ask questions, if any.

The following questions were discussed:

(Q1) *Have you experienced any internships or work placements? If you have, could you share your internship or any form of work experience?*

Do you believe that this experience is useful to develop your soft skills or work-ready skills?

(Q2) *What skills have you learned in your studies that you think will help you succeed at work? In which subjects did you learn them?*

Do you feel that your undergraduate studies should help you develop work-ready skills or do you feel that you can develop these after you join the work force?

(Q3) *Do you believe that curricular interventions can improve the preparedness of undergraduates from the university to the workplace? What specific areas of preparedness do you believe that this intervention can address?*

Representative responses from the students are:

"I would like to have this internship or work placement to be in the course because as a student you can experience how the job is, and whether you like it or not. You can then decide whether you want this kind of job, so it's like giving you an idea before you graduate…" ***Speaker 3 (00:48:05)***

"I think helping students develop professional skills helps you to transition from learning to working because definitely there will be a gap, so it gives you a heads up in the working world. I think that it is very useful to help students to transition into what they're going to do in the future when they start working" ***Speaker 5 (00:43:44)***

These reflections portray students' insights towards the value of work placement as well as the concept of introducing work-ready curricular components as a precursor before work placement and graduation. Extracts from the transcripts display a clear understanding of participants' responses relating to the need for a curricular intervention that assists them to develop work-ready skills. As mentioned by ***Speaker 5 (00:43:44)***, developing professional skills is perceived as providing undergraduates with an opportunity to gain experience and understand the "working world" before graduation.

Likewise, the new graduates' comments are:

"I feel like I'm a bit better prepared to enter into the work because in my course, we were given the option to do a one semester internship. So, I tried it and applied whatever head knowledge that I had into my work. So that gave me a bit of working experience and the expectations of the working world…" ***Speaker 3 (00:34:32)***

"…I think it's very important to have professional development in curriculum and it should be implemented from the first year all the way to your final year. this gives students the chance to continue practicing and developing what they have learned…. rather than it being implemented in the final year

and giving them a very short period of time to learn and develop the skills before they enter into the workforce" ***Speaker 2 (00:48:54)***

"I think this intervention is actually very useful for fresh graduates who want to enter the workforce.. I myself have been working for five months now. At the beginning I was really suffering at work. I feel like if we had this focus, it will be easier to adapt to the workforce and I can have a better performance in a job" ***Speaker 3(00:48:05)***

The comments portray the actual value of work placement as well as the benefits of introducing work-ready skills development in the curriculum. The excerpts outline how integrating professional or work-ready learning components as a scaffolded intervention assists in developing work skills progressively in their undergraduate studies. ***Speaker 3 (00:48:05),*** as a new graduate, reveals his/her actual challenges faced at the workplace due to a lack of developing these skills during his undergraduate studies.

While the students' and new graduates' comments are positive towards the benefits of incorporating work-ready skills development in the curriculum, the analysis of qualitative data relating to the learning outcomes to be pursued through employability teaching indicates that the expected learning outcomes is lower than the unexpected learning outcomes. This is because this curricular intervention has not yet been experienced by both students and new graduates. Instead, the comments are based on anticipations and perceptions of positive learning outcomes of work-ready skills with the introduction of curricular changes.

5.3.5 Theme 4 – Responses from academics and Heads of Program

The following questions were examined with academics:

(Q1) *Is internship/work placement a compulsory or optional component of the undergraduate program?*

What is students' feedback to you on their work placement experience and how do you assess this feedback against the program's expected learning outcomes?

As an academic, do you observe any differences in the students that have undergone some form of work placement versus students who have no experience?

Also, as you assess this feedback against the program's expected learning outcomes, what are your views on a few students' comments that they end up with administrative functions that are not related to their studies?

(Q2) *Your expectations of what you believe students will develop if work-ready skills development is introduced in the undergraduate program as a scaffolded strategy to develop professional competencies.*

Should these skills development in curriculum be scaffolded over 3 years or focused only in the final year? What are the possible advantages/benefits or disadvantages of doing so?

The representative responses from the academics across 4 focus group sessions are:

"they gain indirect experience to develop soft skills on how to survive in the job market..students who volunteer to do internship, they will get extra values. Those who do not are left behind definitely, yeah, I think we need to do that, so that when students go out, they are ready for the industry which is what we want for our students" ***Speaker 5 (00:41:08)***

"Yes, we can encourage these components in our subjects. We do know every process has issues, right so in spite of that, we need a differentiated curriculum to engage with students and with the industry and so on. I think that is the best thing that we can do" ***Speaker 2 (00:48:44)***

"Yes, despite a few complaints from students on their internship experience, I can see the comparison between those students who regularly volunteer themselves to go for internship. It is easy for them because they have the skills such as they can communicate really well. They have confidence and they can even sell themselves when they go for interview" ***Speaker 7 (00:14:30)***

The comments on Learning Outcomes from academics were analysed collectively with representative responses from the Heads of Program, as follows:

"As Dean and Head of Program I believe they need to develop analytical skills so that it's easy for them to apply it in any area…now they can't even imagine that but if they have exposure in the working environment through internship, it's easier for them to get some idea from the experience. If they work while they study, their level of thinking is much better. They also communicate better" ***Speaker 2 (00:43:08)***

"Internship is not compulsory but an optional component, so it is not assessed if they choose to get an internship. But you can see the difference of these students compared to those who have no experience. So, I think the experience is very good because they know what the real world and that is why they're more mature in terms of dealing with issues" ***Speaker 2 (00:25:21)***

"One student opted for internship though it is not compulsory here. He took a gap year and worked before he continued with his study because he wanted experience. He realised it gave him an advantage and increased his employability prospects. I think professional development should be made compulsory for

undergraduate students. An internship as part of this intervention in second year will be good as they will understand the course better because they have 1 year knowledge" ***Speaker 2 (00:30:58)***

The comments indicate the experiences and viewpoints of academics and Heads of Program as they manage the curriculum and their students' learning outcomes. The value of an internship or work placement, even though optional in most programs in Malaysia and the concept of introducing work-ready skills development in the curriculum together with the practical work exposure were clearly explained in these sample responses. The positive feedback from both groups of participants, which is similar to the majority of students' and new graduates' responses on learning outcomes (***Section 5.3.4***) is displayed in the above quotations.

Both the academics' and Heads of Program's comments are positive towards the benefits of incorporating work-ready skills development in the curriculum. This is reflective of their roles as academics and program heads who are directly involved in curriculum development and learning objectives. As noted in the responses, though there is a slight difference in participants' opinions on which year of study this intervention should be introduced, nevertheless, the concept of developing work or professional skills was supported by both academics and Heads of Program. The detailed thematic analysis against coding references is reflected in a 136-page Detailed Thematic Coding Summary[11] by stakeholder groups.

As evidenced in substantial global literature in Chapter Three, the concept of developing work-ready skills, namely WIL in the curriculum resulted in developing positive learning outcomes, specifically graduate attributes and employability skills (Green, Hammer & Star 2009). Scholars had also reinforced the scaffolding of WIL as a learning mechanism which has shown improvements in skills development (Campbell et al. 2019; Dean et al. 2020, Larkin & Beatson 2014; Trede & Wehr 2021). The concept of introducing WIL as a curricular intervention is deliberated under *Theme 6*.

5.3.6 Theme 4 - Responses from employers

The following questions were put forward to obtain employers' views on the concept of introducing work-ready or professional development components (inclusive of internship) in the undergraduates' curriculum and their anticipated learning outcomes.

[11] *The 136-page detailed thematic coding summary by stakeholder groups (analysis using NVivo 12 ® CAQDAS) is available as a supplementary document.*

(Q1) *Internship or work placement is currently either a compulsory or optional component in many of the undergraduate programs in Malaysia.*

Based on your experience interacting with students during their internship/work placement, please share your views on its effectiveness in developing their work-ready skills.

Similarly, based on your interaction with them, what are the challenges faced by students in relation to workplace expectations during their internship/work placement?

(Q2) *Please share your expectations of what you believe students will develop if professional development or developing work-ready skills components are introduced in the undergraduate program;*

Do you feel that this intervention should be scaffolded over 3 years or focused only in the final year? What are the possible advantages or disadvantages of doing so?

The representative responses across 11 interviews are:

"for the internship to be effective and to meet the learning outcomes in the curriculum, the college should say what are the skills that the employer needs to focus on for the students to complete their internship versus the role that we already have…. Now, most companies just get interns to do the basic job…but we're looking at people who can come and leave new ideas which will benefit them and the organization" ***Speaker 2 (00:13:12)***

" internships are a must if you are studying to be employed or you plan to work for somebody. If you want to be an intrapreneur, internship is also a must…it's your first exposure to working with people from different backgrounds with different needs, but come together for one single purpose, which is having a profitable organization running" ***Speaker 2 (00:14:21)***

"to improve the preparedness of undergraduates, industry coaches should also be trained to have an academic perspective because industry perspectives are totally different. Our roles are different. So, when we say what specific areas of preparedness do you believe that professional development components can address, this is the preparation of industry coaches working with the university, which needs to be introduced right from the start of their studies" ***Speaker 2 (00:12:26)***

"The advantage of developing work-ready skills is that it helps to fine-tune students' mindset on the relevance of what they have studied. Because they are personally involved, that experience will be embedded in their minds for their entire lives..this benefit will bring them into how the industry works versus depending on what they have learned in a classroom setup. The reality is, itis important because the students will be able to build the bridge between theoretical knowledge and the practical implication" ***Speaker 2 (00:15:48)***

The above remarks outline some of the observations of employers who manage undergraduates during their internship as well as their experiences with new graduates in their

organisations. Overall, employers shared their views on positive learning outcomes when work-ready skills development is introduced in the curriculum and their relevance in bringing 'industry into the class environment'. However, as emphasised by ***Speaker 2 (00:13:12)*** *and* ***Speaker 2 (00:12:26),*** the collaborative roles of both universities as well as industry (employers) are key to the successful learning outcomes of such interventions, which will be analysed under *Theme 7.*

The analysis of qualitative data relating to the learning outcomes to be pursued through employability teaching, indicates that the 11 employers had reflected more on Unexpected Learning outcomes because of their limited understanding of the structure of existing higher education curriculum and the Expected Learning Outcomes. Instead, their comments highlight their positive perceptions of integrating work-ready skills development as a curricular strategy to enhance work readiness.

5.3.7 Interpreting the data - Themes 1-3 and Theme 4

The analysis of the coded references reflects the joint focus areas and collective views of the stakeholders on the present curriculum and its existing learning outcomes. Together, the qualitative analyses indicate the overall excitement and engagement of all three groups of stakeholders. The positive anticipation among the first group of participants at the focus group sessions was due to future expectations as students as well as personal experiences as new graduates in the workforce. The second group of academics and program heads, while expressing positive perceptions and sentiments in Themes 2 and 3, also expressed some apprehensions in Theme 1 about the anticipated challenges of making changes to the existing curriculum. They however, acknowledged that there is a need for students to develop work-ready competencies via curricular interventions which could enhance their employment outcomes, which would also reflect well on their program offerings. The third group of employers were fully engaged and anticipative about the positive effects of a curricular strategy that would focus on developing students' workplace readiness.

Yoke-Yean et al.'s (2021) study involving academics, students and industry, reveals challenges faced by academics in curriculum modifications in tandem with the needs of the employment sector due to various internal and external factors in Malaysia, inclusive of policy restrictions. The MoHE's policies and the issues of autonomy to universities were deliberated at length in Chapter 3.2 (Abdul Razak et al. 2011; Muda 2008; Sirat & Morshidi 2009). The impact on the stakeholders in **Themes 1-3 and Theme 4** is reflective of their different roles

as students/ new graduates, academicians/Heads of Program and employers, reviewed later in ***Section 5.3.***

5.4 Participants' responses about higher education policies (Theme 5) and the value of WIL intervention as a curricular strategy (Theme 6)

As outlined in the introduction, the second consideration is to explore the introduction of Work-Integrated Learning (WIL) as a curricular strategy in business undergraduate programs to understand stakeholder perceptions, anticipated challenges, and the expected learning outcomes as a result of this intervention. The policy considerations were delved into as a third angle for deliberation on policy empowerment and policy inhibitors to introduce WIL in the Malaysian higher education curriculum.

Theme 5 focused on the existing higher education policies where the questions were closely guided by the three higher education policy documents and the three employability review documents examined in Chapter Three. To obtain rich and unbiased data, the findings from the document review were incorporated into the focus group and interview sessions with the academics and Heads of Program. This process is important as it enables a methodological triangulation against the document review findings. Undergraduates and employers were purposefully not involved in this validation due to their lack of familiarity with higher education policies to ensure the reliability and authenticity of the analysis (Denzin & Lincoln 2000).

Theme 6 focused on stakeholders' views towards a proposed curricular intervention like WIL to address students' readiness for employment before graduation. In addition, discussions were centred on students' learning styles and preferences with consideration of Malaysia's different education system and learning culture. To ensure an accurate understanding of WIL across all participants, a brief description was incorporated into the information sheets of all three stakeholder groups prior to the focus group and interview sessions. To observe ethical considerations, they were also invited to ask questions to clarify before the commencement of each session.

5.4.1 Themes 5 and 6 - Responses from academics and Heads of Program

Aiming for validity and accurate representation of findings, ***Theme 5*** was analysed with the academics and Heads of Program only, as the students'/new graduates' transcripts revealed negligible coding references in Theme 5. This outcome is expected as students have minimal (if any) knowledge of higher education policies. The analysis of the employers' transcripts

indicated no references at Theme 5 - Policy Hindrances due to their non-involvement as well as a lack of familiarity with higher education curriculum and its related government policies. Instead, employers focused on policy empowerment as a key driver toward improved learning outcomes as reflected earlier in ***Section 5.4.2,*** which will be analysed collectively under ***Theme 6***.

The following questions, some of which are interrelated to other themes, elicited academics' and Heads of Program's feedback on education policies and how proposed interventions like WIL could be enablers toward enhancing curriculum learning outcomes (***Theme 4***). This feedback is in tandem with students' needs and challenges *(**Themes 1-3**)* to enhance their work-ready skills and facilitate employment outcomes.

*(**Q1**) Do you feel that incorporating WIL in curriculum will benefit students more towards a holistic education which includes both technical (academic) as well as work-ready skills?*

Alternatively, do you feel that the present policies on curriculum sufficiently address the development of workplace competencies with an objective of a holistic education outcome?

*(**Q2**) Do you believe that WIL can improve the preparedness of undergraduates from the university to the workplace?*

What specific areas of preparedness do you believe WIL can address?

Key Questions for Heads of Program

*(**Q1**) Do you believe that introducing WIL in the curriculum addresses the concept of "employability" in relation to work-place readiness?*

*(**Q2**) As a Head of Program, do you feel that the current policies enable higher education institutions to propose such interventions?*

Alternatively, do you feel that there are areas that should be reviewed given the present challenges faced by undergraduates?

Themes 5 and 6 were analysed collectively with the academics and the Heads of Program due to the inter-relativity of the questions with this stakeholder group. The representative comments by academics on policies and proposed interventions, are:

"..we are very keen to revise our curriculum because of feedback from my students and the industry, where most employers expect that the students know how to do their work. Reviewing the curriculum is something we will be keen to do provided the higher education policy allows us to do so. Including components of even bringing the industry into class" ***Speaker 2 (00:16:53)***

"I agree that WIL would address the concept of employability. I support if internship and WIL is being made as part of course curriculum so that upon completion, it can be part of the assessment process. WIL should be made compulsory for the students, so that you apply those things that you learn theoretically in the class. Probably too early to do that in year 1. I think year 3 would be much more appropriate" ***Speaker 4 (00:29:03)***

The academics' input was analysed against the Heads of Program's comments which reveal corresponding opinions as follows:

"WIL will help students develop soft skills before graduation, so it should be integrated in the curriculum maybe as 1 subject. So, they have to take this subject as 1 unit in the first year, second unit in the second year and third unit in the third year…but it should be integrated throughout the 3 years. So, definitely support this to be scaffolded over 3 years…with policy approval, not just in the final year because that is not enough" ***Speaker 2 (00:41:30)***

"Reviewing the curriculum is not easy, but it's not impossible. It's a question of also involving the education policymakers. So, if the policymakers can see the light at the end of the tunnel, this kind of WIL and collaboration between public and private universities and industry as a total picture, that would be the way forward. It is possible..the 3-year period of introducing WIL is a good idea because I've always felt like the three-month internship is too short" ***Speaker 2 (00:34:27)***

".. WIL will be a huge advantage because the business landscape is changing rapidly. Our students need to be work-ready and competitive when they finish. WIL should be incorporated every year so that students will have exposure over 3 years, but it has to be given credit points so that students will be committed. The advantage is It will fine-tune students' mindset on what they have studied. So, they can do their own analysis after one year of WIL experience. The benefit of WIL brings them into how the industry works versus depending on what they have learned in the classroom" ***Speaker 2 (00:12:26)***

The quotations indicate the perceptions of both academics and Heads of Program on the importance of curriculum review to enhance their students' employment readiness *"because the landscape of business is changing rapidly"* ***Speaker 2 (00:12:26)***. Policy considerations and the role of the policymaker (the MoHE), as well as employers in a collaborative effort, is also highlighted as one of the main considerations (***Speaker 2 (00:34:27))*** which are analysed in ***Theme 7 – Role of Stakeholders*** in ***Section 5.5.*** While there were some different opinions by the academics on the question of incorporating WIL as a proposed intervention over a 3-year period or only in the final year, the Heads of Program contend that a 3-year approach will enable the process of learning, practising, reflecting and re-learning to enhance the intended learning outcome at the end of their undergraduate studies (***Speaker 2 (00:41:30), Speaker 2 (00:34:27) and Speaker 2 (00:12:26)).***

5.4.2 Theme 6 – Responses from students and new graduates

The next set of questions on ***Theme 6***, focused on **proposed interventions** that would assist students towards work readiness, are:

For new graduates only

(Q1) *Having had some casual work/internship experience, and reflecting back on your 3-year undergraduate studies, is there anything specific that you would have liked to be included in your curriculum to better prepare you for work?*

Or, do you feel that internships are sufficient for workplace competencies, instead of incorporating WIL in curriculum?

A key question for both students and new graduates

*(**Q2**) Do you believe that having WIL in curriculum can improve the preparedness of undergraduates from the university to the workplace?*

What specific areas of preparedness do you believe that WIL can address?

The following are the representative responses from both the students and new graduates in the five sessions, which were analysed collectively:

"For the curriculum, I think one of the subjects could cover soft skills that are needed in the workplace today…from some of the reports, you can pick up the top ten soft skills needed for the workforce, however, most of these skills are not covered in the syllabus currently… so, having WIL subjects in curriculum would cover some of the soft skills to prepare us for the workforce in the future which would be useful as we are better prepared" ***Speaker 4 (00:20:51)***

"I have some basic casual work experience. A lot of things you need to learn in order for you to adapt to the working environment, so that we won't be left out. I see all these people who is very shocking when I join the workforce. You need a few skills that you don't know how to use or you don't even have them because you never came across them during your studies, it's a struggle for us…I think WIL can help give us that skills before we start working" ***Speaker 4 (01:00:00)***

"I did it during my summer break as a credit intern so I was able to communicate with real life business clients and I feel like it was very helpful experience when I started working because I cannot learn that in class or during assignments… I feel it's important to develop core work ready skills like with WIL while we are still studying, but of course, we can develop more even after we join the work. With WIL we become students that are hands on and who are ready for any challenge once we start in the workforce" ***Speaker 2 (00:24:12)***

The sentiments expressed by both students as well as new graduates, highlight the inter-relationship across themes, where the impact of strategic interventions *(**Theme 6**)* in the undergraduate curriculum, has a direct impact on learning outcomes *(**Theme 4**)*. A participant whose quotation was reviewed earlier under the clustered Themes 1-3 in ***Section 5.3***, reflected his/her sentiments on the importance of work-ready skills prior to graduation. Later, in ***Theme 6***, the same participant (*based on timestamp*) reflects on the importance of WIL as an intervention tool to address these sentiments and overcome the anticipated obstacles to develop work-ready skills ***Speaker 4 (00:20:51)***.

5.4.3 Theme 6 – Responses from employers

The following questions sought employers' feedback on the concept of introducing WIL as a **proposed intervention** (Theme 6) tool to enhance graduates' workplace-ready competencies:

(Q1) *Do you feel that incorporating WIL in curriculum will benefit students more towards a holistic education which includes both technical (academic) as well as work-ready skills?*

A Key Question for employers

(Q2) *Please share your views on the concept of "employability" in relation to WIL, and its intervention to enhance workplace readiness*

Some of the employers' responses are:

".definitely I think that WIL incorporated in curriculum will benefit the student more toward this holistic education because they are not just focusing on theory, but they have a hand into a real situation. The real world, because what we learn from school may not be applicable to the life outside. So, I think WIL is very important for our country, to expose student so that their employability will become greater" ***Speaker 2 (00:23:02)***

"for employer expectation with WIL in curriculum, it's a good exposure. It's a good transition period for them to face the real world, my expectation of WIL is that they become more brave, independent in expressing themselves and aware of the do's and don'ts and their rights. So, WIL will give value in being ready to work by giving the right exposure to all these qualities to improve their employability prospects" ***Speaker 2 (00:21:18)***

".. if we intervene with Will in curriculum, we expose them to the actual workplace requirement. I like the idea of them doing the self-reflection because literally that is what they will be asked to do in a normal

workplace, which is, assessing their own skills versus comparing the knowledge or the exposure by having this WIL in curriculum in different organisations. Ideally, it should be the last two years because the 1st year they should be academically focused and then focus on being work-ready" ***Speaker 2 (00:22:02)***

"The advantage is that WIL helps to finetune students' mindset on the relevance of what they have studied. Because they are personally involved, that experience will be embedded in their minds for their entire lives. The benefit of WIL will also bring them into how the industry works versus only depending on what they have learned, in a classroom setup. So, the reality is, WIL is important because the students can build the bridge between theory and practise which is important before they enter the workforce" ***Speaker 2 (00:12:26)***

The responses on WIL as a curricular strategy to enhance employment outcomes, highlight the industry's recognition of graduates' present challenges and the critical need for an intervention to resolve this ongoing concern, evidenced in extensive Malaysian scholarly literature in Chapter Three. ***Theme 6*** is associated with ***Theme 4*** where WIL as a curricular intervention enhances learning outcomes as emphasised by ***Speaker 2 (00:12:26)*** who also mentions it earlier in ***Section 5.3.6*** *(based on timestamp)*. The introduction of WIL in the curriculum is envisaged as a strategic move towards a holistic learning outcome which benefits the students' experience when entering the workforce (***Speaker 2 (00:22:02)).*** In addition, according to ***Speaker 2 (00:21:18),*** WIL is perceived as adding value to students' overall learning outcome as they are given the right exposure to developing work skills that would enhance their employment prospects.

5.4.4 Interpreting the data – Themes 5 and 6

Analysing the responses from the 3 groups on both the themes collectively, reveal significant links to ***Themes 1-4*** as evidenced in the representative responses in ***Section 5.3.1 – Section 5.4.3.*** The proposed intervention of WIL as a curricular strategy to address concerns on graduates' readiness for employment is perceived as a holistic approach towards the intended learning outcome. Stakeholders are also aware of the importance of policy reviews and the role of the MoHE as the key driver to initiate any curricular interventions. While there were some divided opinions on integrating WIL as a scaffolded approach over 3 years, nevertheless stakeholders have expressed a concerted agreement that a curriculum that incorporates both technical as well as non-technical (professional skills development) is imperative to equip students for the workplace. This is an important observation that different approaches to education might suit different countries due to different government policies and because different countries have different capacities to introduce a technique like WIL (Brown, Lauder & Sung 2015; Jackson & Bridgstock 2019 and Rook 2015 discussed in Chapter 2). Different

approaches also relate to ***Theme 4*** on learning outcomes as the introduction of WIL is viewed as a curricular strategy to enhance learning outcomes towards graduates' readiness for employment. Relationships between other themes/clustered themes will be presented in the Chapter Summary.

5.5 Participants' comments on the roles of stakeholders in the provision of WIL (Theme 7)

As emphasised in the introduction, the third consideration in this analysis is the individual and collaborative role of the stakeholders. Theme 7 focuses on the important role of the three stakeholders, as well the critical role of the government as the policymaker (MoHE). The role of the MoHE as the key driver of the WIL initiative together with the collaborative role of all the three stakeholders are the underpinning condition that needs to be met if WIL is to be implemented successfully within a curriculum, which addresses both the second research questions, mentioned in ***Section 5.2.***

5.5.1 Theme 7 – Responses from students and graduates

As evidenced in the representative responses from ***Section 5.3.1*** to ***Section 5.4.3*** on ***Themes 1-6***, the roles of the different stakeholders are viewed as important. Respondents like ***Speaker 2 (00:43:36), Speaker 2 (00:03:49) and Speaker 3 (00:48:54)*** emphasise their independent role, as well as their collaborative role which would determine the extent of challenges, experiences, learning outcomes, policy adjustments and the success of the curricular intervention strategies. To discuss the final ***Theme 7***, key questions were used to obtain input on the different roles of students, academics, employers and the policymaker in developing work-ready skills.

The following key question was posed to students and new graduates:

(Q1) *Do you feel that incorporating WIL in curriculum will benefit students towards a holistic education outcome?*

Or, do you feel that if students actively participated in internships, this experience is sufficient to develop work-ready competencies instead of introducing WIL in curriculum?

The representative responses are**:**

"For me, I think it's better to start as early as possible from year 1 onwards until year 3. We should learn and develop the work ready skills prior to graduation because it will be a disadvantage compared to the other graduates if they have this experience….I prefer to have theory and also practical in the course outline so it actually blends in together. If theory, you get like 100% but not practical. You can't really prepare yourself to the workforce" ***Speaker 2 (00:39:14)***

"I had an internship experience at the end of my second year, 2018…those 3 months of internship, although a short duration, I felt like I've learned a lot of things that I cannot learn inside the class. I feel it's important for us to develop it to have strong core work- ready skills. But it's important that while we're studying, we become students that are hands on and who are ready for any challenges once we start in the workforce. So, having this experience in our studies as part of the curriculum outcomes from the start is very important" ***Speaker 3 (00:07:58)***

"I think WIL including internship is a great benefit in the curriculum…, it's a very good idea to develop it from college, which was not happening during my studies. Now I face a steep learning curve that can be reduced before I enter the working world. It's easier for us then to climb up the curve, whereas like me, after college, for the first few months, a lot of things you need to learn to adapt to the working environment" ***Speaker 4 (00:59:59)***

The responses expose the interrelatedness of the themes in addressing both research questions. The reflections from both undergraduates as well as new graduates stress the need for work-related components in the curriculum to address this skills gap (***Speaker 2 (00:39:14) and Speaker 3 (00:07:58)***). The role of students to take ownership and initiative by enrolling for internships or work placements as part of their WIL experience was also highlighted by ***Speaker 4 (00:59:59).*** Some of these responses are consistent with a few students' comments earlier on the positive learning outcomes with the introduction of WIL in curriculum.

5.5.2 Theme 7 – Responses from academics and Heads of Program

The Heads of Programs and the academics, seen as key participants in curriculum design and learning outcomes, were requested to reflect upon these key questions to establish the roles played by the different stakeholders:

(Q1) *Do you feel that competitiveness among universities in Malaysia is influencing curriculum design and learning outcomes?*

Reflecting on your own experience, do you believe that WIL can be a unique proposition in your undergraduate program to engage students in the future?

Do you believe that a curriculum review is timely to incorporate this unique proposition?

The representative responses from the academics are:

"Teaching students where they already have some working experience is easier than teaching those who have no working experience…yes, it should be made compulsory. In fact, I would suggest to the government to make it a policy that internship program be conducted in the first year right until the final year…if they have exposure in the working environment, it's easier for them to get the experience" ***Speaker 4 (00:16:27)***

"I definitely support this to be scaffolded over 3 years, not just in the final year… but the problem is the administrative, the policy and design because we have to change the curricular activities and some of the assessments to fit… it's a good thing definitely if you incorporate this WIL in the curriculum" ***Speaker 3 (00:42:30)***

"I would like to see more rather than less rather than focusing on 3 subjects on soft skills and then forgetting to embed WIL learning in the academic subjects… I feel that our assessments are very stale and not competitive...it's time we explore varied forms of assessment even study tours and prepare a report to do a business simulation of a real problem…then so that they can apply their knowledge more quickly" ***Speaker 5 (00:46:47)***

The responses indicate support towards implementing WIL learning into the curriculum. Likewise, the representative responses from the Heads of Program are:

"We don't have WIL but we have WBL together with the industry people in my specific program. This is more of internship on its own, not exactly part of the curriculum but a separate WBL assessment. Our students work with industry in terms of training and workshop….at the end of their program...if there's a job opportunity, they may get absorbed into their system" ***Speaker 2 (00:18:30)***

"To improve the preparedness of students will need industry coaches because industry perspectives are very different from what we do as academics but we need to prepare specific areas like an employability concept relating to workplace readiness. And now with this pandemic with online teaching, having the right skill set to get into the industry is a challenge that we're all grappling right now" ***Speaker 2 (00:26:59)***

".. WIL will be a huge advantage because our students need to be work-ready and competitive…. WIL should be incorporated every year so that students will have exposure over 3-years, but it has to be part of assessment. The advantage is It will fine tune the mindset of the students on what they have studied and they can do their own analysis after 1 year of WIL experience. The benefit of WIL brings them into how the industry works versus depending on what they have learned in the classroom" ***Speaker 2 (00:12:26)***

The excerpts outline the sentiments of academics and Heads of Program on the different stakeholders' roles in introducing WIL in the curriculum. While most agree that a curriculum review is very essential to remain competitive, especially with rapid industry challenges, nevertheless, key considerations are policy empowerment, the policymaker's intervention and the employer's collaborative involvement. ***Speaker 2 (00:18:30)***, revealed the evidence of collaborative efforts by a few universities to initiate work-based learning efforts within the industry. which was also mentioned earlier by ***Speaker 2 (00:03:49)***. The reflections by ***Speaker 3 (00:42:30)*** *(academic) and* ***Speaker 2 (00:12:26)*** *(Head of Program)* on the effectiveness of a scaffolded WIL rather than a one-off work placement despite acknowledging the administrative challenges, are supported by global literature as deliberated in Chapter Two on WIL in the curriculum.

5.5.3 Theme 7 – Responses from employers

The final step to investigate the **role of stakeholders** (Theme 7) was to present questions to the employers to obtain their views, if any, using the following key questions:

(Q1) *Please share your views on the concept of "employability" in relation to WIL and workplace readiness;*

(Q2) *Reflecting on your own experience, do you feel that increasing university-employer collaboration would assist to better prepare students for "employability"?*

Please share your expectations of what you believe are some of the possible key contributions of this collaboration.

The representative responses from 11 interview sessions with the employers are:

"for WIL to be successful to improve employability, there must be a follow up program and structured feedback from employers on what the students have learned and what they have not learned. if there's a proper management of WIL in institutions, it will be a success. It is definitely a competitive advantage. However, as I said earlier, if it is not managed and tracked by the universities in terms of learning outcomes, then it may not be so effective after all…they need to work with us" ***Speaker 2 (00:13:59)***

"The collaboration between the college as well as the organization has to be well organized for it to be successful…, universities should be open to approaching all levels of employers, not just target the big ones… it's the exposure that we're looking for the students. So regardless of the environment, students must also be open minded and willing to learn no matter what the task is as it is a learning process" ***Speaker 2 (00:29:58)***

"The talents that we have, there's a life cycle, people who will be retiring soon and so we need a constant supply of talents..in order to build the talent pipeline, employers need to collaborate with universities and select future employees….so part of the collaboration is to offer internship. So, why should we be collaborating? What's it in for me? Employer ROI is my ready talent so it's a win-win collaboration" ***Speaker 2 (00:39:22)***

"universities should collaborate with a few potential employers, and discuss what are the expected job roles available…is definitely very relevant and applicable when the students embark on their careers or even during internship…if WIL is introduced and to enhance employability, the university must have identified the employers to collaborate with" ***Speaker 2 (00:24:10)***

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The insightful feedback by employers on their roles and the roles of universities and students address ***Theme 7***. Some keywords like, "structured feedback from employers", "*supply of talents and talent pipeline", and "employer ROI"* direct the need for a strategic intervention rather than vague measures or piecemeal efforts to address students' lack of work-ready skills which affect employment opportunities. Earlier in ***Section 5. (Theme 4***), employers agreed that introducing the development of work-ready skills would enhance graduates' employment outcomes. Notwithstanding, ***Speaker 2 (00:13:12)*** *and* ***Speaker 2 (00:12:26)*** emphasised the importance of collaborative roles of both universities as well as industry (employers) as key determinants of a successful learning outcome.

5.5.4 Interpretation of findings – Theme 7

The successful outcome of WIL as an intervention strategy would entail the individual as well as collaborative roles of stakeholders (Henderson & Trede 2017; Rowe, Winchester-Seeto & Mackaway 2012). Theme 7 included a discussion on the role of the fourth stakeholder who is the policymaker (MOHE). Analysing the responses revealed that each group acknowledged their role and their different responsibilities. The academics and the Heads of Program also stressed the role of MOHE as a key driver to initiate any policy reviews and curricular interventions. Another piece of data gleaned was the evidence of "fragmented" or contemporary efforts by a few universities which had been revealed by a few Malaysian scholars (Yassin et al. 2008 and Yaacob 2012). The responses on the effectiveness of a customised and scaffolded WIL in the curriculum to enhance learning, experience and reflection rather than a one-off work placement in different education and cultural settings, are supported by global literature (Dean et al. 2010; Larkin & Beatson 2014; Lim et al. 202; McRae, Pretti & Church 2018; Seow & Pan 2022; Trede & Wehr 2021). A customised WIL framework is dependent on internal stakeholders' course requirements, external stakeholders' capacities

and students' individual employability needs (Trede & Wehr 2021). The details of the different stakeholders' roles and the proposed action steps are elaborated on in the next chapter.

5.6 Chapter summary

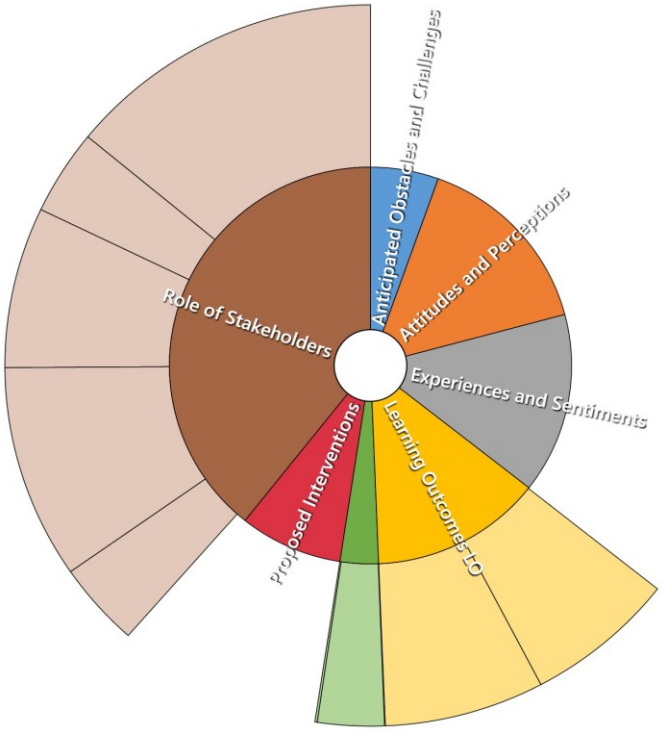
This chapter has provided a detailed analysis of the rich data collected from the **57** participants across three groups of stakeholders in **24** focus groups and interview sessions. In a qualitative analysis, the researcher is the 'research instrument' (Creswell 2017) thus, the researcher made a careful effort to 'bracket' personal biases. Notwithstanding, as mentioned in ***Section 5.1*** and as advocated by researchers like Charmaz (2006), Miles & Huberman (1994) and Denzin (1994), this research proceeded with methodological triangulation (Stavros & Westberg 2009) across the three stakeholder groups in ***Section 5.3.1 to Section 5.5.4*** to minimise concerns of single-coder bias. Lastly, the stringent approach of using 3-levels of coding[12] (Saldana 2013, 2014) ensured that the analysis was diligent, robust and rigorous and in essence, captured the actual meaning and perceptions of participants towards graduate workplace readiness and the concept of introducing WIL as a curricular strategy to address employability concerns.

Extracts of the detailed analysis report (segregated by stakeholder groups) were discussed in the analysis of each theme/theme cluster from ***Section 5.3.1*** to ***Section 5.5.4.***

To conclude the data analysis, the summary table which provides coding evidence of all 7 themes is consolidated in a 78-page Data Analysis Summary by Themes for the 3 stakeholder groups. The summary table, besides providing the number of coding references, lists the number of words coded as well as the number of paragraphs coded. A visual representation of the themes in ***Figure 5.2*** using NVivo 12 ®, complements the summary table, which according to Adu (2019) accompanies thematic analysis in a qualitative methodology. The purpose of a visual analysis is to strengthen the researcher's argument based on visual evidence of the qualitative analysis (Adu 2019) on the themes discussed earlier. Visual representation adds more meaning to the findings as outlined earlier in Chapter 4 in Adu's (2019) Step 5 of the Qualitative Research Process ***(Figure 4.5***).

[12] *The details of the 3 levels of coding using NVivo 12 ®, were described in Figure 4.7.*

Figure 5.2 Visual Representation of the Thematic Analysis

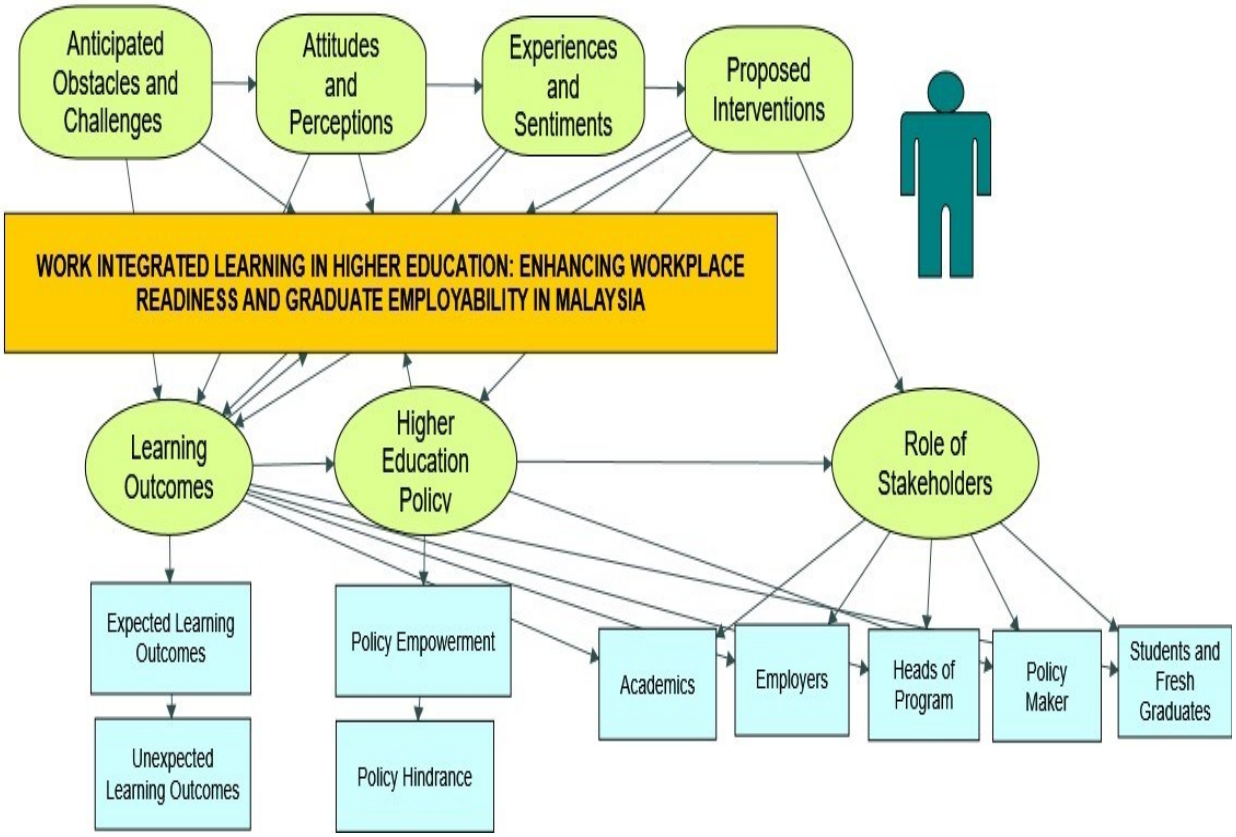


Finally, a thematic map ***(Table 5.3),*** was used to analyse the qualitative data, as it is possible to use focus groups and interviews to analyse data with behavioural elements or attitudes (thoughts, believes, and reported needs) with a thematic map analysis (Braun & Clarke 2013). In the analysis process, significant data segments are first identified and then summarized in keywords or key phrases thematic map. ***Table 5.3*** was extracted using cross-tabulation in NVivo 12 ® to determine the relationship between the seven main themes and two sub-themes to address both the research questions which are explained next**.** As elaborated earlier, by using direct quotations, a summary of themes, summary reports as well as a codebook of themes, the thematic analysis revealed linkages between clustered and individual themes as evidenced earlier in ***Section 5.3*** to ***Section 5.5***.

Current curriculum considerations (**Themes 1-4**) are influenced by the existing higher education policies (**Theme 5**) which have resulted in the lack of graduates' readiness for employment as evidenced in an extensive Malaysian literature review as well as from the data collected from the three stakeholder groups. As a result, there is a need for a proposed

intervention like WIL as a curricular strategy (**Theme 6**) which aims to embed work-ready competency development into the curriculum as a scaffolded approach over the course of their studies. For WIL to be developed, introduced and assessed successfully relative to employment outcomes, the individual and collaborative roles of all four stakeholders (**Theme 7**) are critical.

Table 5.3 Thematic Map – Links between Themes and across Theme Clusters



Based on the thematic analysis, a Data Analysis Design Framework was developed to summarise and answer both the research questions which will be presented in the next chapter. The next chapter also draws the inference from this research with detailed discussions to understand i) stakeholders' experiences of current employability teaching and learning and ii) stakeholders' perceptions regarding the viability of WIL as a means of enhancing graduate employment outcomes. The role of stakeholders as active collaborators of WIL implementation in higher education is elaborated alongside the possible challenges

that need to be addressed to ensure its effectiveness. Another key consideration is the different education system and learning preferences among Malaysian undergraduates, which accentuates the need for a customised WIL as a strategic curricular intervention. Discussions on how this research differs, confirms, and adds to scholarly literature will be elaborated in the next chapter, concluding with a critical assessment of the research findings, its strengths and limitations and its opportunities for further research.

Chapter 6

Discussion and Conclusion

6.1 Introduction

This chapter explores the findings of the research, discusses their relevance, and highlights the limitations and implications of this research project. The first chapter of this study began by drawing on the personal and professional perspectives of the researcher concerning the graduates' readiness for employment or lack thereof in Malaysia. This was followed by extensive Malaysian and global literature, which led to the qualitative research methodology and the data collection process which was completed on December 20, 2021. Thereafter, the thematic data analysis was conducted, and findings were presented that cast light on the highly centralised Malaysian higher education system and policy governing curriculum design and learning outcomes.

The investigation led to the revelation of conditions that need to be met if WIL is implemented in Malaysian business curricula as a strategic, quality intervention, and unpacked the cultural considerations, expectations, anticipated outcomes, and impending challenges that need to be overcome. The research questions set out at the beginning of this thesis have been addressed via a rigorous qualitative methodology and are reflected upon in the subsequent discussion.

This concluding chapter pulls the threads together by revisiting the objectives of this research, considering the findings produced through the project, and considering these in light of the latest published research. The summary of findings and the practical implications are presented while establishing the significance of this study. Introducing WIL as a strategic curricular intervention will be challenging in Malaysia due to its multicultural society and hierarchical higher education structure. As such, this study affirms that a well-defined strategy and a collaborative action plan by all the stakeholders are imperative. To make a substantial contribution to improving the work readiness of Malaysian graduates who are well-equipped to meet the challenges of the labour market, concerted efforts are required from the students, industry, education institutions and the government. A series of recommendations and guidelines are proposed accompanied by an acknowledgment of the study's limitations and suggestions for future research.

6.2 The Data Analysis Design Framework

Before summarising the findings, the objectives and questions pursued in this research will be reviewed. Upon completion of the thematic data analysis, as advised by Bazeley and Jackson (2014) and Saldana (2011, 2014), this research's findings are presented to address the research questions in the following sequence:

1. The characteristics of each question are reviewed carefully;
2. The relevant evidence from the transcript relating to the questions is identified; and
3. The themes that are developed should best represent relevant information that is consistent with the particular questions that the research aims to answer.

The sequence of presentation begins with the development of a Data Analysis Design Framework (***Table 6.1***) to answer both research questions, guided by their corresponding research objectives.

The first research objective and research question **1(a)** focus on three specific aspects: firstly, the experiences of and perceptions held by the Heads of Program and academics regarding existing curricular strategies that are intended to develop work-ready competencies of students; secondly, undergraduates' and new graduates' experiences of existing employability strategies, and; thirdly, employers' insights regarding new graduates and their work-ready competency.

The second research objective and research questions **2(a)** and **2(b)** investigate, with regards to all three stakeholder groups, perceptions regarding the introduction of WIL in the curriculum to enhance the development of work-ready skills. In addition, the prevailing conditions within the education system are delved into to understand if WIL can be implemented successfully and to identify the conditions that need to be in place for a successful educational outcome to be achieved.

Table 6.1 - Data Analysis Design Framework

3 Data Types	Unit (s)	Variables	Longitudinal Study (yes or no)	7 Main Themes	Research Objectives and its related Research Questions
(1) Interview Transcripts **(2) Focus Group Transcripts** **(3) Policy Documents and Employability review documents**	People Literature	**People Attributes** -Research Site -Public/Private Entity **Literature Attributes** -Policy documents -Government Reports -Year of Publication -Author(s)	No – Snapshot study	(**1**) Attitudes and Perceptions (**2**) Experiences and Sentiments (**3**) Anticipated Challenges and Obstacles (**4**) Expected Learning Outcomes and Unexpected Learning Outcomes (**5**) Proposed Interventions (**6**) Role of Stakeholders (**7**) Policy – Empowerment and Policy - Hindrance	**Objective 1)** To survey existing curricular strategies used to promote employability in the Malaysian higher education sector. **Research Question 1)** What curricular strategies have been used in Malaysian universities to promote graduate employability? **Question 1a)** What evidence is there to support the use of the different employability-focused curricular strategies currently used in Malaysia? **Objective 2)** To consider the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates. **Research Question 2)** What is the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates? **Question 2a)** What conditions need to be met if WIL is to be implemented successfully within a curriculum? **Question 2b)** Are these conditions met or can they be met within the Malaysian higher education system?

6.2.1 Summary of findings

This section summarises in ***Table 6.2,*** the key findings from this research project and sets them in the context of both contemporary literature regarding employability teaching and learning and the contemporary higher education sector in Malaysia.

Table 6.2 – Summary of Findings

Research Questions	Summary of Findings
Research Question 1) **What curricular strategies have been used in Malaysian universities to promote graduate employability?**	The findings have established that while a few initiatives were introduced by some universities, the initiatives were, however, fragmented and "loosely" incorporated into the curriculum, often without any measurement or assessment of learning outcomes to enforce their effectiveness.
Question1a) **What evidence is there to support the use of the different employability-focused curricular strategies currently used in Malaysia?**	The evidence on employability-focused strategies revealed that whilst there are policy documents to guide the process and implementation, nevertheless, the lack of a structured and measured enforcement and tracking mechanism as well as collaborative stakeholder involvement has contributed to escalating unemployability statistics in Malaysia.
Research Questions	**Summary of Findings**
Research Question 2) What is the potential for WIL to be used as a curricular strategy aimed at enhancing the employability of Malaysian graduates?	There is ample literature from a pedagogical perspective that a structured WIL framework, which is scaffolded with clear objectives, milestones and learning objectives needs to be established to enhance the employability of the Malaysian graduates.
Question 2a) What conditions need to be met if WIL is to be implemented successfully within a curriculum?	Extant literature deliberated in Chapter 2 elaborates the conditions that need to be met. ***Section 6.3.2*** presents the conditions for a successful WIL in the Malaysian curriculum in ***Table 6.4.***

Question 2b) Are these conditions met? Or can they be met within the Malaysian higher education system?	Present strategies reinforce that the conditions have not been met, thus the struggle to develop and adequately equip the undergraduates before graduation. The conditions that need to be enforced within the Malaysian education system together with key stakeholders are proposed in ***Table 6.4.***

The summary of findings lays the foundation to initiate the practical implications of implementing WIL in the Malaysian curriculum which are discussed later in this chapter.

6.3 The Guidelines to customise a WIL framework for Malaysia

As evidenced in ***Table 6.2*** above, the use of a structured and scaffolded quality assurance WIL framework which is customised for the Malaysian higher education system needs to be encouraged. These findings make clear that what is imperative in Malaysia is a commitment from the MoHE to support the implementation of a structured and scaffolded WIL framework. The support and directive from the MoHE as the driver of new curricular strategies in higher education will allay universities' fears of non-adherence to the MoHE policy and the Malaysian Qualifications Agency[13] (MQA) accreditation (www.mqa.gov.my). Likewise, the WIL framework needs to be structured with a tripartite curricular strategy with close involvement and collaboration by the stakeholders, which is outlined at the conclusion of this chapter.

Customisation also includes looking at WIL models or frameworks in countries with a similar culture and the works of Tanaka and Zegwaard (2019) on Work-Integrated Education (WIE) in Asia are particularly relevant here. WIE, according to Tanaka and Zegwaard (2019) is commonly included within the umbrella term of WIL (Patrick et al. 2008). The Asian countries analysed were China, Japan, Korea, Hong Kong, Vietnam, Thailand, Malaysia and Singapore with a focus on educational history, present practices of work-integrated education (if any), future issues and current challenges. In their analysis of Malaysia, the authors highlight that while practicum experience as a component of WIE was present in a few universities, nevertheless, a focus on the measurement of intended outcome needs to be monitored for quality and to reduce mismatches (Tanaka & Zegwaard 2019). The scholars' analysis corresponds with this researcher's analysis and findings presented in ***Table 6.2***. The authors conclude that the intensity and vigour of WIE components across Asian countries differ as a

[13] *MQA – Malaysian Qualification Agency – The government statutory body to accredit academic programs.*

result of varying government support, the future direction of higher education, socio-cultural backgrounds and the establishment of national associations as drivers of change.

Of further relevance is research focused on Singapore, Malaysia's closest neighbour, because of its similar ethnicity and cultural practices and history with Malaysia[14] before its independence in 1965. As noted in Chapters 2 and 3, Singapore has an impressive record of educational achievements as it consistently tops global education league tables and university rankings (Brown et al 2019). Its national association, the Centre for Skills, Performance and Productivity (CSPP), as a driver of change, periodically reviews its education system and policy in accordance with global labour market challenges in its quest to attain and retain high-quality talent (Brown et al 2019).

As a testament to Singapore's willingness to adapt its education system in tandem with the fast-changing work environment, the Singapore Management University (SMU) and Singapore Institute of Technology (SIT) have recently incorporated customised WIL models into their curricula. Seow and Pan (2022) emphasise that most Singapore universities are shifting their emphasis from teaching content to applying and reflecting knowledge through experiential learning (Kolb & Kolb 2005). The process of learning and unlearning through experience and reflection was discussed in Chapter 3. It involves discussing students, academics and employers' expectations openly so that they may be examined and tested (Kolb & Kolb 2005). SMU, in January 2022, launched its WIL model through its Faculty of Accountancy's partnership with a lead accounting firm, KPMG, in a work-study elective program (WSEP) as a pilot study to gauge its effectiveness to develop work-ready graduates. The model leveraged an anticipated win-win outcome for both SMU and KMPG by providing employable talents to KPMG and the WSEP is currently being monitored by both parties. The deliberation on talent and using WIL as a strategy for employers to strengthen their talent pool was seen in Chapters 2 and 3. SMU's WSEP is flexible for students to interlace academic learning with a structured on-the-job internship training, therefore resulting in learning outcomes that incorporate technical competencies, and work-ready skills as well as enable network building with industry (Seow & Pan 2022). A core consideration emphasised by the scholars includes the requirement by the employers, academics and students to re-frame their thinking on what learning entails and how learning should occur. Thus, all three stakeholders play critical roles to ensure the success of this WIL model at SMU, as a tripartite strategy prescribed by Nxumalo (2022), which is a curricular strategy proposed in this research based on the findings and analysis in ***Table 6.4***.

[14] *When it was established on September 16, 1963, Malaysia comprised the territories of Malaya (now Peninsular Malaysia), the island of Singapore, and the colonies of Sarawak and Sabah in northern Borneo. In August 1965 Singapore seceded from the federation and became an independent republic.*

Correspondingly, in 2020, SIT introduced a customised WIL model into its curriculum called Integrated Work-Study Program (IWSP) as an amalgamation between Work-Based Learning (WBL) which is vocation focused and WIL which is more academically rigorous. Thus, the drivers of IWSP are the emphasis on learning through practice at the workplace in tandem with the integration of theory learnt at the university (Lim et al. 2020). Both the SMU and SIT models in Singapore underpin this research's key consideration of designing and refining a customised WIL model by individual focus areas and expected learning outcomes as a best practice with due deliberation on different cultures and education systems.

Having reviewed the various practices as guidelines on WIL frameworks and models and the findings of this study, this research advocates that a customised WIL model suited for Malaysia be similarly implemented.

6.3.1 Recommendations for WIL implementation in Malaysia

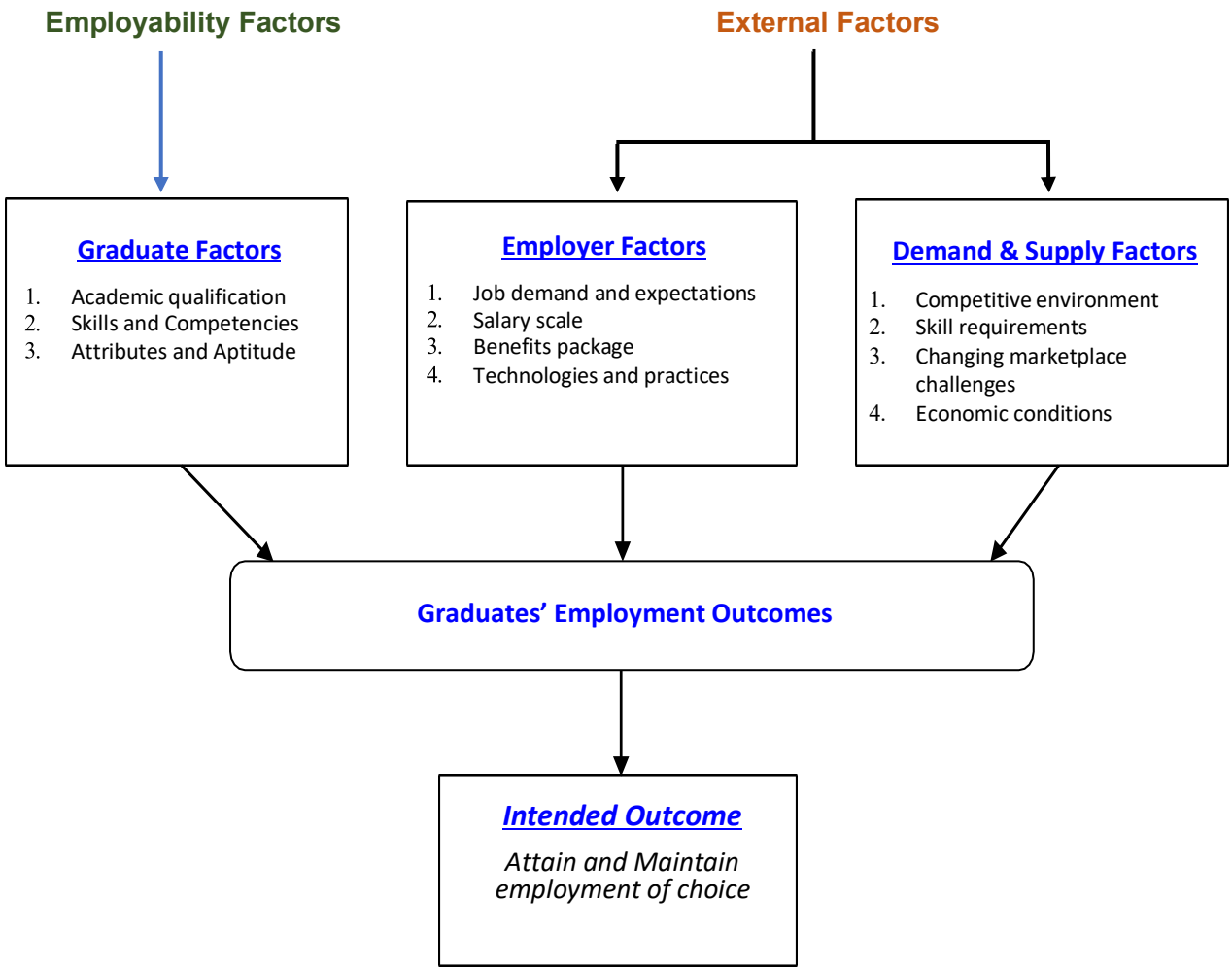
This section canvasses a series of recommendations to guide the approach that Malaysian universities take for WIL implementation. The recommendations include a proposal that given Malaysia's current centralised education system, the MoHE as a key stakeholder and decision-maker, needs to establish clear strategic directions and operational tactics. The recommendations also acknowledge that the piloting of a WIL initiative in the higher education curricula would need the MoHE to evaluate the costs and benefits of the program so as to determine the financial viability of this approach in the future. Wardle (2014) asserts that clear definitions of WIL initiatives, policies and operational processes with intended learning outcomes establish consistent WIL practices at the universities which the MoHE needs to exhibit at the onset of any pilot initiatives. This is recommended in ***Table 6.4***.

Wardle's (2014) suggestions were initially analysed against the researcher's conceptual framework in ***Figure 6.3.***

The graduates' employment outcomes are influenced by various independent factors, primarily categorized as employability factors and external factors. The employability factors encompass aspects related to the graduates themselves. This research is framed within this context, where these factors play a pivotal role in shaping employment outcomes. Each recommendation put forth is grounded in the rationale provided by these readiness-for-employment factors. Additionally, external factors influencing graduate employment outcomes encompass both demand and supply factors, as well as considerations pertinent to employers and industries, all of which are linked to prevailing economic conditions and the state of the

labor market. As outlined in Chapter 1 (**Section 1.3.1**), the scope of this research does not extend into the exploration of these external factors.

Figure 6.3: A conceptual framework of Malaysian graduates' employability and employment outcomes



Subsequently, the recommendations were analysed against the research questions and tabulated below as a step-by-step pathway that can be undertaken by Malaysian universities in close collaboration with the government and industry. To prepare for the introduction of a WIL program, a number of steps must be taken so as to ensure that the program has every chance of succeeding and so that its effectiveness can be carefully evaluated. The recommendations are underpinned by the WIL Quality Framework by Trede and Wehr (2021)

reflecting the five WIL principles: purposeful, authentic, evidenced, collaborative and supported (McRae, Pretti & Church 2018; McRae at al. 2019), and are categorized under three stages of implementation for specificity and clarity which are, preparation, execution and review.

Table 6.4 – The 3 Stages of Recommendations for WIL implementation in Malaysia

Preparatory Stage

Recommendations	Rationale
STEP 1: Government (MoHE)'s Approach to the introduction of WIL into the curriculum ***Government as Key Driver and Decision-Maker***	As the policymaker, decision-maker and key driver, the MOHE is to champion the WIL agenda through active involvement in university and industry collaboration. Clear definitions of WIL initiatives, policies and directives on paid internships are imperative, to guide WIL practice at the institution and its collaboration with employers. To incentivise employers with clear guidelines on a structured internship program and its benefits to them as a collaborative partner. That the MOHE establishes a WIL body/association (similar to CSEP, Advance-HE, ACEN, HERDSA, HERE-SA) as government-linked or independent bodies to drive the WIL initiatives, thereby reinforcing the government's evidenced commitment to WIL whilst facilitating networking and professional collaboration. To review MQA (Malaysian Qualifications Agency) accreditation standards that enable a degree of autonomy to be afforded to universities to adapt their WIL curriculum designs (like SMU and SIT) in alignment with specific conditions of the industry and their program offerings.
STEP 2: Universities' Approach to WIL and WIL Resources ***Universities as Active Collaborators***	Develop the university's guidelines, training and support mechanisms to launch WIL in the curriculum. Involvement of stakeholders (industry/government) consultation and collaboration during the review and development of the curriculum design to secure and maintain strategic relationships (Lim et al. 2020). A tripartite strategy that meets its intended objectives needs to be developed (Nxumalo 2022) WIL is to be positioned as mandatory with core components of the curricula targeted to provide adequate work experience to impart employability skills (Campbell et al. 2021; Wardle 2014).

STEP 3: Employers/Industry Partners' Approach to WIL collaboration with universities ***Employers & Industry Partners as Active Collaborators***	Development of templates and checklists with details of student requirements for induction, workspace, periodic discussions and very importantly, the assessment schedule (Trede & Wehr 2021). Employers are to provide for medium-term placements/internships of more than two weeks duration. The MoHE to incentivise employers who use a structured placement/internship program (with reference to the existing MoHE Structured Internship Program* (SIP))
STEP 4: Students/Undergraduates' Approach to embracing WIL and WIL resources ***Students as Active Collaborators***	The availability and promotion of government (MoHE) funding/allowances to students for financial support during WIL placements will make WIL more accessible and attractive for students (Seow & Pan 2022).
STEP 5: The development of the WIL program in Malaysian universities' undergraduate curricula ***(Tripartite Strategy)***	WIL curricula in Malaysia be guided by the SIT and SMU models in Singapore as close evidence in a similar cultural setting. Also, to leverage Australia and UK's in-depth experiences (*Section 6.3.1*). WIL partnership arrangements are to be based on the negotiation of a formal contract to clarify the roles and responsibilities of all parties (academics, students and employers) to establish a mutually cohesive relationship (Lim et al. 2020; Wardle 2014).

Execution Stage

Recommendations	Rationale
STEP 1: Government (MoHE)'s Approach to the introduction of WIL into the curriculum ***Key Driver***	To strategically select and pilot 2 universities (1 private and 1 public university) for this purpose (similar to Singapore's pilot WSEP strategy). A commitment to funding (MoHE FRGS Grant) for further research into WIL in curricula must be aligned to continuously improve quality standards in higher education.

STEP 2: Universities' Approach to WIL and WIL Resources ***Active collaborators***	Universities to ensure blended learning initiatives are adequately resourced and integrated within curricula to supplement technical/discipline focus areas to adequately equip students to meet workforce needs whilst enforcing discipline knowledge and commitment (Trede & Wehr 2021). WIL components are to be interspersed throughout the degree program to establish a connection to industry in year 1 and scaffolded in each subsequent year (Campbell et al. 2021). Scaffolding or cascading of WIL components within the curricula with simple initiatives within the first year and becoming progressively more complex enables better student engagement (Dean et al. 2020).
STEP 3: Employers/Industry Partners' Approach to WIL collaboration with universities ***Active collaborators***	To encourage younger industry members into WIL collaboration as an implicit merit of having workplace supervisors closer to the age of the student population thus addressing generational expectations during employer/student interactions (Wardle 2014). In-Class and Out-of-class involvement – able to source talents from universities with good quality graduates/ready talent pipeline/incentivised to collaborate closely with selected universities for a Win-Win outcome.
STEP 4: Students/Undergraduates' Approach to embracing WIL and WIL resources ***Active collaborators***	Able to see the benefits of internship or industry exposure. Engaged and keen to participate and learn – able to 'stand-out' as a good potential to secure employment of choice. Faster turnaround time after graduation as a work-ready graduate equipped with both technical and soft skills.
STEP 5: The development of the WIL program in Malaysian universities' undergraduate curricula ***(Tripartite strategy)***	Mandatory induction at universities to provide information about the workplace, establish standards of professional behaviour, outline responsibilities on the placement and outline forms of assessment (Seow & Pan 2022; Wardle 2014) Simultaneous integration of employability-related modules within curricula to focus on both operational skills and develop professional skills towards a holistic learning outcome (Atkinson 2015; Nxumalo 2022; Smith et al. 2018; Wardle 2014) Bringing industry into class as a strategy for employers' involvement both in the curriculum as well as in collaboration with academics and students.

	Initiatives driven by the MoHE and jointly carried out by employers and academics in and out of class to develop momentum from step to step, scaffolded until the final semester (Dean et al. 2020).

Review Stage

Recommendations	Rationale
STEP 1: Government (MoHE)'s Approach to the introduction of WIL into the curriculum ***Key Driver***	Upon completion of the pilot study and after reviewing the outcome, MoHE can strategise and provide directions and improvements to course offerings and establish a set of national standards in the higher education policy/MQA which includes very importantly, tracking and measurement mechanisms for ongoing assessment and review.
STEP 2: Universities' Approach to WIL and WIL Resources ***Active collaborators***	Establish centralised support structures for WIL programs through collaboration across the university serves to share knowledge and experience while avoiding duplication and wastage of resources (Campbell et al. 2021) Universities engaged in WIL initiatives incorporate frameworks for handling problems and addressing emerging issues as essential foundations for WIL programs (Dean et al. 2020; Wardle 2014)
STEP 3: Employers/Industry Partners' Approach to WIL collaboration with universities ***Active collaborators***	Periodic sessions with students during work placement to provide constructive feedback to promote engagement and ongoing development of workplace skills. To review and ensure that the work duties are aligned with learning objectives as a Structured Internship Program (SIP).
STEP 4: Students/Undergraduates' Approach to embracing WIL and WIL resources ***Active collaborators***	Universities and employers are to establish mechanisms to provide constructive feedback to improve student performance during the placement, including scheduled meetings between both parties (Lim et al. 2020; Seow & Pan 2022).

STEP 5: The development of the WIL program in Malaysian universities' undergraduate curricula ***(Tripartite strategy)***	The MoHE is to empower universities with a certain level of autonomy to enable periodic curriculum reforms. University's brand image is enhanced when students are of good quality with good employability outcomes and are sought by top employers (Lim 2015; Lim et al. 2016) Post preparation include guided reflective learning and debrief sessions to maximise learning from the WIL experience, demonstrate alignment of teaching to practice and facilitate peer-to-peer learning (Seow & Pan 2022; Trede & Wehr 2021)

6.3.2 The Milestones towards Enhanced Graduate Employability Outcomes

The recommendations in ***Table 6.4*** above have been put forward as a structured 3-stage approach to ensure clarity of roles of all 3 stakeholders (government/universities/employers) in a cohesive tripartite arrangement. As observed in Chapters One and Three, the absence of milestone tracking against the thrusts of the policy documents, especially the overarching Blueprint, reveals a significant inadequacy in the present education system which is an important aspect of the research gap that this study aimed to address. To reinforce the three-stage approach, this research presents below, five key milestones that should be used to guide the recommendations and to help Malaysia eventually reach the intended outcomes of enhanced graduate employability (***Figure 6.3***).

The milestones in ***Table 6.5*** are linked to the personal and professional perspectives of the researcher (reflected in Chapter 1) which ultimately led to the purpose of embarking on this research journey.

Table 6.5 – Milestones to Guide the Recommendations

	Rationale
IMPORTANT **MILESTONES** towards Enhanced Graduate Employability Outcomes	(1) A **compulsory measurement of employability-related initiatives,** enforced and tracked by the MoHE. Standards are to be consistent with clear learning outcomes over specific periods and learning stages. Measurement of initiatives assists in curriculum review and design changes using the evidence of successes and improvement areas (Campbell et al. 2021; Seow & Pan 2022)

	(2) Develop **robust data analysis of employability outcomes** to enable credible findings for continued stakeholder engagement and ongoing commitment to WIL review. The revised curriculum must be compared against the current syllabus and learning outcomes as a yardstick to measure new initiatives and new learning outcomes (Seow & Pan 2022; Trede & Wehr 2021). (3) **Employment outcomes must be assessed against the type of employment secured.** *(Figure 6.3 - Intended Outcome = Attain and Maintain employment of choice)* (4) **Proposed duration of the pilot project - 4-5 years** for WIL to be introduced in stages from Year 1 to Year 3. Plus, another 1-2 years to measure outcomes and assess success factors and improvement areas before a similar approach is adopted as a policy across all universities nationwide (Seow & Pan 2022). (5**) Suggested Policy Enablers:** i) Review the main document, The Blueprint to re-strategise focus areas and to extend the Blueprint beyond 2025 to track and complete short-term and medium-term initiatives, including the pilot project. ii) Scrutinise niche areas of existing policies against industry reports and 21st-century labour challenges – from national levels to regional level to global level as a comparative study (Lim et al. 2020).

The recommendations are practical ways that stakeholders may cooperate and co-function to achieve learning outcomes that benefit undergraduates' workplace readiness.

Notwithstanding, the WIL initiatives that have been drawn-up step by step benefit all the stakeholders in Malaysia. As outlined in the 11th Malaysia Plan 2016-2020 in Chapter 3, it is very pertinent from the economic perspective that Malaysia focuses extensively on human capital development for it to achieve the status of a developed country. One approach is for universities to build a sustainable employability curriculum (Bradford 2013) that connects with the workplace where McRae (2015) emphasises that a transformative WIL model is necessary to create a sustainable curriculum of employability learning which prepares students for the 'future of work' (HERDSA 2017). The findings of this research and the recommendations that have been proposed are consistent with the best of recent research on WIL which is deliberated next.

6.4 The implications of this research

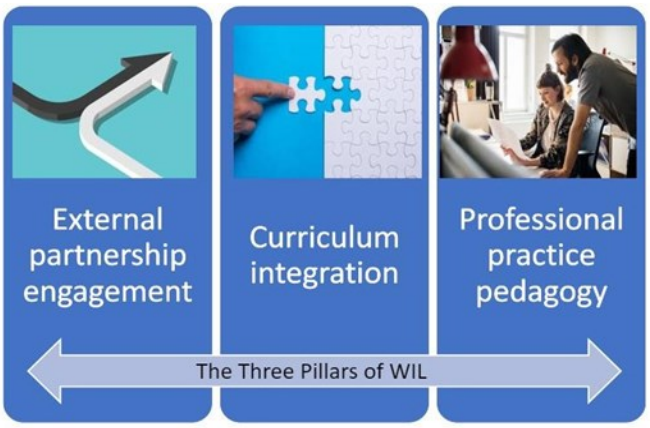
This section discusses a series of practical and theoretical implications drawn from the review of higher education policy documents and the thematic analysis from the focus group and interview transcripts to inform the approach that Malaysian universities take for WIL implementation.

6.4.1 The Practical Implications

As evidenced in their recent study in Australia, Trede and Wehr (2021) delineate WIL as a vehicle to engage in the public and private sector and community partnerships, design real-world relevant courses, prepare educated future professionals and strengthen graduates' employment outcomes. The scholars reinforce that there is no one best practice of WIL because the best practice in one context might not be the best practice in another, especially, in different countries with different cultures and education systems such as Malaysia.

Trede and Wehr's (2021) WIL Quality Framework can be used as a guide by Malaysian universities as a catalyst to design the curriculum. It is positioned as a capacity-building framework outlining possibilities and choices for a unique and customised WIL at the subject, course, school, faculty and university level. The Framework hinges on three distinctive pillars of WIL which are reflective of this research's summary of findings in ***Table 6.2*** namely the importance of stakeholder collaboration, a structured and scaffolded WIL approach and the involvement of industry in the curriculum as a blended learning approach (***Figure 6.6***). The three pillars are (1) external partnerships as the foundation and transition spaces for students to become professionals, (2) curriculum integration as a scaffolded approach to educating graduates with practice and employability skills aligned with career goals and (3) professional practice pedagogy which facilitates participatory, collaborative, relational and critical learning.

Figure 6.6 – The 3 Pillars of WIL *Source: Trede and Wehr (2021)*



The three pillars are mapped to five WIL principles advocated by McRae, Pretti and Church (2018) and incorporated into the UTS WIL Quality Framework by Trede and Wehr (2021) in ***Figure 6.6.*** The WIL principles: purposeful, authentic, evidenced, collaborative and supported, are aimed at ensuring a higher education outcome that strengthens graduates' employability (Trede & Wehr 2021; Wehr & Trede 2022), which is aligned with the overarching intent of this research.

McRae, Pretti and Church (2018) emphasise that (i) a purposeful WIL is designed and assessed in curriculum in accordance with internal and external accreditation standards, (ii) an authentic WIL is learner-centred, personalised and professionally relevant, (iii) an evidenced WIL is informed, scholarly and can be evaluated to determine its relevance, (iv) a collaborative WIL provides a value-add proposition for all stakeholders which is equitable and reciprocal and (v) a supported WIL can be supervised and mentored, before during and after. The five principles ensure that quality WIL experiences and opportunities to try out professional practices are integrated into the course curriculum. Professional knowledge, skills and attributes need to be identified for each course and intentionally scaffolded and co-designed to meet accreditation standards (Trede & Wehr 2021; Wehr & Trede 2022). A customised WIL Quality Framework for Malaysia, will, therefore, fulfil not only the government's (MoHE) policy and accreditation standards based on WIL research and scholarly literature on higher education standards but very importantly, address the current identified lack of clear assessment and measurement standards in the curricular design.

The assurance of a quality institutional outcome using a WIL framework is correspondingly supported by Campbell et al. (2021) who undertook an evidence-based project on WIL

practices across universities in Australia. Interestingly, the scholars highlight how government policy and accreditation standards towards quality education across Australia using TEQSA[15] and Europe (including the UK using QAA[16]) have resulted in universities being vigilant in making changes to curriculum designs and learning outcomes.

Campbell et al. (2021) reinforce their WIL framework as a comprehensive articulation of quality education using WIL practices. However, they acknowledge that their framework which was crafted in an Australian context should be used as a tool for ongoing benchmarking, evaluation and improvement in global spaces, with due consideration of policy and education systems. Other guiding frameworks include Dean et al.'s (2020) WIL Classification Framework aimed at scaffolding WIL components across an Australian degree as well as Pretti, Etmanski and Drewery's (2021) WIL Talent Framework based on research in Canada.

Another region that recently highlighted the need for customisation of WIL models is South Africa, where both government and universities are currently in the initial stages of building WIL policies and models. Its higher education network HERE-SA[17], with parallel objectives as discussed above, held in March 2022, a training workshop on how to build WIL as a strategic curricular intervention to develop graduates who are 'fit for purpose' (Lagrosen, Seyyed-Hashemi & Leitner 2004a, 2004b; Lim 2008, 2010). HERE-SA was launched by the government in 2021 to positively influence its universities to achieve better learning outcomes that connect industry requirements and university curricula. HERE-SA emphasises a key modality of WIL which is a tripartite curriculum strategy involving students, universities the employers as the success factors, besides ensuring a thorough assessment process to measure specific outcomes (Nxumalo 2022). A tripartite curriculum strategy heeds the call for close collaboration by Malaysian universities, employers and the government to customise a WIL model which meets the intended outcomes of developing employability skills in the undergraduate curriculum.

A recent initiative in Kazakhstan, called the Centres of Academic Excellence (CAE) programme, also emphasises the importance of a collaborative effort to increase the quality of higher education (Melynk & Yablokov 2023). The initiative hinges importantly on a concept of co-creation or co-design in cooperation with stakeholders which include the government as the key driver, which was deliberated in ***Table 6.4*** as an important consideration. As the policymaker, decision-maker and key driver, the MOHE is to likewise, champion the WIL

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[15] TEQSA - Tertiary Education Quality and Standards Agency - Australia's independent national quality assurance and regulatory agency for higher education
[16] QAA - The Quality Assurance Agency for Higher Education – UK's Quality Body for Higher Education
[17]Higher Education Reform Experts South Africa (HERE-SA) - A network of South African technology-focussed universities, which will focus on the revision and reinvigoration of teaching and learning strategies

agenda through active co-creation and collaboration with the university and industry in Malaysia. The CAE programme, according to Melynk and Yablokov (2023) invites all stakeholders to share ideas based on their experience and knowledge to enable a review of existing higher education policies and the re-design or development of new policies aimed at improving the learning outcomes at higher education. The scholars posit that public policy and universities are notoriously rigid and resistant to innovation, thus co-creating will enable policies to be re-redesigned and enacted better.

As was noted in Chapter Three, the Malaysian higher education system is highly centralised, which means that curriculum initiatives designed to enhance students' readiness for employment are likely to be difficult to implement without the strong support from the government. Chapter Five confirmed that the centralised nature of the Malaysian HE system is recognised as a barrier to curriculum innovation by staff, particularly in relation to employability teaching and learning. Also, Malaysian universities face very stringent policy guidelines on curriculum structure and taxonomy which are accredited annually by the MQA. The research findings presented in Chapter 5 evidence that the current centralisation of decision-making does indeed shape what universities have achieved and believe themselves to be able to achieve. In particular, Heads of Program discussed the "difficulty of pursuing curriculum changes outside of the strict requirements set by the MoHE" *(Speaker 4 (00:34:27).*

The government's directive and involvement in higher education policy reviews (***Table 6.4***) enable all stakeholders to be engaged as active collaborators to review and co-create or co-design policies, as advocated by Melynk and Yablokov (2023) to improve learning outcomes aimed at enhancing Malaysian graduates' employment outcomes.

6.4.2 The Theoretical Implications

This study, with its focus on Malaysia, underscores the substantial and dynamic influence that the government (as the stakeholder, key driver and decision-maker) can exert on Work-Integrated Learning (WIL) education. In the prevailing body of literature, which is largely influenced by the education systems in developed countries, the government's engagement is often portrayed as passively establishing overarching characteristics of the higher education and employment landscape.

The findings of this research prompt scholars in the realms of employability and WIL theory to reevaluate which key stakeholders are engaged in WIL and to reconsider how their involvement and active collaborative dynamics can be conceptualised and investigated as outlined in Trede & Wehr's (2021) WIL Framework in ***Figure 6.6***. Specifically, in a Malaysian

context, the role of government (the MOHE) as the policy maker, is positioned as the key stakeholder, who can drive the 10-year Malaysian Education Blueprint (MEB 2015-2025) which is a strategic roadmap towards a transformational journey for its undergraduates to gain specific skills and attributes that will equip them for the workplace (discussed in Chapter 2).

The theoretical implications of this discovery are multifaceted, which was outlined in ***Table 6.4***. Firstly, it challenges the conventional perception of governments primarily as policy-setters in WIL implementation. Instead, governments are recognized as active drivers and policymakers who directly shape and steer the WIL implementation (Seow & Pan 2022; Wardle 2014). This shift prompts a re-examination of the power dynamics among stakeholders and underscores the need for an analysis of their roles (Campbell et al. 2021; Trede & Wehr 2021).

Secondly, the findings call for a broader understanding of stakeholder engagement and collaboration within the context of WIL (Lim et al. 2021; Seow & Pan 2022). While the prevailing perspective emphasises the partnership between academia and industry, the inclusion of governments as a significant stakeholder and key driver, introduces a tripartite relationship (Nxumalo 2022) that necessitates new conceptual models. Researchers can explore how governments' active involvement affects the equilibrium of influence and collaboration among all three stakeholders (Seow & Pan 2022; Trede & Wehr 2021).

Lastly, the findings encourage a re-evaluation of research methodologies in the employability and WIL domains. Traditional approaches might not adequately capture the complexities of active government involvement (Campbell et al. 2021; Trede & Wehr 2021). Consequently, researchers need to develop innovative frameworks that can comprehensively account for the intricate collaborative roles between governments, educational institutions, and industries (Lim et al. 2020; Seow & Pan 2022).

In conclusion, this research findings expand the theoretical landscape surrounding WIL by shedding light on the proactive role governments can play as key drivers in shaping the dynamics of this educational approach. It challenges existing paradigms, prompting researchers to rethink stakeholder roles, interaction models, and methodological approaches (Rook 2015; Seow & Pan 2022; Trede & Wehr 2021; Wardle 2014).

6.5 The Significance of this research

Given the large number of universities in Malaysia and the different undergraduate courses being offered, the findings from this research cannot be generalised across all curricula.

Instead, the analysis recognises that the curriculum, content, delivery, and objectives underpinning curriculum design and delivery vary between both public and private Malaysian universities as well as across programs in different disciplinary fields. WIL intervention must, therefore, be considered collaboratively by the higher education policymaker (MoHE), Heads of Program, academics and employers, in order to identify the needed skills and learning outcomes in workplace settings across disciplines. An effort was made in the analysis to allow for the transferability of the research findings as discussed in the early works of Lincoln and Guba (1985). Transferability refers to how the reader utilises the results of research in a corresponding situation. This study is transferable in that the research methods, the data analysis and the themes identified in a Malaysian context could relate to other countries with similar graduate employability challenges albeit in differing contexts. In addition, this research contains useful insights that can be relevant and hold currency to other studies investigating the factors that contribute to a successful WIL experience.

The central premise of this research was to provide a set of guidelines for the design and delivery of WIL within the business curricula as a strategic intervention to enhance graduates' readiness for employment in Malaysia. In so doing, a conceptual framework of Malaysian graduates' employability was constructed and presented earlier in ***Figure 6.3***. Indications of possible challenges to WIL encountered by participants were explored within the focus groups and interview sessions and a thorough review of WIL literature from more mature higher education sectors was performed to identify specific recommendations for practice.

6.6 Limitations of the study and scope for future research

There are several limitations to this study. This study is by no means an exhaustive examination of introducing WIL as a curricular strategy to enhance the employment outcomes of Malaysian graduates. Limited resources coupled with Covid-19 pandemic restrictions from March 2020 to-date have contributed to the confined scope of this research.

One obstacle was the researcher's inability to meet the policymaker (the MoHE officials) both face-to-face and online, due to pandemic SOPs[18] as well as other stringent guidelines, thus confining the research to an examination of the MoHE policy documents and employability review documents, discussed in Chapter Three. Having said that, the document findings were instead corroborated during the focus groups and interview sessions with the academics and

[18] *SOP – standard operating procedures*

Heads of Programs as stakeholders who are familiar with and employ these policy guidelines at the universities.

The data collection protocol whilst purposive, with a generous sample size of 57 participants across three stakeholder groups in 24 focus group and interview sessions, could have included a larger number of new graduates/alumni to obtain a keener insight on graduate work readiness and how changes in curriculum design and learning outcomes could have reduced their challenges when they entered the workforce. New graduates' feedback could, in addition, enlighten contrary views that work-ready skills can be developed as an additive approach or acquired while 'on-the-job' (Wheelahan, Moodie & Doughney 2022), rather than considering a structured curricular strategy as a proposed intervention to enhance employment outcomes.

The scope of research was focused on business students and academics/Heads from the business discipline. The employers were also purposefully selected from those hiring business graduates or offering work placements to business students. This was due to time factors as well as better accessibility to and response from Business schools while observing Covid-19 restrictions during the period from 2020 to the end of 2021 in Malaysia. It is also necessary to limit the scope of the research because of the need to evaluate the viability of WIL through interviewing stakeholders who must cooperate in the design and delivery of WIL. The applicability of the findings to other fields of education cannot be taken for granted.

Another possible limitation is the selection of WIL as a proposed strategic curricular intervention in Malaysia rather than frameworks like USEM (Yorke & Knight 2004, 2006), CareerEdge (Pool & Sewell 2007), PBE (Higgs 2012; Higgs et al. 2012) and other similar employability frameworks. WIL is focused on because it is recognised as a particularly beneficial approach to employability teaching (Ajjawi et al. 2020; Campbell at al. 2021; Ferns, Russell & Kay 2016; Jackson 2018; Jackson & Bridgstock 2021; Nguyen 2020; Rook 2015; Trede & Wehr 2021; Wardle 2014). However, the viability of other mechanisms that might enhance employability was not evaluated within this thesis.

This research is focused on the viability of introducing WIL as a strategic curricular intervention to enhance Malaysian graduates' employment outcomes. The factors that need to be considered for a successful WIL implementation as per the second research objective and research questions, have been discussed in ***Table 6.4***. However, other factors which need to be considered prior to implementation of a curriculum change (e.g. the financial cost) cannot be considered in this thesis.

These limitations provide an avenue for future research on WIL in curriculum using pilot studies (*mentioned in Step 1 of the recommendations)* which is proposed via the MoHE's annual fundamental research grant scheme (FRGS funding). This grant allows for educational research that can improve existing policies, methodologies and solution models and frameworks via new concepts and theories which has the potential to contribute to the national strategic agenda (www.mygrants.gov.my).

6.7 Concluding remarks

This study's research objectives and research questions hinge on the underpinning importance of curricular strategies, curriculum design and measurement of learning objectives with regard to the production of better employment outcomes for students in Malaysia. A periodic review of the curriculum and its learning outcomes is crucial for the effectiveness of higher education both in the short and long term, regardless of the origin of universities, types and sizes (Khan & Law 2015). In their research findings on curriculum development in Australia, the UK and the USA, Khan and Law (2015) concur that universities, whether privately or state-run, develop curriculum that is culturally or nationally bound. The nature of curriculum related to work-ready capabilities will also vary according to the type of government policies, control and involvement in higher education management (Khan & Law 2015), which was deliberated in Chapter Three using curriculum samples from both private and public universities in Malaysia. Whilst there are components of practicum and internship in a few of the curriculum outlines, they are however, optional or elective components. Thus, they are not measured against expected learning outcomes, which have been discussed in the thematic analysis in Chapter Five. The thematic data analysis presented in Chapter Five has revealed that the stakeholders agree that there need to be reviews in the present curriculum towards enhancing an employability-focused education. The stakeholders also concur that the introduction of a structured curricular intervention like WIL would offer improvement to the curriculum and the graduates' readiness for employment, despite a few differing views from academics on whether to introduce WIL in the final year or scaffolded over the three years duration to gradually build work-ready competencies. Further discourse on curriculum development, its implementation and evaluation have been perused in ***Section 6.4*** using Trede and Wehr's (2021) WIL Quality Framework as a guide to design the curriculum in Malaysia. The role of government policies and their reinvention in global higher education as an education reform (Bloom 2005; OECD 2020a, 2020b) has also been delved into as a comparative study against the current Malaysian higher education landscape.

The term ‘quality’ in higher education is often contested, considered vague and highly contextual as different interest groups or stakeholders attach different meanings to the term (Lim 2008). Some common definitions include ‘quality as excellence’ or ‘fit for purpose’ where quality is defined in terms of achievements of the desired outcome and occasionally, ‘value for money’ when quality is directly related to costs (Lagrosen, Seyyed-Hashemi & Leitner 2004; Lim 2008; Sogunro 2017). A ‘quality’ higher education is sustainable as evidenced in the United Nation’s Sustainable Development Goal 4 (SDG 4 Quality Education) which requires universities to demonstrate improvement year-on-year by introducing new policies that indicate evidence of progressive teaching and learning. While the term ‘quality’ may be debatable, this research sought to view a ‘quality’ higher education as being one that prepares undergraduates with work-ready competencies prior to graduation. This ‘quality’ higher education is one that meets the intended learning objectives and expectations of all key stakeholders, namely undergraduates, academics, employers and policymakers. As reiterated by Suppramaniam, Siew and Ainara (2019), the ultimate measure of a quality university education rests in the richness of the students’ learning experience and its application in the workplace. As such, that quality should be recognised in the positive feedback from employers.

The demand for work-ready graduates, who are skilled and familiar with organisational demands and expectations is on the increase which escalates the need to incorporate work-integrated learning components in higher education curricula. With the globalisation of higher education including transnational education (TNE) and the quest for talent across borders, being a work-ready graduate is becoming essential to remain employable (Hill & Lim 2021). Furthermore, with the issue of massification of universities and colleges with similar offerings, WIL in the curriculum is viewed as a differentiator due to its integration of universities, workplace, government, business and industry, resulting in the development of appropriate talents for a quality workforce (Seow & Pan 2022).

In preparing graduates for the world of work, it is incumbent on universities to adjust their educational offerings, aligning them with the ever-changing industry expectations in tandem with global labour market challenges. This study has demonstrated that there is a critical need for the Malaysian higher education system to review and restrategise its curricula to deliver skilled and responsive graduates for industry needs. Whilst there has been a broad update of WIL as a curricular intervention tool and a detailed expansion of WIL literature, tertiary education institutions require clear and well-articulated directions and effective design and integration of WIL which has been outlined in this study’s recommendations. Although the terms ‘employability’ and ‘work-ready’ are ubiquitous in higher education, being work-ready

and employable according to Bradbury (2022) are the clear outcome of incorporating WIL in curricula as it encompasses a diversity of stakeholders from within and across faculties, industries and external learning spaces. The future of WIL in higher education is a journey of learning from the past to progress and create opportunities for the growth of new knowledge in tandem with industry expectations (Bradbury 2022).

The employability of 21st-century workers is improved by developing students' cognitive and social development as capable and informed individuals, professionals and social citizens (Al-Busaidi & Tuzlukova 2021; Bennett 2019, 2020; Bridges 2000; Lauder 2014). Pushing forward the WIL agenda within universities will be challenging in Malaysia due to its multicultural society and hierarchical higher education structure. As such, a well-defined strategy and a collaborative action plan are imperative at the government level. To make a substantial contribution to improving the quality of Malaysian graduates who are well-equipped to meet the challenges of the labour market, concerted efforts are required from 'game-changers' or champions from the industry, education and government. Importantly, the stakeholders are in concerted agreement that there is a need to review the existing curriculum with a focus towards successful employment outcomes. For improving the quality of Malaysian university graduates so that they more successfully take part in the labour market, it is in the best interests of universities, industry and government to advance the WIL agenda.

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