

**UNDERSTANDING EDUCATOR BELIEFS IN TEACHING
AND ASSESSING SOFT SKILLS: AN EXAMINATION
WITHIN THE MALAYSIAN PUBLIC HIGHER
EDUCATION SECTOR**

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DECLARATION

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

Perth, 25th February 2017

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ABSTRACT

Higher education plays a significant role in determining the growth and income of a country through the development of graduates with discipline-specific technical skills. However, employers consider graduates who have developed generic skills, or soft skills, as most employable. To address this, the Malaysian Ministry of Higher Education (MOHE) established the soft skills development module for the advancement of soft skills in higher education with the aim of producing the work-ready graduates demanded by employers. The module is flexible and provides for the development of seven soft skills: communication; critical thinking and problem solving; teamwork; lifelong learning and information management; entrepreneurship; moral and professional ethics; and leadership. Despite this innovative policy-level approach, little is yet known about the experiences of individual educators within the Malaysian higher education system in delivering and assessing soft skills.

A mixed methods approach was used in this study in order to gain a better understanding of educator experiences. An in-depth qualitative phenomenological approach was followed by a quantitative study to explore educator perceptions. The outcomes of this research highlight educator personal beliefs as a significant antecedent to perceptions of teaching and assessing soft skills. The varied and interdependent role of the educator as teacher, facilitator and consultant is also a central theme of this research, which recognises the central role of educators in the development by students of soft skills via formal, non-formal and informal modes with a student-learning focus.

Results across the two phases of this study have been integrated, leading to the development of two frameworks. The first enables a better understanding of educator perceptions about their role, and specifically “individual responsibility” in developing soft skills. The second guides the teaching and assessing of soft skills. These frameworks have implications for teaching and learning strategies associated with soft skills development, and have applicability across the higher education sector.

Keywords:

Soft skills, generic skills, employability skills, graduate attributes, higher education, teaching and assessing soft skills, mixed methods research.

TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	viii
LIST OF TABLES	ix
LIST OF ABBREVIATIONS	xiii
ACKNOWLEDGEMENTS	xv
DEDICATION	xvi
CHAPTER I INTRODUCTION	1
1.1 Introduction	1
1.2 Background to the research	3
1.3 Impetus for the study	6
1.4 Malaysian higher education institutions.....	7
1.5 Malaysian higher education and soft skills development.....	7
1.6 Research on soft skills	9
1.7 Significance of the study	11
1.8 Methodology	13
1.9 Overview of the thesis structure	16
1.10 Researcher reflections – Part 1	18
1.11 Conclusion	19
CHAPTER II LITERATURE REVIEW	21
2.1 Introduction.....	21
2.2 Emergence of the focus on soft skills	22
2.2.1 History.....	23
2.2.2 Soft skills in workplace settings	24
2.2.3 Soft skills in educational settings.....	25
2.3 Soft skills concepts and frameworks.....	31
2.4 Responsibility for soft skills development.....	41
2.4.1 Role of government.....	41
2.4.2 Role of the education and training sector.....	42
2.4.3 Role of employers	44
2.4.4 Role of individuals	45
2.5 Teaching and learning soft skills	48
2.5.1 Formal, non-formal and informal learning	48
2.5.2 Theories of teaching and learning	56
2.5.3 Soft skills training in practice	68
2.5.4 Assessment and reporting	74
2.6 Conclusions.....	79
CHAPTER III RESEARCH METHODOLOGY	83
3.1 Introduction.....	83
3.2 Selecting a research design	83
3.3 Selecting a research paradigm.....	87
3.4 Selecting a theoretical lens.....	91

3.5	Selecting a research methodology.....	92
3.5.1	Research methodology selected: mixed methods research.....	94
3.5.1.1	Qualitative methodology selected: phenomenological study.....	100
3.5.1.2	Quantitative methodology selected: cross-sectional study	101
3.6	Research method	101
3.6.1	Data collection method	101
3.6.1.1	In-depth interview	102
3.6.1.2	Web survey.....	107
3.6.2	Data analysis method.....	112
3.6.2.1	Qualitative data: thematic analysis.....	112
3.6.2.2	Quantitative data: SPSS statistics	115
3.7	Quality of research	119
3.7.1	Qualitative data: establishing trustworthiness and authenticity	119
3.7.2	Quantitative data: establishing validity and reliability	121
3.7.3	Mixed methods data: validation frameworks.....	121
3.8	Ethical considerations	122
3.8.1	Approval.....	122
3.8.2	Participation	122
3.8.3	Data management and reporting	123
3.9	Conclusion.....	124
CHAPTER IV QUALITATIVE RESEARCH RESULTS.....		125
4.1	Introduction	125
4.2	Participant profile.....	126
4.3	Research results.....	127
4.3.1	Establishing context	128
4.3.1.1	Defining soft skills	129
4.3.1.2	Value of soft skills	133
4.3.1.3	Importance for getting jobs	135
4.3.2	Role of educators	138
4.3.2.1	Educator views on “my role and your role”	138
4.3.2.2	Educator views on industry collaboration.....	147
4.3.3	Teaching soft skills	149
4.3.3.1	Delivery context.....	149
4.3.3.2	Delivery approaches.....	154
4.3.3.3	Implementation of delivery approaches.....	168
4.3.4	Assessing soft skills	183
4.3.4.1	Assessment context.....	184
4.3.4.2	Assessment methods	187
4.3.4.3	Implementation of assessment methods.....	196
4.4	Conclusion.....	202
CHAPTER V QUANTITATIVE RESEARCH RESULTS		203
5.1	Introduction	203
5.2	Data screening results	203
5.3	Participant profile.....	204
5.4	Soft skills and the curriculum	206
5.5	Educator perceptions about the importance of delivery approach.....	209
5.6	Soft skills and student employability	212
5.7	Educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills	216

5.7.1 Communication skills	220
5.7.2 Critical thinking and problem solving skills	223
5.7.3 Teamwork skills	225
5.7.4 Lifelong learning and information management	227
5.7.5 Entrepreneurship skills	228
5.7.6 Moral and professional ethics	232
5.7.7 Leadership skills	233
5.7.8 Variation in the levels of emphasis, confidence and willingness to teach and assess soft skills	236
5.8 Conclusion	239
CHAPTER VI FINDINGS – SYNTHESIS AND INTREPRETATION OF RESULTS	241
6.1 Educator experiences: personal beliefs	241
6.1.1 Introduction	241
6.1.2 Educator experiences in soft skills development	243
6.1.2.1 Context of the study	243
6.1.2.2 Overview of educator personal beliefs	250
6.2 Proposed framework for teaching and assessing soft skills	254
6.2.1 Teaching and assessing: a proposed framework	255
6.2.1.1 Personal beliefs and role conflict in soft skills development	261
6.2.1.2 Personal beliefs and teaching soft skills	266
6.2.1.3 Personal beliefs and assessing soft skills	288
6.3 Conclusion	295
CHAPTER VII CONCLUSIONS, IMPLICATIONS AND FUTURE RESEARCH	297
7.1 Introduction	297
7.2 Key findings	297
7.2.1 Personal beliefs are key to understanding teaching and learning soft skills	298
7.2.2 Agile hybrid approach: formal, non-formal and informal learning in developing soft skills	298
7.2.3 Building capable people: the role of students	299
7.3 Significance and implications	300
7.3.1 Implications for theory	300
7.3.2 Implications for policy development	302
7.3.3 Implications for educator professional development	303
7.3.3.1 Capability to undertake tasks	303
7.3.3.2 Competence to undertake tasks	305
7.3.3.3 Commitment from educators and their institutions	308
7.4 Recognition of limitations	308
7.4.1 Data	308
7.4.2 Methods	310
7.4.3 Challenges of mixing	311
7.5 Future research	313
7.6 Researcher reflections – Part 2	315
7.7 Conclusion	316
Appendix A1 Approval from the Murdoch University Human Research Ethics Committee – Phase 1: Interview	319

Appendix A2 Approval from the Murdoch University Human Research Ethics Committee – Phase 2: Web Survey.....	320
Appendix A3 Approval from the Research Promotion and Coordination Committee, EPU, Prime Minister’s Department Malaysia.....	321
Appendix B1 Interview information sheet.....	324
Appendix B2 Interview consent form.....	326
Appendix B3 Interview guide.....	327
Appendix B4 Interview card	352
Appendix C Web survey	357
Appendix D1 Translation of finding themes.....	382
Appendix D2 Advantages and disadvantages of delivery in educational settings and workplace settings.....	399
Appendix D3 Goal attainment of delivery approaches and suggested alternatives.....	423
Appendix D4 4.3.3.3.2 Problems encountered in developing soft skills	432
Appendix D5 4.3.4.3.2 Problems encountered in assessing soft skills	444
Appendix E Presentations and publications	452
LIST OF REFERENCES	453

LIST OF FIGURES

Figure 1.1: Key job-specific skills gaps in Malaysia	5
Figure 1.2: Soft skills development framework.....	8
Figure 2.1: Modes and characteristics of education.....	50
Figure 2.2: Formal, non-formal and informal learning in the workplace	54
Figure 2.3: Formal and informal learning	55
Figure 2.4: The natural maturation toward self-direction as compared with the culturally permitted rate of growth of self-direction.....	58
Figure 2.5: Direction and support in learning	61
Figure 2.6: Principles of heutagogy	65
Figure 3.1: Prototypical version of the convergent design	99
Figure 3.2: Linked studies: qualitative and quantitative data	118
Figure 4.1: Views of educators on teaching and learning strategies.....	180
Figure 6.1: Convergent mixed methods design	241
Figure 6.2: Structural overview of educator personal beliefs	251
Figure 6.3: A framework for teaching and assessing soft skills	256
Figure 6.4: Framework to understand educators' perceptions of their role	263
Figure 6.5: The learning modes	269
Figure 6.6: Transfer of responsibility for soft skills development.....	280
Figure 7.1: Central role of agile educator in teaching and assessing soft skills	302

LIST OF TABLES

Table 2.1: Terms describing soft skills by country	32
Table 2.2: Major developments in generic skills by country and at international level	34
Table 2.3: Common elements across soft skill types	39
Table 2.4: Learning autonomy	60
Table 2.5: Principles of pedagogy, andragogy and heutagogy	67
Table 2.6: Patterns practised by HEIs in the UK	69
Table 2.7: Principles of good teaching consistent with the development of employability skills and attributes	72
Table 2.8: Assessment: principles of good teaching	78
Table 3.1: Crotty's model of developing a research study.....	85
Table 3.2: Basic characteristics of four worldviews used in research	86
Table 3.3: Elements of worldviews and implications for practice.....	87
Table 3.4: Authors and the focus or orientation of their definition of mixed methods	95
Table 3.5: Aspect of rewards, social costs and trust	109
Table 3.6: Phases of thematic analysis.....	113
Table 3.7: Main features of this mixed methods research	117
Table 3.8: Summary of techniques for establishing trustworthiness	120
Table 3.9: Component of authenticity.....	120
Table 4.1: Profile of participants ($n = 25$).....	126
Table 4.2: Research findings.....	127
Table 4.3: Advantages and disadvantages of formal activities of teaching and learning.....	155

Table 4.4: Advantages and disadvantages of support programs	157
Table 4.5: Advantages and disadvantages of campus life activities	159
Table 4.6: Advantages and disadvantages of industrial training	160
Table 4.7: Goal attainment of delivery approaches and suggested alternatives	167
Table 4.8: Educator beliefs about responsibility for soft skills development	170
Table 4.9: Ways educators implement soft skills in their teaching	173
Table 5.1: Teaching as standalone course.....	205
Table 5.2: ANOVA results for beliefs about familiarity with university official list of soft skills and obstacles in teaching soft skills	207
Table 5.3: Mean scores showing educator perceptions about the factors that influence teaching and assessing soft skills	209
Table 5.4: Mean scores showing educator perceptions about the importance of delivery approach.....	211
Table 5.5: Mean scores showing educator perceptions about student employability ...	212
Table 5.6: ANOVA results for beliefs about the important of soft skills for student employability across demographic categories	213
Table 5.7: Mean scores showing educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills	217
Table 5.8: Summary of educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills	218
Table 5.9: ANOVA results showing the influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess communication skills.....	221

Table 5.10: ANOVA results showing influence of demographic variables on perceptions relating to the emphasis to teach and assess critical thinking and problem solving skills	224
Table 5.11: ANOVA results showing influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess teamwork skills.....	226
Table 5.12: ANOVA results showing the influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess entrepreneurship skills.....	229
Table 5.13: ANOVA results showing the influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess leadership skills	233
Table 5.14: Emphasis, confidence and willingness to teach and assess soft skills across university category	237
Table 5.15: Emphasis, confidence and willingness to teach and assess soft skills across discipline	238
Table 5.16: Emphasis, confidence and willingness to teach and assess entrepreneurship skills across whether or not educators had industry experience	238
Table 6.1: Educator beliefs and soft skills development: synthesis and interpretation of results	242
Table 6.2: Soft skills development and the learning modes.....	270
Table 6.3: Learning soft skills in formal, non-formal and informal modes.....	271
Table 6.3: Learning soft skills in formal, non-formal and informal modes (continued)	272

Table 6.4: Questions for full utilisation of delivery approaches.....277

Table 6.5: Learning soft skills: implicit versus explicit.....277

LIST OF ABBREVIATIONS

ACCI	Australian Chamber of Commerce and Industry
ACER	Australian Council for Educational Research
AEC	Australian Education Council
ANOVA	analysis of variance
APEL	Accreditation of Prior Experiential Learning
APK	Asas Pembudayaan Keusahawanan [Basic Entrepreneurship]
ASEAN	Association of Southeast Asian Nations
ASTD	American Society for Training and Development
BCA	Business Council of Australia
BIHECC	Business, Industry and Higher Education Collaboration Council
CBI	Confederation of British Industry
CSfW	Core Skills for Work Developmental Framework
DEEWR	Department of Education, Employment and Workplace Relations
DeSeCo	Definitions and Selection of Competencies
DEST	Department of Education, Science and Training
DIISCCRTE	Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education
DOL	Department of Labour
DVC	deputy vice chancellor
EC	European Commission
EPU	Economic Planning Unit
GNVQ	General National Vocational Qualifications
HEIs	higher education institutions
HEP	Hal Ehwal Pelajar [Student Current Affairs]
HRD	human resource development
KI	kemahiran insaniah [soft skills]
KPI	key performance indicators
KPT	Kementerian Pengajian Tinggi [Ministry of Higher Education]
KPJPIPT	Ketua Pengarah Jabatan Pengurusan Institusi Pengajian Tinggi [Chief Director, Department of Higher Education Institutions Management]
KSSM	Kurikulum Standard Sekolah Menengah [Secondary School Standard Curriculum]
KSSR	Kurikulum Standard Sekolah Rendah [Primary School Standard Curriculum]
JMMR	Journal of Mixed Methods Research
My3S	Malaysian Soft Skills Scale
MOE	Ministry of Education
MOHE	Ministry of Higher Education
MOSS	Murdoch Online Survey System
MQA	Malaysian Qualifications Agency
NCVER	National Centre for Vocational Education Research
NGOs	non-governmental organisations
NVQ	National Vocational Qualifications
OECD	Organisation for Economic Cooperation and Development
PBL	problem-based learning

PCA	Principle Component Analysis
PLP	Pusat Latihan Pelajar [Centre for Student Training]
PTK	Penilaian Tahap Kecekapan [Competency Level Appraisal]
PTPTN	Perbadanan Tabung Pendidikan Tinggi Nasional [National Higher Education Fund Corporation]
QCA	Qualifications and Curriculum Authority
QUAL	qualitative
quan	quantitative
QSA	Graduate Skills Assessment
RU	research university
SCL	student-centred learning
SCANS	Secretary's Commission on Achieving Necessary Skills
SDL	self-directed learning
SEEC	South East England Consortium
SMEs	small and medium enterprises
SPSS	Statistical Package for the Social Sciences
STG	self-training group
SUKSIS	Kor Sukarelawan Polis Siswa Siswi [Undergraduate Police Volunteer Corps]
UiTM	Universiti Teknologi Mara Malaysia
UK	United Kingdom
UMT	Universiti Malaysia Terengganu
UPM	Universiti Putra Malaysia
US	United States
VET	vocational education and training
VC	vice chancellor
VF	validation framework
WIL	work-integrated learning

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To those who have interest in my study, thank you for reading this thesis. My hope in sharing this knowledge is that it helps bring soft skills development practices to the next level.

DEDICATION

I dedicated this thesis to my late father, Haji Meor Osman Mat Liki (1941–2013), and my mother, Hajah Lejah Megat Ahamad, for all their love, support, advice and encouragement.

*Ayahnda dan bonda serta keluarga
bersyukur pada Tuhan sebab anaknda diberi
Peluang mencari Kecemerlangan.*

*Oleh itu! CEMERLANG di tangan Kanan
Gemilang di tangan Kiri nanti!!!*

*Aturlah Langkah Kanan dan Kiri
Mu dengan penuh Berhema
Ikutlah Rasmi Padi
Mangkin berisi Mangkin MENUNDUK*

*Kepada TUHAN JUGALAH Ayahnda dan Bonda
Berserah demi Keselamatan Anaknda Ku!!!
Wan Sofiah bt Meor Osman
Salam dari!!*

*Ayahnda Bonda
Yang
Jauh*

Ahad 13.4.08

CHAPTER I

INTRODUCTION

1.1 Introduction

This thesis explores and interprets the experiences of educators in developing soft skills in tertiary education in Malaysia. The aim is to explore soft skills development efforts within Malaysian public higher education institutions (HEIs). In particular, a deeper understanding is sought of the experiences¹ of educators as soft skills developers. The focus of this study is the underlying beliefs that give direction and justification to the role of educators, and three main research questions are addressed:

Question 1: What are the individual and institutional factors that influence educator perceptions on teaching and assessing soft skills?

Question 2: What are the perceptions of educators about their role in developing soft skills?

Question 3: What are the experiences of educators when they are teaching and assessing soft skills?

The term educator refers to those directly involved in the delivery of curriculum to students. Academic research on the experiences of educators in soft skills development is sparse in Malaysia. To fill this gap, this thesis employs mixed methods research to explore educator experiences. Where previous research has had such a focus it has most often been related to student experiences rather than to that of the educators who deliver the curriculum. Further, it has often been broadly focused and/or the approach has

¹ The researcher uses terms such as experiences, perceptions, views and expectations interchangeably.

tended to be more quantitative. Therefore, educator experiences are not yet clearly understood. This research explores diverse perspectives on the experience of educators as trainers for soft skills development. The stories of educator experiences were gathered from 25 interviews conducted over a two-month period and 613 web survey responses collected over a five-month period. The text constructed from the transcribed in-depth interviews provides the interviewees' descriptions of teaching and assessing soft skills. It is important to explore these experiences because educators may "still maintain a strong belief" that their job is to teach academic knowledge² or hard skills rather than soft skills (see Star & Hammer, 2008, p. 15) and they may not perceive developing soft skills "as their responsibility" (Bath, Smith, Stein, & Swann, 2004, p. 314). The cross-sectional online survey design included multiple scales to measure the impact of variables on educator perceptions about the emphasis, confidence and willingness of educators in teaching and assessing soft skills. Within the mixed methods framework of this research, qualitative descriptions of educator experiences about teaching and assessing are merged with quantitative measures of educator perceptions to develop a more complete picture.

The research background and rationale for conducting the study are described in Section 1.2, and impetus for the study is described in Section 1.3. This is followed by a brief explanation of the Malaysian higher education context, research on soft skills, and an explanation of the significance of the study. Subsequently, a brief overview of the research methodology is described and the thesis structure is outlined. Prior to the chapter's conclusion, a section is included outlining the role of the personal experience

² Academic knowledge consists of academic skills and technical skills.

of the researcher as an educator in the Malaysian higher education system, in order to acknowledge the role of this experience in the interpretation of data for the study.

1.2 Background to the research

Changing demands of work, changing work environments, and changing employment patterns and contexts have led to a reconsideration of the skills and attributes needed by graduates as they seek employment at the end of a university degree. These factors see increased demands for work-ready graduates to possess high levels of what are known as generic or soft skills,³ as well as the more focused discipline-specific skills of their chosen field. This is of significance to education providers as they place huge importance on the employability of graduates and their continued success. This has led to the development of an increasingly complex landscape associated with soft skills initiatives in many levels of education on the international stage. Issues associated with the definition and conceptualisation of soft skills, as well as their delivery and assessment, have been discussed and studied by several researchers since these skills began to feature on the main agenda of the generic and work related skills movement in the 1980s and 1990s (see Abu, Kamsah, & Razzaly, 2008; Cinque, 2013; de la Harpe et al., 2009; Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education [DIISCCRTE] & Department of Education, Employment and Workplace Relations [DEEWR], 2013; Green, Hammer, & Star, 2009; Hager, 2006; Hanover Research, 2014a & 2014b; Hart Research Associate, 2015; Jansen & Suhre,

³ For the purposes of this study, generic skills will be referred to as soft skills. This study acknowledges the existence of other terms within the terminology used for soft skills, such as generic skills, generic attributes, employability skills, key skills, key competencies and transferrable skills. In this study, these terms are treated as related and equivalent.

2015; Matteson, Anderson, & Bowden, 2016; McCurry, 2003; Ministry of Higher Education [MOHE], 2011; Precision Consultancy for the Business, Industry and Higher Education Collaboration Council [BIHECC], 2007; Star & Hammer, 2008).

Higher education has been found to play a significant role in determining the growth and income of a country (World Bank, 2012). Investment in higher education provides economic and social benefits that include higher productivity and strong nation building (Baum & Payea, 2005). Citizens with a higher education degree tend to participate in elections, to be more aware of their responsibilities, and to be more involved in community service (Baum, Ma, & Payea, 2013). Higher education is therefore seen to be able to improve quality of life both at an individual level and at the level of the nation.

Despite these positive effects, low and middle income countries, especially in East Asia, are facing challenges associated with skills development (World Bank, 2012). In particular, there are recognised gaps in Malaysian employee skill sets (see Figure 1.1). Information technology skills, English language proficiency and professional communication skills are amongst those skills identified as lacking in graduates (World Bank, 2012), suggesting that beyond academic knowledge, soft or generic skills are in need of further development to ensure individuals are work ready (e.g. Armstrong & Kleiner, 1996; Fahnert, 2015; Harvey, 1993; Precision Consultancy for the BIHECC, 2007; Rao, 2015; World Bank, 2012). In a graduate employability survey conducted in 2014 by TalentCorp and the World Bank, communication skills still appeared to be the most lacking in Malaysian graduates, followed by creative/critical thinking, analytical and problem-solving competencies (World Bank, 2014).

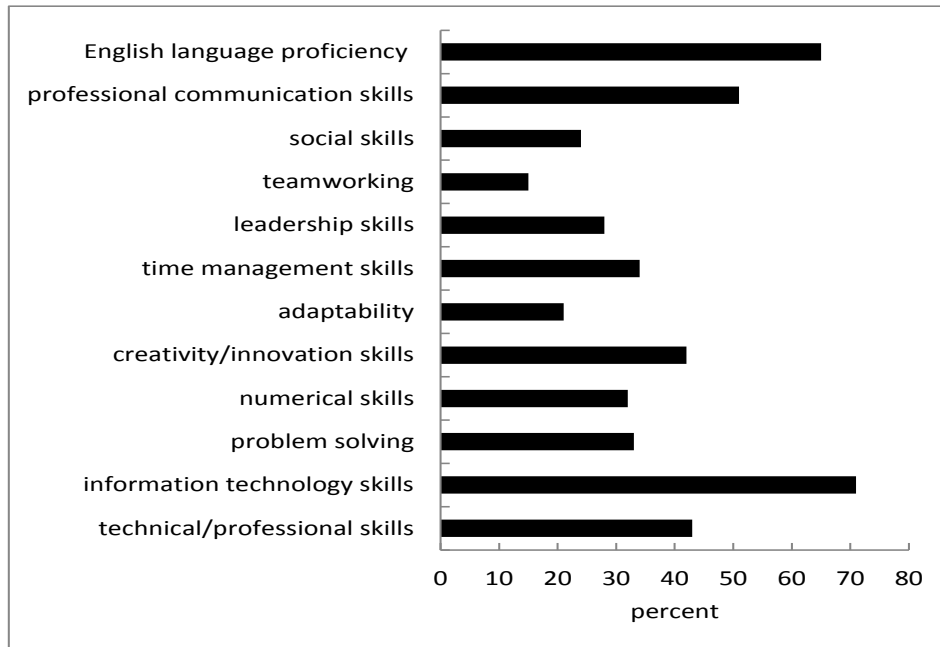


Figure 1.1: Key job-specific skills gaps in Malaysia

Note: Skills most lacking among employees (proportion of respondents indicating particular skill “one of the three most lacked”), both professionals and skilled workers. Adapted from “Putting Higher Education to Work: Skills and Research for Growth in East Asia” by the World Bank, 2012, p. 56. Retrieved from http://siteresources.worldbank.org/EASTASIAPACIFICEXT/Resources/226300-1279680449418/7267211-1318449387306/EAP_higher_education_fullreport.pdf

Public higher education systems are critical in producing work-ready employees, especially as 70 per cent of all students in East Asia are enrolled in this sector (World Bank, 2012). However, there is evidence that higher education does not sufficiently equip its graduates with the skills that firms want in order to increase productivity. This failure is due to the disconnect between HEIs and their stakeholders, such as schools, training providers and employers in East Asia’s higher education system. For example, a survey conducted in Malaysia revealed that there is a lack of communication between universities and employers on the required skills (World Bank, 2014). Thus, as a middle-income country, Malaysia has begun to take measures to address these concerns by focusing on soft skills development in the higher education system.

1.3 Impetus for the study

The impetus for this study started largely from a desire to address a much more personal issue. For some time I have felt – as have many of my colleagues – that the teaching and assessing of soft skills is somehow different from that of academic knowledge. As university lecturers, we are academic knowledge experts, but have had little or no formal teacher education to prepare us for the teaching role. We believe that teaching and assessing soft skills not only requires a kind of “pedagogy competence” but also a continuous commitment from lecturers which influences the kinds of “interactions” that occur in a “learning space”. There is still room for improvement in terms of the approaches used and the roles of HEIs in ensuring educator involvement in soft skills development. In addition, the transformation of soft skills development from “able to be learned” to “able to be taught” (Curtis, 2004a, p. 21) and the ideological shift of HEIs in terms of their role “from knowing as contemplation to knowing as operation” (Barnett, 1994, p. 15), from academic competence to operational competence (Chada, 2006), from the academic knowledge to the person (Drew, 1998) or from “a move from the traditional curriculum focus on ‘content’ and knowledge to one which emphasises ‘process’” (Vu, Rigbi, Wood, & Daly, 2011, p. 5) have changed the education landscape. Therefore, as educators are the linchpins in the successful development and implementation of soft skills in HEIs, it is important to recognise their roles and acknowledge their perceptions and beliefs.

1.4 Malaysian higher education institutions

The Malaysian higher education system⁴ consists of public and private HEIs, and other HEIs. There are 20 public HEIs, 487 private HEIs and 61 other HEIs (World Bank, 2012). The private HEIs comprise 20 universities, 21 university colleges, 398 colleges, five foreign branch campuses and 43 open universities and virtual universities. The term ‘other’ refers to 24 polytechnics and 37 community colleges.

The 20 public HEIs are divided into three categories: research intensive; specialised; and broad based (Malaysian Qualifications Agency [MQA], n.d.). The resources of research-intensive universities (e.g. Universiti Putra Malaysia [UPM]) are used primarily for research, while comprehensive programs in various disciplines are offered by broad-based universities (e.g. Universiti Teknologi MARA [UiTM]), and programs in specialist disciplines are offered by universities in the specialised university category (e.g. Universiti Malaysia Terengganu [UMT]).

1.5 Malaysian higher education and soft skills development

In 2006, the Ministry of Higher Education (MOHE) Malaysia established the soft skills development module to inculcate soft skills in university students (Kementerian Pengajian Tinggi [KPT - Ministry of Higher Education], 2006). Educators in Malaysian HEIs commonly refer to this module as the soft skills module, and it has been developed to produce work-ready graduates as required by employers. The module has been established as a guideline for public HEIs to develop soft skills, and provides for

⁴ Higher education refers to the education that takes place beyond upper secondary schooling that is provided by public and private HEIs.

flexibility in the implementation process. The module focuses on seven soft skills components identified as communication, critical thinking and problem solving, teamwork, lifelong learning and information management, entrepreneurship, moral and professional ethics, and leadership.

The soft skills module includes three approaches to developing soft skills in students: formal teaching and learning activities consisting of embedded and standalone models; a support program comprising academic and non-academic focus activities; and campus life activities (KPT, 2006). Figure 1.2 illustrates these suggested approaches to developing soft skills.

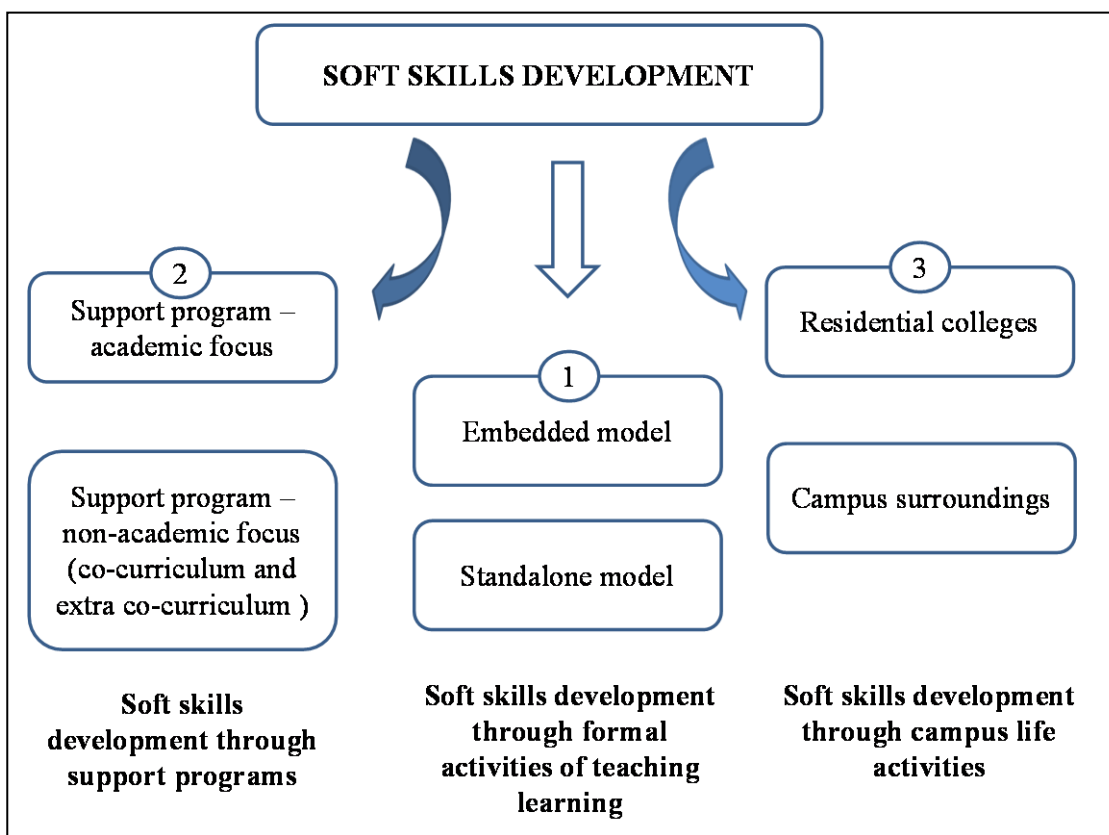


Figure 1.2: Soft skills development framework

Note: Adapted from “Modul Pembangunan Kemahiran Insaniah (Soft Skills) untuk Pengajian Tinggi Malaysia” by the KPT, 2006, Serdang: Penerbit Universiti Putra Malaysia, p. 15.

In the embedded model, the soft skill components are integrated into the core subject curriculum. In contrast, in the standalone model, soft skill components are taught by

educators as a separate subject, for example public speaking or language (depicted centrally at 1 in Figure 1.2). The academic focus option (2) emphasises programs such as writing workshops and language clinics. Generally, these programs are conducted by centralised departments concerned with student affairs, in collaboration with faculties and colleges. Students can also develop their soft skills in the co-curriculum and extra co-curriculum modes (2) by participating in activities conducted by student clubs and societies such as badminton clubs, and peer groups. Finally, campus life activities (3) offer students the opportunity to take part in many indoor and outdoor activities at different levels. Various programs are conducted by residential colleges, faculties and universities. None of these models clearly outline industrial training or work-integrated learning as an important approach to soft skills development.

The focus of higher education on soft skills development may lead to curriculum change (Bath et al., 2004). The evidence is that educators are expected to adapt their ways of teaching (Star & Hammer, 2008); that is, changing the way students learn requires specific approaches. Bolton and Hyland (2003) indicate that not much research has been undertaken focusing on the educators who are responsible for teaching and assessing these skills. To date, it still appears that little work has been done specifically in Malaysia to investigate educator perceptions of their role. Thus, it is important to study the experiences of educators to better understand their roles in soft skills development.

1.6 Research on soft skills

Lots of studies look at soft skills where the focus is partially but not fully on the educator, and where emphasis is given to certain soft skills but not all. The following

studies have been carried out in Malaysia and Australia to investigate soft skills development at HEIs, and are among the key studies that have been influential in the development of the current study (see Abu et al., 2008; Precision Consultancy for the BIHECC, 2007; de la Harpe et al., 2009). These studies employed a variety of methodologies and presented important findings.

The most important Malaysian study was conducted in 2007, a year after the soft skills module was launched in 2006 (see Abu et al., 2008). The objectives of the study were to determine the level of skills, knowledge and readiness of academic staff and the institutional support for soft skills development; to determine the existing level of implementation, method used and assessment of soft skills; and to determine the existing weaknesses, and problems faced by academic staff in developing soft skills. This significant quantitative study did not further explore educators' perceptions about their role in developing soft skills or their experiences in teaching and assessing soft skills.

In 2007, a study was commissioned to investigate the development, teaching, assessment and reporting of graduate employability skills or soft skills in Australia (see Precision Consultancy for the BIHECC, 2007). As with the Malaysian study, this study did not explore in any depth educators' perceptions about their role in developing soft skills and their experiences in teaching and assessing soft skills. However, it did provide an overview of activity with some examples of best practice.

A further Australian study known as the *bfactor* project was conducted in 2008 to investigate graduate attributes or soft skills at HEIs (see de la Harpe et al., 2009). As with the other two key studies, this research contributed to the understanding of the development of soft skills. This study took a largely quantitative approach with limited

in-depth detail elicited from participants, and so, like the other studies, did not fully report academic staff experiences in regard to soft skills development.

In addition to these three key studies, two recent studies conducted in Malaysia (MOHE, 2011) and Australia (DIISCCRTE & DEEWR, 2013) have also contributed to the field. The Malaysian study is known as Malaysian Soft Skills Scale (My3S) (MOHE, 2011). The aim of this ongoing study is to assess soft skills achievement among undergraduates. It is not aimed at the experiences of educators who deliver the curriculum. Similarly, a study conducted in Australia had as its primary aim the Core Skills for Work Developmental Framework (CSfW) (DIISCCRTE & DEEWR, 2013); once again there was no focus on the role of educators in developing soft skills among their students.

These studies point to the importance of individual educators in the emphasis on, and teaching and assessment of, soft skills. However, there is still limited understanding of educators' experiences in soft skills development, especially their perceptions and self-beliefs. This area needs to be explored; however, this study did not further explore educator conceptions of soft skills as conducted in the manner of Barrie (2004, 2006, 2007).

1.7 Significance of the study

This study is significant for three important reasons. Firstly, the study is an in-depth exploration of the experiences of educators, and in particular their role in developing soft skills and how this influences their activities. Given the establishment of the soft skills development module in higher education by the Malaysian MOHE – which aims to produce the work-ready graduates demanded by employers – its implementation is an

important issue for educators. An understanding of educator perceptions of their role, and specifically ‘individual responsibility’ in developing soft skills, can only contribute to the better formulation of policies and strategies on soft skills development. This will assist HEIs in taking new directions in producing work-ready graduates. Åkerlind (2004, p. 373) suggests that the perceptions of educators are essential “but are rarely considered”. This study proposes to develop a framework to better understand educators’ perceptions of their role and the role of others.

Secondly, the study explores the educator’s perception of teaching and assessing and explains how the personal beliefs of educators contribute to this perception. Academic knowledge is easy to teach and measure (Henville, 2012; Rao, 2014). Soft skills, on the other hand, are hard to teach and measure. This is because the nature of each is different. Soft skills are intangible, subjective, undefined and context-specific, whereas academic knowledge is tangible, objective, specific and predictable. Understanding educator perceptions of teaching and assessing soft skills can improve pedagogical competence for teaching and assessing soft skills, which can be done through training and development of educators in higher education. This study also proposes to develop a framework for teaching and learning soft skills which offers direction and support for HEIs to engage in the work of soft skills development. Through this framework, energies, resources and attention can be strengthened. In this way, the potential of the curriculum, as well as that of educators and students, can be maximised for better development of soft skills.

Thirdly, the work offers a direction for research into the training and development of educators in higher education. This thesis contributes to the growing literature on formal, non-formal and informal learning and how this can lead to the use of pedagogy, andragogy and heutagogy models in soft skills development. The major finding of the

existing research is that there is no single “one size fits all” model for soft skills development. This calls for an agile hybrid approach and for the roles of educators in developing soft skills to be flexible. However, implementation of the approach selected by educators involves a sophisticated interplay with their personal beliefs. Thus, it is important for universities to address these beliefs because appropriate conceptions support the development of soft skills (Radloff, de la Harpe, Dalton, Thomas, & Lawson, 2008). Through training and support, educators will be exposed to the various strategies of implementing an agile hybrid approach, and this will help them achieve and maintain flexibility in their role of developing soft skills. This study will go some way in unpacking this agile approach.

This study also contributes to research and scholarship on soft skills development that derives from the methodology used in this study. The mixed methods design offers pragmatic advantages by providing robust descriptions of the phenomenon under investigation (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). In-depth exploration of the participant’s perception and point of view measures in the survey instrument yields evidence about educators’ personal beliefs that can account for their practice in soft skills development. The sophisticated interplay between educators’ personal beliefs and their practice offers insights that, if another methodology was employed, might not be available.

1.8 Methodology

The reasons for the decision to use a mixed methods design were manifold. A decision to conduct mixed methods research requires sound research problems and questions (Heyvaert, Hannes, Maes, & Onghena, 2013; Punch, 2005). This was considered to be

the case for this study, where the primary focus was on understanding the experiences of educators in teaching and learning soft skills, seen as central due to their role in developing work-ready graduates.

A mixed methods approach was considered useful in expanding on existing research, specifically when the understanding of 'soft skills' was shown in the literature to be particularly fragmented (see Van Loo & Toolsema, 2005). Both a broad institutional view and the personal insights of individual educators were required. Therefore, a convergent mixed methods approach was seen as appropriate to obtain this multi-level data. Moreover, the use of mixed methods research was identified as being able to address limitations in the extant literature relating to an in-depth understanding of educator perceptions and the role of individual and institution-based characteristics on these perceptions. Greene, Caracelli, and Graham (1989) and Creswell and Plano Clark (2011) support such reasons for the use of a mixed methods approach. Of the options outlined by Creswell and Plano Clark (2011), a QUAL + quan (Leech & Onwuegbuzie, 2009) convergent approach was considered appropriate for this study. The qualitative and quantitative strands are implemented one after the other, with the qualitative strand taking priority. The strands are kept independent during analysis and the results then mixed during overall interpretation (Creswell & Plano Clark, 2011).

This study collected data from educators across five Malaysian public HEIs. Purposive sampling was employed for the qualitative data collection and a form of convenience sampling for the quantitative data. The first phase of data collection employed in-depth interviews where some quantitative (mainly demographic) data was also collected from the participants. This approach involved semi-structured interviews with 25 educators that sought data on: establishing context (including definition of soft skills, and the

value of soft skills and their importance in getting jobs); the role of educators; and teaching and assessing soft skills.

The second phase of data collection employed an online survey. The cross-sectional study returned a sample of 613 participants. A combination of closed and open-ended questions sought data on the importance of soft skills as a focus for the university and within the curriculum; familiarity with university soft skills; the importance of soft skills for students' employability; teaching soft skills as standalone courses; the emphasis placed on teaching and assessment of soft skills; the confidence and willingness to teach and assess soft skills; the importance of delivery approach; obstacles in teaching and assessing soft skills; and the challenges that influence teaching and assessing soft skills.

The qualitative data from the interviews were transcribed verbatim and analysed via a thematic approach. The six phases outlined by Broun and Clarke (2006) – familiarisation with the data; generation of initial codes; searching for themes; reviewing themes; defining and naming themes; and reporting – were followed. These guidelines provide a flexible way to move back and forward within the data set, making decisions along the way, which reinforces the rigor of the approach. It also allows for the researcher to make clear what was done, how it was done and why it was done.

The quantitative data were screened using the Statistical Package for the Social Science (SPSS) program (Version 17) for normality as per Tabachnick and Fidell (2012), and descriptive statistics and analysis of variance (ANOVA) techniques were used to identify patterns of interest in relation to the impact of demographic factors on the emphasis, confidence, and willingness to teach and learn soft skills.

In terms of analysis, the results were compared and related to each other once independent analysis had been conducted, and then integrated during interpretation. This convergence during interpretation was conducted in an iterative manner to check and countercheck the inferences that were being made and to ensure that the findings were true to the data. From this, an overall understanding of the data was developed and findings were reported.

1.9 Overview of the thesis structure

What follows is a brief description of the rest of the chapters in this thesis. Chapter II presents the literature review related to soft skills development. It starts with a description of the soft skills agenda in both workplace and educational settings. The chapter provides further details on the three key studies conducted in Malaysia and Australia. Various soft skill concepts and frameworks are presented with a focus on soft skills development in four countries: Australia, the United Kingdom, the United States and Malaysia, as well as consideration of the broader international picture. The teaching and learning of soft skills are explored with reference to the existing theories and concepts. This chapter also discusses research related to who is responsible for soft skills development.

Chapter III details the selection of research design, the paradigm, ontology, epistemology, methodology and method for this study. The interview, transcription and data analysis procedures used in the first phase of the study are described. Procedures used in the second phase of the study – for the survey, assessment of assumptions of normality, linearity and homoskedasticity, and data analysis – are then detailed. In

closing, Chapter III discusses the importance of quality research and ethical conduct, and how this was employed throughout the study.

Chapter IV presents the qualitative research results. The interviews generated a wealth of data on educator views of soft skills that are laid out in four main sections: establishing context, role of educators, teaching soft skills, and assessing soft skills. The first section considers the definition of soft skills, the value of soft skills and their importance in getting jobs. The second section consists of educator views on roles and industry collaboration. The third section consists of delivery context, delivery approaches and the implementation of delivery approaches. The fourth and final section consists of assessment context, assessment approaches and the implementation of assessment approaches.

Chapter V presents the quantitative research results. This cross-sectional data created a profile that added important elements to the understanding of the phenomenon under investigation such as educator beliefs on adding to and focusing on soft skills in the curriculum; their familiarity with the universities' official lists of soft skills; teaching soft skills as standalone courses; student employability; their perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills; the importance of delivery approach; and the factors that influence teaching and assessing soft skills.

Chapter VI provides a synthesis and interpretation of the qualitative and quantitative results of this study. The convergence at this stage leads to a creation of themes, comprising the main common elements of educator experience. These are identified as personal beliefs, which are then discussed, and two main frameworks are proposed. Personal beliefs emerged as influential factors on educator approaches to role conflict in

soft skills development, and in teaching and assessing soft skills. The frameworks provide direction and support for HEIs to engage in the work of soft skills development.

Chapter VII presents the key findings: the personal beliefs of educators in teaching and learning soft skills; formal, non-formal and informal learning in developing soft skills; and the individual's role in building capable people. The implications and limitations of the study are also discussed, as is future research. This chapter concludes with a presentation of researcher reflections.

1.10 Researcher reflections – Part 1

As a Malaysian higher education educator, my engagement with the research topic was central to this study. Therefore, it is important to acknowledge both the role this has played in my interpretation of results, and the efforts I have made to take a reflexive approach to ensure that the findings are derived from the data. My role as an educator provided me with the topic, and gave me access to organisations and their people.

Being an educator at a public HEI for almost 20 years has exposed me to a teaching and learning environment where I need to fulfil the demand for quality education. This demand is required by all stakeholders, particularly in regard to the employability of our graduates. While performing my everyday job, I experience firsthand the changes in policies and strategies aimed towards improvement of the curriculum. I have faced many of the challenges identified by the participants in this study, particularly pressures to shift the approach from the focus on content and knowledge to the focus on process and to deliver both academic knowledge and soft skills because the nature of each is different. This has formed a complex landscape in positioning my role as an educator.

My role is surrounded with questions about who, what, why, when, where, how and how much, and I recognise that my role as an educator has the potential to impact the production of work-ready graduates in a way that goes beyond my HEI's policies and strategies.

Through employing the mixed methods approach in this study I was able to view reality as both singular and multiple. As I hold an insider status, I was able to draw on my knowledge, particularly in understanding the thoughts, feelings, situations and terminologies highlighted by participants in the interviews. My background also assisted me in constructing and adapting questions for the interview and survey. Furthermore, it helped me interpret the qualitative and quantitative data. At all times, however, I was also mindful of the dangers associated with insider status and continually tested my findings and interpretations against the data to ensure these were true to the contributions of participants.

1.11 Conclusion

This chapter outlines the reasons for conducting a study within the Malaysian public HEI context, as well as the background for the thesis and the central research questions. An overview of the research setting, methodology and thesis structure have been presented to outline the chosen approach in this study.

The next chapter presents a scan of international and national literature in the area of soft skills development.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the relevant literature related to educator experiences of teaching and learning soft skills in the higher education sector. The importance of soft skills has led to their inclusion in the national curriculum of Malaysia and as a pertinent agenda item at the broader educational policy level. Therefore, and especially in the Malaysian context, much of the extant literature is in the form of reports, particularly government reports.

In this chapter, the literature is placed in its historical context through a discussion of the emergence of the focus on soft skills, particularly in Australia, the United Kingdom (UK), the United States (US) and Malaysia. The significant value of soft skills in the workplace and in educational settings is then reviewed. A discussion of the various definitions and frameworks in use is followed by consideration of the literature on responsibility for soft skills development. Next, the chapter canvasses the literature on the manner and form of teaching and learning soft skills (describing formal, non-formal and informal learning), as well as the literature on the theories of teaching and learning; soft skills training; and assessment and reporting, with reference to the higher education sector.

This chapter concludes by presenting an overall view of the literature, highlighting that there is little research evidence that examines the processes and approaches to soft skills training at the higher education level from the perspective of individual educators. It

also concludes by identifying that a comprehensive study examining the experiences of educators in teaching and learning soft skills will go some way towards addressing this gap and provide insights to improve the teaching and learning of soft skills.

2.2 Emergence of the focus on soft skills

The focus on the soft skills agenda can be traced back to as early as the 1980s (McCurry, 2003; National Centre for Vocational Education Research [NCVER] 2003). In this era, recession and globalisation extensively affected restructuring of the economy (McCurry, 2003), and demand increased for flexible and adaptable employees. Throughout the 1990s, with the push for increased productivity and efficiency in the workplace, the discourse on key skills or soft skills took on greater significance (Harvey, 2005; Hinchliffe, 2006; McCurry, 2003; NCVER, 2003; Payne, 1999; Yorke & Harvey, 2005). At this time, and since, employers looked to take on work-ready employees because such employees could become productive in a short time, having an immediate impact on business. The push for work-ready employees particularly comes from small and medium enterprises (SMEs) that suffer from a limited capacity to provide training when compared with large organisations (Yorke & Harvey, 2005). Further, the emergence of a new knowledge economy calls for graduates with soft skills who are capable of working in a dynamic and challenging environment (Bunney, Sharplin, & Howitt, 2015). This has led to new demands in the development of soft skills and a focus on the role of education and training in preparing employees for work.

2.2.1 History

All over the world, research into soft skills acquisition is increasing. This includes in Australia, the UK and the US, where policy on soft skills development in higher education institutions (HEIs) continues to be developed.

The first major attempt to identify the key generic skills or soft skills needed by employers in the new competitive environment emerged in 1988 from a study carried out in the US by the American Society for Training and Development (ASTD) and the Department of Labour (DOL) (Kearns, 2001). This initiative was followed by the Secretary's Commission on Achieving Necessary Skills (SCANS), which established a Framework of Workplace Know-how, published in 1992. In the UK, the Confederation of British Industry (CBI), in a 1989 report on what they termed skill revolution, recommended that the development of self-reliance, flexibility and broad competence as well as specific skills should be conducted by all education and training providers (McCurry, 2003). In Australia, the growing interest in this area is reflected in the *Mayer Key Competencies* of 1992 (Kearns, 2001), with further development since then including work conducted by the Ithaca Group in 2011 (Ithaca Group, 2012).

The major interest in developing human capital in Malaysia can be traced to the *Ninth Malaysia Plan 2006–2010*, which focused on preparing the country's youth with the knowledge, skills and attitudes to face a challenging global economy (Economic Planning Unit [EPU], 2006). HEIs in Malaysia are seen as important entities that should play a significant role in building these skills in their graduates (KPT [Kementerian Pengajian Tinggi – Ministry of Higher Education], 2006). The Minister of Higher Education views soft skills as important in building capabilities. A working committee was formed by the Chief Director, Department of Higher Education

Institutions Management (Ketua Pengarah Jabatan Pengurusan Institusi Pengajian Tinggi [KPJPIPT]) to outline the strategic and practical approach to be implemented by HEIs. The major contribution of this committee is the soft skills development module (hereafter referred to by its more commonly used name the soft skills module) that was established in 2006, suggesting a framework to develop soft skills in HEIs.

These developments showcased the major role of education and training in generating human capital that can fulfil the needs of the labour market and contribute to economic growth in an increasingly global marketplace. It is important for HEIs to manage the transition of graduates from higher education to employment because traditional academic education and soft skills are perceived as subsets of employability (Lees, 2002; Sonja, Tomislav, & Dilda, 2014). Soft skills continue to be part of the agenda of HEIs (Harvey, 2003; Jones, 2013), especially in fulfilling their social obligation (Donleavy, 2012).

2.2.2 Soft skills in workplace settings

A rapidly changing world has led to complex and super complex situations (Barnett, 2006) that demand capable people and capable organisations (Hase & Kenyon, 2001). Capability is central for adaptation in extreme uncertainty. Given that changes are often beyond individual or organisational control, capability in acquiring new knowledge, skills, attitudes and abilities is essential. Hard skills and soft skills complement each other (Nicolini et al., 2015; Schulz, 2008), and organisations pay attention to both when hiring new employees (Yorke & Harvey, 2005). Individuals exhibiting both sets of skills improve the chances of greater success for both the organisation and themselves (Hart Research Associate, 2015; Marshall, 2011). Research commissioned by the fast food company McDonalds found that soft skills contribute £88billion to the UK

economy, and that employers perceive soft skills as more important than academic qualifications and, furthermore, believe these skills contribute immensely to the success of their business (“Soft Skills,” 2015). Because of a lack of training investment in the development of these skills in the UK, a shortage of talent by 2020 is expected and this will have an impact on business growth (Zao-Sanders, 2015).

2.2.3 Soft skills in educational settings

There has been considerable debate about soft skills in the vocational education and training (VET) sector, in fact more so than in the HEIs sector. Soft skills requirements have been included in VET qualifications and many studies have been conducted examining soft skills development in this sector (e.g. Gibb, 2004). The battle over the (false) dichotomies such as training versus education, vocational versus academic, and skills versus knowledge has been experienced by higher education for some time (Walker, 1998). In addition, Tomlinson (2017, p. 2) argues that “the issue of graduate employability is a clearly a key theme” in higher education where it highlights the role of higher education to enhance graduates’ soft skills. In Australia, the university community were sceptical about the establishment of policies and regimes of compliance that were needed to secure agreement on the selection of soft skills that students should develop (Chanock, 2013). According to Bennette, Dunne, and Carre (1999), soft skills delivery in HEIs has so far had little impact because of the academics’ disbelief that it is their role to provide skills for employment, and due to a lack of clarity, consistency and a recognisable theoretical base with respect to what the skills are. On the other hand, Jones (2009) summarised the barriers to the teaching of soft skills as epistemological, cultural, intrinsic, pedagogical and structural. Radloff, de la Harpe, Dalton, Thomas, and Lawson (2008, p. 6) argue that “academic staff beliefs are critical and fundamental to any attempts at developing students’ graduate attributes [soft

skills], since academic staff are the custodians of the curriculum and the ones who determine what is taught and assessed”. This is consistent with other views (Barrie, 2004, 2006, 2007; de la Harpe & David, 2012). Also, academics may not be aware of these skills and may not be competent to develop and enhance them (Harvey, 1993) because expertise in academic knowledge may not promise expertise on teaching and learning. Those who are charged with the responsibility for teaching and assessing soft skills are uncertain about ways to do this (Wibrow, 2011). Educators may therefore need to be trained to deliver such generic skills.

Leckey and McGuigan (1997) examined both teacher and student perceptions of soft skills development and the gap in their perceptions. They found that teachers and students have different views on the level of soft skills being developed. This study also indicated that different faculties, such as engineering, pay more attention to academic knowledge than soft skills. However, evidence in the literature suggests that soft skills are better learned within the work environment (see Canning, 2011; Green, Ashton, & Felstead, 2001; Hayward & Fernandez, 2004; Sung, Ng, Loke, & Ramos, 2013).

It is important to better understand educator perceptions about soft skills, especially if there is a mismatch between what HEIs provide and what employers demand. Jones (2014), Medhat (2003) and Nenzhelele (2014) suggest that there is a gap between skills required by industry and skills provided by HEIs. Pita et al. (2015) view the mismatch as a major challenge. In addition, it is also important to determine whether the “wish list” of employers has been well communicated to HEIs, and whether educators are aware of it. According to Hesketh (2000), it remains unclear what soft skills employers would like graduates to have because of a lack of agreement on a language to identify those skills. Apart from that, those in an organisation – including human resource managers, line managers, graduate recruiters and strategic managers – may have

different expectations of graduates (A. G. K. Abdullah, Keat, Ismail, Abdullah, & Purba, 2012; Abayadeera & Watty, 2014; Arnold, Loan-Clarke, Harrington, & Hart, 1999; Harvey, Moon, & Geall, 1997; Husain, Rasul, Mustapha, Malik, & Rauf, 2013; Jackson, 2014). Other research also suggests that employers are not satisfied with graduates' soft skills, and claims that it is important for HEIs to ensure that all students are prepared with these skills (Badcock, Pattison, & Harris, 2010; Brewer, 2013; Clarke, 1997; Hart Research Associate, 2015; Heywood, 2012; Kruss, 2004; Leckey & McGuigan, 1997; Panagiotakopoulos, 2012; Precision Consultancy for the Business, Industry and Higher Education Collaboration Council [BIHECC], 2007; Pritchard, 2013).

A computer search was made of ProQuest from 1998 to April 2016, in which there were slightly more than 238,047 entries in three databases (ProQuest Education Journals, ProQuest Social Science Journals and ERIC) on soft skills/generic skills/generic attributes/employability skills/key competencies skills and higher education/universities. Only 7186 manuscripts relating to the Malaysian higher education/universities were found. A computer search via Scopus revealed there were slightly more than 1395 entries on soft skills/generic skills/generic attributes/employability skills/key skills/key competencies/transferable skills and higher education/universities. Only 14 were found on Malaysian higher education/universities. While such a database search helps find academic materials for the literature review, studies on soft skills conducted at the national level are, in the main, not available in the databases and are published in the form of reports.

Of the studies reviewed, most examine students and their learning (e.g. Abdul Karim et al., 2012; Ani, Tawil, Johar, Ismail, & Abdul Razak, 2014; Arnold, Loan-Clarke, Harrington, & Hart, 1999; Badcock, Pattison, & Harris, 2010; Carvalho, 2016; Crebert,

Bates, Bell, Patrick, & Cragno, 2004; Jackson, 2015; Kember, 2009; Ministry for Higher Education [MOHE], 2011; Muslim & Hassan, 2014; Ravenscroft & Luhanga, 2014). Work on educators' perceptions and their teaching and assessing of soft skills continues to lag some way behind. Three key studies on soft skills development in HEIs carried out in Malaysia and Australia (see Abu et al., 2008; de la Harpe et al., 2009; Precision Consultancy for the BIHECC, 2007) have been identified as central to this review.

The key Malaysian study was conducted in 2007 (Abu et al., 2008). This study surveyed 3696 educators from 20 public HEIs. In the study, most of the respondents were not only aware of the need to embed soft skills in teaching and learning, but believed they were also ready to carry out this task at their institution. The study reported that personal initiative, not university directive, played an important role in whether educators embed soft skills in their teaching and learning. However, it is not apparent whether this study used a research method that would have provided access to the wide-ranging roles and practices of respondents.

For example, this study claimed that soft skills have been intentionally and explicitly integrated in teaching and learning by having the majority of respondents outline the activities for soft skills development in their lesson plans. The results, however, can be criticised as the evidence in the literature argues that educators may include activities for soft skills development in their course outlines not because they see the importance of these skills but because they are required to do so (Jones, 2009). As the activities were merely outlined in lesson plans, readers are left to assume the role and teaching practice of respondents. The results appeared to be derived on the basis of perceptions and interpretation rather than anything more tangible or, indeed, any issues to do with

the methodology used for elicitation. The lack of process in arriving at the results makes these results vulnerable to criticism.

This quantitative study did not further examine educators' perceptions about their role in teaching and assessing soft skills. Furthermore, had this study accessed the context of the sample, it would have had an opportunity to examine the learning cultures throughout the study. These learning cultures are likely to be different to those in the Western educational context, and therefore such an examination could have led to different findings.

In Australia in 2007, a range of stakeholders participated in a study conducted by the BIHECC that included respondents across 10 HEIs ($n = 15$) and from business and industry ($n = 34$) (Precision Consultancy for the BIHECC, 2007). The thematic analysis of data from the literature, interviews and responses to the discussion paper identified that approaches such as the integration of soft skills into the curriculum and Work Integrated Learning (WIL), amongst others, were used by HEIs to develop soft skills. The study also highlighted that explicit inclusion of soft skills assessment in course materials and learning objectives was an effective way to assess soft skills. In terms of reporting, e-portfolios were seen as a practical approach. However, this report only provides an overview of activity with some examples of best practice. Therefore it lacks objective evidence on the effectiveness of each, especially from the perspective of those who are charged with the responsibility for teaching and assessing. Given the absence of a method to gain access to the experiences of staff from specific academic disciplines and faculties about their role and practice in teaching and assessing, it is suggested that this study lacks evidence to provide better understandings of the experiences of those staff. Thus, there is an urgent need to understand the role of educators in teaching and

assessing soft skills; an understanding that requires the exploration of who, what, why, when, where, how and how much, in terms of their practice.

In 2008, researchers collected both quantitative and qualitative data in a further Australian study known as the *bfactor* project (de la Harpe et al., 2009). This study took a largely quantitative approach with some details elicited from an online survey of 1064 educators across 16 HEIs and found that demographic characteristics such as gender, discipline and industry experience influenced the emphasis placed by the educator on teaching and assessing soft skills. In this study, educators could report what they think, hope or believe they do, rather than necessarily what they do, resulting in a gap between what is valued and what exists in teaching practice. Once again this study did not employ any alternative means to further explore the educators' beliefs about their role and their practice in teaching and assessing soft skills. Thus, it is proposed that a survey instrument that provided only options for the staff to choose from limited the potential of the study to fully describe educator perceptions about teaching and assessing soft skills.

These three studies present important findings that show there is still limited understanding of the role of educator perceptions and experiences in soft skills development, and that the research conducted so far has not adequately explored the role of educator. Myriad reasons have influenced this lack of understanding, some of which relate to the ambiguity about soft skill definition; identification of the key stakeholders who are responsible for providing training in soft skills; and the pedagogy surrounding the development of these skills (see Star & Hammer, 2008).

The studies reviewed above have also adopted a mono-method approach to the research, with the *bfactor* project being the first to use a multi-method approach. The use of

multiple data sources and research methods not only allows the researcher to view the focus of inquiry from several vantage points (Davidson & Tolich, 1999) but can also capture the complex, multifaceted aspects of teaching and learning (Kagan, 1990) and build trustworthiness, as asserted by Lincoln and Guba (1985). The importance of this has long been acknowledged by reviewers in the area of educator beliefs (Richardson, 1996; Wideen, Mayer-Smith, & Moon, 1998), and supports that further studies need to consider other methodological approaches to capture the depth of educator perceptions.

These gaps concerning focus, research design and richness of findings in examining the role of educators in teaching and assessing soft skills therefore warrant further investigation to achieve the following objectives:

1. Understand the individual and institutional factors that influence educator perceptions on teaching and assessing soft skills.
2. Understand the perceptions of educators about their role in developing soft skills.
3. Understand the experiences of educators when they are teaching and assessing soft skills.

The next section of this review examines the challenge of researching in this area across these three foci.

2.3 Soft skills concepts and frameworks

Soft skills are known by many terms in different countries and contexts. Table 2.1 presents a summary.

Table 2.1: Terms describing soft skills by country

Country	Term
United Kingdom	Core skills, key skills, common skills
New Zealand	Essential skills
Australia	Key competencies, employability skills, generic skills
Canada	Employability skills
United States	Basic skills, necessary skills, workplace know-how
Singapore	Critical enabling skills
France	Transferable skills
Germany	Key qualifications
Switzerland	Trans-disciplinary goals
Denmark	Process independent qualifications

Note: Adapted from “*Defining Generic Skills: At a Glance,*” (p. 2), by the NCVER, 2003. Retrieved from <http://www.ncver.edu.au/publications/1361.html>

The term *generic skills* is most widely used and appears to be well-liked and used in the literature (Hager & Holland, 2006). Debates on the ability to transfer skills from one setting to another have led to the infrequent use of the term *transferable skills* unless the issue of transferability is the focus (Gillespie, n.d.). There is evidence that industry tends to prefer the term *employability skills* (NCVER, 2003), whereas within HEIs they have often been known as *graduate attributes* or *graduate qualities* (Department of Education, Science and Training [DEST], n.d.; Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education [DIISCCRTE] & Department of Education, Employment and Workplace Relations [DEEWR], 2013; Hager & Holland, 2006). Barrie (2006) argues that there is considerable divergence within the description and definition used for graduate attributes among universities and

education systems. In this thesis, the term *soft skills* used as it is the preferred term adopted in the Malaysian context where this study is set (KPT, 2006).

Such varied synonyms associated with soft skills make it difficult to conceptualise the meaning (Lees, 2002). Walker (1998, p. 4) observes that "... the subject of key skills are sometimes confused, not only because of the language used but because the participants may be thinking of different operating contexts". Holmes (2001) argues that people may incorrectly assume that the term *skills* has the same meaning in both contexts – educational and employment – and that this becomes part of the skills agenda problem. Fallows and Steven (2000) claim there is no single view on terminology.

Although there has been no consensus regarding the terms used, soft skills and its cognates are commonly used to refer to a range of skill components, attitudes, values and dispositions that are generally seen as essential for life and employment (Canning, 2007a; Hager, 2006; Hager & Holland, 2006; Tymon, 2011). Hager (2006, p. 18) argues that "This lumping together of significantly distinct kinds of entities is enough in itself to muddy the waters" and asserts that it has contributed to the lack of a consistently operationalised definition, except that both *skills* components and *personal attributes* components most commonly make up the operationalisation of the term. The skills components of the terms seem to consist of mental and physical components, whereas the personal attributes components commonly refer to attitudes, values and dispositions that are viewed as products of cultural, ethical and social circumstances. These core elements have been consistently referred to in several soft skills frameworks that have a focus on work readiness. Tymon (2011) further discusses this issue by linking skills and personal attributes to employability with a question about whether both can be developed.

Table 2.2: Major developments in generic skills by country and at international level

AUSTRALIA	UNITED KINGDOM	UNITED STATES	MALAYSIA	OECD
Mayer key competencies	Core skills	SCANS workplace know-how	Soft skills	Key competencies
Collecting, analysing and organising information	Communication	Foundation skills:	Communication skills	Acting autonomously and reflectively
Communicating ideas and information	Personal skills	Basic skills	Critical thinking and problem solving skills	Using tools interactively
Planning and organising activities	Numeracy	Thinking skills	Teamwork skills	Joining and functioning in heterogeneous groups
Working with others and in teams	Information technology	Personal qualities	Lifelong learning and information management	
Using mathematical ideas and techniques	Problem solving	Workplace competencies:	Entrepreneurship skills	
Solving problems	Competence in modern (foreign) language	Resources	Moral and professional ethics	
Using technology	Qualifications and Curriculum Authority (QCA) Key skills (National Key Skills Qualification)	Interpersonal skills	Leadership skills	
	Basic skills:	Information		
	Communication	Systems		
	Application of numbers	Technology		
	Information technology	21st Century Workforce Commission		
	Wider key skills:	Added to SCANS <i>lifelong learning</i> component and emphasis on information technology skills, teamwork and communication		
	Working with others			
	Improving own learning and performance			
	Problem solving			

Note: Adapted from “Notions of Generic and Work-related Skills: Essential, Core, Necessary and Key Skills and Competencies,” by D. McCurry, 2003, *International Journal of Training Research*, 1, p. 85.

Table 2.2 provides a summary of the predominant international soft skills frameworks that have guided operationalisation, and the subsequent development of soft skills research (see Curtis, 2004a; Kearns, 2001; McCurry, 2003; NCVER, 2003).

In Australia, the Karmel Committee (1985), the Finn Committee (1991) and the Mayer Committee (1992) (NCVER, 2003) all had briefs associated with soft skills development and training for the workplace, with government and industry attention coming to a head in 1999. In 1999, the Australian Industry Group commissioned a

report on the training needs of Australia's industries and in 2002 the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) developed an Employability Skills Framework. Employability skills as outlined in this framework may reasonably be seen as a subset of graduate attributes specified by Australian universities to support transition of graduates into the workplace (Vu, Rigbi, & Mather, 2011). There was also a joint initiative that led to the establishment of the National Policy Development in 2002.

According to the Mayer Committee, key competencies are:

... competencies essential for effective participation in the emerging patterns of work organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations. Key competencies are generic in that they apply to work generally rather than being specific to work in particular occupations or industries. This characteristic means that the key competencies are not only essential for participation in work, but are also essential for effective participation in further education and in adult life more generally. (Australian Education Council [AEC] & Mayer Committee, 1992, p. 7)

Key competencies require six characteristics. They must:

- be essential to preparation for employment
- be generic to the kinds of work and work organisation emerging in the range of occupations at entry levels within industry rather than occupation- or industry-specific
- equip individuals to participate effectively in a wide range of social settings, including workplaces and adult life more generally
- involve the application of knowledge and skills
- be able to be learned
- be amenable to credible assessment.

(AEC & Mayer Committee, 1992, p. 12)

The Mayer Committee outlined seven key competencies (listed in Table 2.2). The committee also proposed three levels of performance for these key competencies as follows:

- **Performance Level 1**
Describes the competence needed to undertake activities efficiently and with sufficient self-management to meet the explicit requirements of the activity and to make judgements about the outcome against established criteria.
- **Performance Level 2**
Describes the competence needed to manage activities requiring the selection, application and integration of a number of elements, and to select from established criteria to judge quality of process and outcome.
- **Performance Level 3**
Describes the competence needed to evaluate and reshape processes, to establish and use principles in order to determine appropriate ways of approaching activities, and to establish criteria for judging quality of process and outcomes.

(AEC & Mayer Committee, 1992, p. 18)

The National Quality Council replaced the Key Competency Framework with the Employability Skills Framework in 2006 and, in 2007, developed a website that contains the summary pages for each training package (Wibrow, 2011). The Employability Skills Framework encompasses communication skills, teamwork skills, problem-solving skills, initiative and enterprise skills, planning and organising skills, self-management skills, learning skills and technology skills, and personal attributes (ACCI & BCA, 2002). A comprehensive study by the ACCI and BCA established this set of key skills, and defined employability skills as:

... skills required not only to gain employment, but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions. Employability skills are also sometimes referred to as generic skills, capabilities or key competencies. (ACCI & BCA, 2002, p. 3)

It is important to note that in Australia further work has been undertaken by a consulting group on the Core Skills for Work Developmental Framework (CSfW) (DIISCCRTE & DEEWR, 2013). This project aims “... to make more clear and explicit a set of non-technical skills and knowledge that underpin successful participation in work” (p. 4).

Similar attention is paid to soft skills development in the UK (see Table 2.2). In the 1990s, a list of core skills was approved by the National Curriculum Council (Curtis, 2004a; NCVER, 2003). The Qualifications and Curriculum Authority (QCA) revised these skills and established *key skills*. The Dearing Report review in 1997 proposed key skills that became prominent in higher education. In 1998, the CBI further proposed employability skills comprising: basic literacy, numeracy skills, and six key skills and attitudes including adaptability, career management and commitment to lifelong learning (NCVER, 2003; Turner, 2002). Employability is defined by the CBI as “The possession by an individual of the qualities and competencies required to meet the changing needs of employers and customers and thereby help to realise his or her aspirations and potential at work” (as cited in NCVER, 2003, p. 6).

Within the US, the focus is on *workplace know-how* (McCurry, 2003), as shown by Table 2.2. Five proficiency levels for workplace know-how were suggested by the SCANS in 1990. These include preparatory, work-ready, intermediate, advanced and specialist levels. The commission has put a great deal of work into the area of education and training, with *lifelong learning* as a focal element. The commission also emphasised information technology, teamwork and communication skills.

Similar efforts can be seen at the international level where experts from five major disciplines – anthropology, sociology, economics, psychology and philosophy – were brought together to define generic skills (Curtis 2004a; NCVER, 2003). This

international project was known as the Definition and Selection of Competencies (DeSeCo) Project. The Organisation for Economic Cooperation and Development (OECD) initiated the DeSeCo Project in late 1997 with the aim of establishing a theoretical and conceptual basis for generic skills. Three broad competencies were outlined (Table 2.2):

- acting autonomously and reflectively
- using tools interactively
- joining and functioning in socially heterogeneous groups.

(Rychen & Salganik, 2000, p. 11)

This project also outlined four conceptual elements of key competencies as:

- multi-functional
- relevant across many social field
- of a high order of mental complexity
- multi-dimensional.

(Rychen & Salganik, 2000, p. 12–13)

The United States Secretariat of the United Nations has also developed a new competency model that encompasses core competencies, core values and managerial competencies (Kearns, 2001). While this model has some elements in common with the other models and frameworks discussed, it does not reflect agreement on the part of member nations.

The above developed countries are amongst those involved in the early stages of the soft skills movement. Developments in the definition of generic skills in these countries involved two stages (NCVER, 2003). Early initiatives focused on lists of skills for work and life, and later industry-led initiatives emphasised the set of skills relevant to

employability. Six common elements are found in the various lists of soft skills, as outlined in Table 2.3.

Table 2.3: Common elements across soft skill types

Basic/fundamental skills – such as literacy, using numbers, using technology
People-related skills – such as communication, interpersonal, teamwork, customer-service skills
Conceptual/thinking skills – such as collecting and organising information, problem-solving, planning and organising, learning-to-learn skills, thinking innovatively and creatively, system thinking
Personal skills and attributes – such as being responsible, resourceful, flexible, able to manage own time, having self-esteem
Skills related to the business world – such as innovation skills, enterprise skills
Skills related to the community – such as civic or citizenship knowledge and skills

Note: Adapted from “*Defining Generic Skills: At a Glance,*” (p. 2), by the NCVER, 2003. Retrieved from <http://www.ncver.edu.au/publications/1361.html>

On the other hand, in countries such as those in East Asia, which includes Malaysia, the soft skills movement started later. In these countries, HEIs are seen as a provider of skills (World Bank, 2012). These countries are categorised into three income groups: high-income economies (Hong Kong SAR, China; Japan; the Republic of Korea; Singapore; and Taiwan, China), middle-income economies (China, Indonesia, Malaysia, Mongolia, the Philippines and Thailand) and low-income economies (Cambodia, Laos People’s Democratic Republic and Vietnam). Employers in these countries view technical, communication and English skills as important.

In Malaysia, efforts towards soft skills development intensified following the launch of the Ninth Malaysian Plan (2006–2010) in 2006 (EPU, 2006). Youth capability building has become a major agenda of the government in the era of globalisation. The MOHE took the initiative by forming a working committee to look at building those capabilities through soft skills development (KPT, 2006). This committee was made up of representatives from public HEIs. The working committee outlined the following goals:

- To establish the definition of soft skills and specify the learning objectives which consist of a “must have” soft skills and a “good to have” soft skills.
- To make formal teaching and learning more embedded-oriented rather than stand-alone.
- To integrate elements of soft skills in co-curricular activities through the learning objectives.
- To extend the use of various methods in teaching and learning soft skills.
- To employ various methods in the assessment system at HEIs which are characterised by formative and summative assessments.

(KPT, 2006, p. 2)

In this context, soft skills are defined as incorporating generic skills including non-academic skills such as positive values, leadership, teamwork, communication and lifelong learning. The committee also devised the soft skills development module (KPT, 2006), known as the soft skills module. This module provides guidelines to HEIs that focus on seven components: communication; critical thinking and problem solving; teamwork; lifelong learning and information management; entrepreneurship; moral and professional ethics; and leadership, as outlined in Table 2.2.

In conclusion, there is no universal agreement on a definition of soft skills. A scan of the international literature in this area further confirms that there is a lack of common understanding of soft skills at a theoretical level (see Bennette, 1999; Kearns, 2001; Matteson, Anderson, & Bowden, 2016; NCVER, 2003; Van Loo & Toolsema, 2005) and no agreed upon definition of the term (Canning, 2007b; Gillespie, n.d.; Fallows & Steven, 2000). This lack of a clear definition has impacted the operational definition of soft skills, and empirical testing of the construct has become problematic (Harvey, 2001; Van Loo & Toolsema, 2005). Jacobs (1973) argues that there is a general lack of clarity concerning criterion measures of soft skills and the Itacha Group (2012) claims that soft skills are difficult to measure, assess and report. Despite the variations in

definitions and other issues related to soft skills, there is agreement about some of the core skills and the importance of non-technical skills development.

The present study restricted the scope of soft skills to the two categories of skills (tangible) and personal attributes (intangible) as a basis for understanding educator perceptions. It did not further explore the concept of soft skills at a theoretical level in order to address a soft skills definition, and so any discussion concerning criterion measures of soft skills is beyond the scope of this thesis.

2.4 Responsibility for soft skills development

Separate from the definitional and operationalisation issues, the issue of who is responsible for soft skills development is an area of particular interest within the extant literature. Discussion of the various views in the literature about responsibility provides a context for consideration of the educator role in soft skills development.

2.4.1 Role of government

Government sectors in Australia, the UK, the US and Malaysia, for example, have made much effort to develop soft skills. For governments, the focus has been on developing guiding policies that can generate human capital to fulfil the needs of the new economy. The OECD concept of human capital includes generic skills as an important factor in the acquisition of human capital (OECD, 1998). Government intervention in general skills or knowledge in economics is known as a poaching externality (Pigou, 1912). This refers to government involvement in ensuring everyone has fair access to general training as it is costly for individuals to invest and it is unwise for employers to train given these skills can be used anywhere when employees move to work for another

employer. Governments have therefore informed the development of education policy with this key outcome in mind. In Australia, a signature initiative by the Australian government such as the New Colombo Plan Mobility Program provides funding for undergraduate students to study and take work-based experiences in the Indo-Pacific region, which will increase their capability including but not limited to soft skills (Department of Foreign Affairs and Trade [DFAT], 2016). Similarly, a program by the Malaysian government known as MyASEANinternship provides the opportunity for Malaysian students from local and overseas universities to undergo their internship in Malaysian companies with regional operations within Association of Southeast Asian Nations (ASEAN) countries and students from ASEAN countries who are studying in Malaysia to undergo their internship in Malaysia (Talentcorp, 2016). These initiatives are important strategies to develop soft skills (Rodríguez Izquierdo, 2015), especially the international awareness that is highly valued by employers (Standley, 2015).

2.4.2 Role of the education and training sector

Undoubtedly there are conflicting interests between HEIs and employers in the skills agenda. Schools, the VET sector and HEIs are expected by employers to develop soft skills among young people to keep up employability (see Brewer, 2013; Curtin, 2004; Hanover Research, 2014a; Hart Research Associates, 2015; Pritchard, 2013; Smits, 2007) and “graduate employability continues to dominate higher education agendas ...” (Jackson, 2016, p. 199). Morley (2001) argues that the skills agenda has received criticism within higher education for restricting the educational aims and threatening academic autonomy. Some educators see the skills agenda as driven not by the academy but by the goal of fulfilling the interests of government and employers (Lees, 2002). The differences in views held by educators and government about higher education becomes part of the major barrier to making progress with this agenda.

Furthermore, the form of innovation in education is complex rather than simple, which can lead to unrest, scepticism and resistance amongst the educators who are expected to develop these skills (Knight, 2001). In addition, in terms of promotion, universities traditionally focused on research output and quality, a situation in which less emphasis is given to curriculum innovation for good teaching and learning (Lees, 2002). Harvey (2000) asserts that the role of higher education is not only to train learners with knowledge, skills, attitudes and abilities but to empower them for the purpose of lifelong and reflective learning. However, it is debateable that control over learning is given to learners.

De la Harpe, Radloff, and Wyber (2000, p. 241) comment that “in the anarchy of individualism that is academia, the responses of staff varies unpredictably ... little can be achieved without staff commitment accompanied by an agreed change process”. Thus, a prior change in educator attitudes, behaviours and beliefs is important to create the possibility of changing the curriculum (Dunne, Bennet, & Carre, 2000). Changing the curriculum includes changing learning practices, and this presents major challenges for education and training systems (Brewer, 2013). Success relies on ownership of curriculum change being held by the staff who deliver the modules (Lees, 2002). Furthermore, teaching and assessing soft skills is different from traditional teaching and assessing in academic knowledge, and this can cause obstacles in learning practices (Hanover, 2014b). Thus, it is important to explore what obstacles are faced by educators when they play their role in developing soft skills. In successfully implementing curriculum change, it is also essential to work with the institutional culture and values (Atlay & Harris, 2000). Further, a failure by management to allocate resources to training and coaching of staff will also threaten successful implementation of change (Wycoff, 2004).

On the other hand, Washer (2007) claimed that soft skills have not threatened the notion of a liberal education. Educators need to believe that this agenda focuses on the ways they teach their subject, in which academic autonomy on content is not restrained (Coopers & Lybrand, 1998; Harvey, 2000). The problem is that many education and training providers focus on academic knowledge rather than soft skills because the approaches to do so are simple and less expensive (Brewer, 2013) compared to soft skills approaches, which are expensive to administer (Pritchard 2013). It is also easy to train a large number of students in a short period of time using the approaches for academic knowledge. Furthermore, regardless of the expectations of employers, HEIs should have an interest in soft skills because they facilitate learning (Hanover Research, 2014b). Many studies provide further evidence that HEIs are now transforming their role towards this dimension (see Abu et al., 2008; Badcock, Pattison, & Harris, 2010; Bunney, Sharplin, & Howitt, 2015; de la Harpe et al., 2009; Donleavy, 2012; Fahnert, 2015; Jackson, 2014; Jansen & Suhre, 2015; MOHE, 2011; Panagiotakopoulos, 2012; Precision Consultancy for the BIHECC, 2007; Rao, 2015). This shifting is described as “from knowing as contemplation to knowing as operation” (Barnett, 1994, p. 15) or “a move from the traditional curriculum focus on ‘content’ and knowledge to one which emphasises ‘process’” (Vu, Rigby, Wood, & Daly, 2011, p. 5).

2.4.3 Role of employers

As mentioned earlier, employers may not be willing to invest in soft skills training because, if employees quit, these skills can be used anywhere. Furthermore, employers prefer to employ work-ready graduates who have both technical and soft skills as they quickly become productive (Kruss, 2004). Employers seek more soft skills than specific technical skills (Dawe, 2004; Hesketh, 2000; Marshall, 2011; McLeish, 2002; Pritchard, 2013; Robert-Edomi, 2014; “Soft Skills,” 2015; Valentin, Carvalho, &

Barreto, 2015) because they believe technical skills can often be obtained through further training, which they are willing to accommodate within their training programs (Hesketh, 2000). In addition, and particularly in tight financial circumstances where training is unlikely to be supported by management, it has primarily been the responsibility of employees to maintain their soft skills (Hawke, 2004). Consequently, job-related technical skills have been given more attention in organisation training programs compared to soft skills (Marshall, 2011).

However, collaboration between HEIs and industry is important in terms of soft skills development, as training for these skills should be tailored to the needs of employers and the promotion of work-related learning (Brewer, 2013). Evidence in the literature (Edmondson, Valigra, Kenward, Hudson, & Belfield, 2012; Precision Consultancy for the BIHECC, 2007) suggests that greater opportunities for soft skills development among students will be created by establishing a stronger link between universities and businesses. In addition to traditional classroom settings, training for these skills in workplace settings can be conducted with help from businesses using, but not limited to, project-based learning and mentoring programs (Brewer, 2013) through approaches such as WIL (Jackson, 2013; 2015; Precision Consultancy for the BIHECC, 2007).

2.4.4 Role of individuals

It is an individual's responsibility to develop skills and competences in order to ensure employability within the market (Clarke, 1997; Pritchard, 2013). Barnett (2006) asserts that continuous changes in the environment in which we are living leads to uncertain and complex situations. The capacity and ability to cope with change comes down to qualities of selfhood, and "the fundamental educational problem of the changing world is neither one of knowledge nor skills but it is one of being" (p. 51). This means focus

should be given to the capability of the individual in the process of developing new knowledge and skills.

The metaphor of guiding and growing referenced by Bergh et al. (2006) broadly captures the development process of soft skills, and addresses the role of students and educators and their interactions in learning spaces as part of the development process. The role of educators seems to be critical in providing students with principles and guidelines, specifically when dealing with difficult situations. However, for a couple of reasons, the role of educators in learning spaces is questioned. Martin and Etzkowitz (2000) suggest that a core focus of the older tradition of university educator role is on teaching and research. In terms of teaching, educators are academic knowledge experts and they are often prepared for the research role (Kane, Sandretto, & Heath, 2002). However, discipline knowledge is considered separate from soft skills and therefore is it not part of the role of the academic to teach soft skills (Jones, 2009). Furthermore, educators have had little or no pedagogical training to prepare them for the teaching role (see Minter, 2011), and in this case the pedagogical understanding for soft skills development is considered to be substantial. Evidence in the literature suggests time-consuming approaches – such as learning from experiences (see de Corte, 1996), reflection and the educator as a role model (see Moy, 1999) – as examples of best practice that reflect guiding. However, without their having exposure to the different pedagogical approaches, it is questionable as to what extent educators can successfully develop soft skills in students. This is especially the case when considering educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills. Thus, universities may have various approaches to teach and assess soft skills but to successfully develop soft skills, it is important for universities to take into account the professional development of educators and the resources available

to them in undertaking their role and these responsibilities. The above factors could hinder educators from integrating soft skills with their teaching, especially given that soft skills are difficult to teach and assess. Educators are even more likely to be hindered when there are few rewards for good teaching and when research output and quality are given greater weight when educators are considered for promotion (Lea & Callaghan, 2008; McGrail, Rickard, & Jones, 2006). In addition, new developments in Malaysian public universities, such as the autonomous status of some universities (Kulasagaran, 2012), might also be affecting the role of educators. The transition to a model-based earned autonomy and less dependence on government funding might affect universities in many different ways, including the role of educators. Thus, there is an urgent need to understand educator perceptions and experiences about their role in teaching and assessing soft skills within the current conflicting demands of creating high quality HEIs.

Virgona and Waterhouse (2004) emphasise that soft skills continuously develop in an individual's life in all areas of human endeavour. For that reason, it is essential to develop these skills at all levels where opportunities to learn are accessible, whether at home, school, higher education or work.

Many entities may be involved in the development of soft skills in an individual, and therefore this growth is not limited to the role of educators at HEIs (Cimatti, 2016). However, given HEIs are the main actor in managing the transition of graduates from higher education to employment, much attention has been given to the ways educators develop soft skills in graduates. Educators are expected by employers to equip graduates with the necessary academic knowledge and soft skills for work. Thus, the role of educators in developing soft skills is seen as vital. Despite the crucial role educators have to play, very little is known about educator perceptions regarding

teaching and learning soft skills. In particular, how educators integrate soft skills into teaching and learning processes needs to be better understood. The intervention of educators in soft skills development may create a dilemma about their role, but this study did not further explore this experience, and so any discussion concerning this is beyond the scope of the study. The next section explores the potential role of educators using teaching and learning theories.

2.5 Teaching and learning soft skills

Walker (1998, p. 7) argues “Institutions have found that the introduction of key skills across the curriculum is not easy: they cut across too many internal boundaries – territorial, ideological, pedagogical, administrative ...”. In this section, the discussion of teaching and learning soft skills is divided into four parts. The first part discusses formal, non-formal and informal learning spaces as ways of developing soft skills. The second part discusses theories of teaching and learning to explore further the role of educator as teacher, facilitator and coach. The third part discusses the reviews’ integration of key skills in the training programs of the educational sector. In closing, the final part discusses issues about the assessment and reporting of soft skills development.

2.5.1 Formal, non-formal and informal learning

Higher education uses many practices to develop soft skills. This study examines the overarching practices according to the formal, non-formal and informal types of learning modalities. A clear understanding of these modalities is needed as they are linked to certain pedagogical approaches. A scan of literature commenting on formal,

non-formal and informal learning structures demonstrates a variety of definitions and relationships between these learning modalities.

Coombs and Ahmed (1974) suggest three discrete types of education: formal, non-formal and informal. They were among the first researchers to use the term non-formal education (Mok, 2011). In this interpretation, formal education refers to educational activities that are conducted inside a formal structure such as schools and universities, whereas non-formal education emphasises educational activities conducted outside the formal structure. Informal education occurs when knowledge, skills and attitudes are gained throughout one's life from daily experience.

La Belle (1976) argues that in reality, these types of learning spaces overlap. For example, students gain knowledge, skills and attitudes from their formal education when attending schools where certain curricula are followed. Simultaneously, non-formal education gained through experiences as part of extra-curricular activities and informal education via peer interaction, also occurs in schools.

La Belle (1976) suggests that learning spaces can be looked at in terms of the *structures of education* (including educational characteristics) and the *process of education* (including educational modes). Figure 2.1 illustrates these characteristics and modes of education (La Belle, 1982).

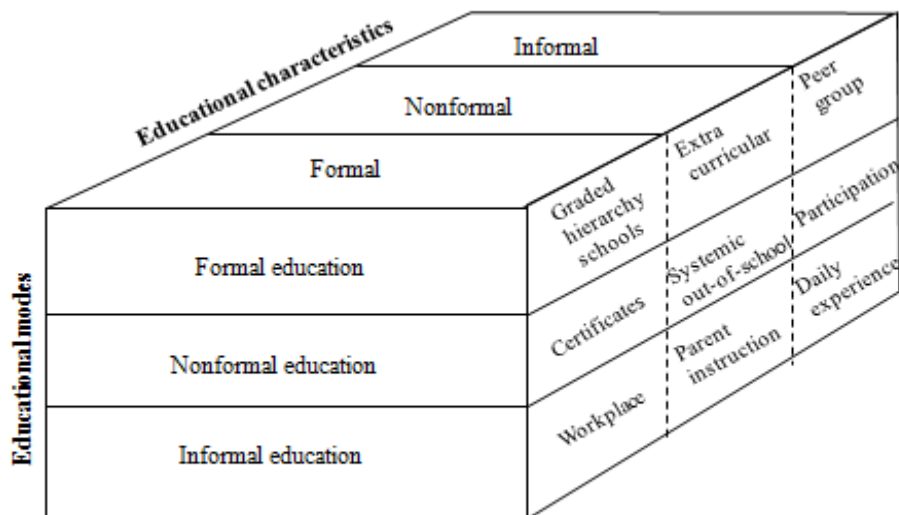


Figure 2.1: Modes and characteristics of education

Note: Adapted from “Nonformal and Informal Education: A Holistic Perspective on Lifelong Learning,” by T. J. La Belle, 1982, *International Review of Education*, 28(2), p. 162.

The figure supports that the types of learning spaces are determined by the location and setting where learning takes place, and that in one learning episode all three types of education may occur with one becoming dominant.

Colley, Hodkinson, and Malcolm (2003) review 10 key studies from 1977 to 2002 that attempt to define these terms and showcase the diversity of definitions, with a primary aim of mapping the conceptual terrain around non-formal learning. The authors argue that it is a misunderstanding of the nature of learning to assume these learning categories are separated. This study found that the more accurate way to regard learning is to acknowledge the existence of formality and informality in all learning situations.

For the purpose of the discussion, three of the 10 key studies most relevant to this thesis have been selected: Beckett and Hager, 2002; Livingstone, 2001; and European Commission (EC), 2001.

No reference is made by Beckett and Hager (2002) to non-formal learning. Only a distinction between formal and informal learning is presented. According to these authors, the characteristics of formal learning are a single-capacity focus, a lack of context, a passive spectator, being an end in itself, stimulation by teachers/trainers and an individualistic focus. In contrast, informal learning is characterised as being organic or holistic, contextualised, activity and experience based, dependent on other activities, activated by individual learners and often collaborative or collegial.

In this articulation, formal learning is educator centred, which is formed by a narrow scope of learning. In contrast, informal learning is student centred, which is supported by a broader scope of learning. This conceptualisation foreshadows that the development of soft skills may take place in informal learning spaces.

Livingstone (2001) defines formal, non-formal and informal education, and informal learning in the context of adult and continuing education, by emphasising the relationship between educators and students. According to the author, in formal education educators are given the authority to effectively deliver the curriculum whereas in non-formal education students voluntarily choose to learn using an organised curriculum with assistance from educators. In contrast, informal education is more incidental and is guided by educators with no organised curriculum. The author further defined informal learning as learning activities that occur outside educational institutions with no curricular criteria.

This definition presupposes that more freedom is given to learners in non-formal education compared to formal education if soft skills are integrated in the curriculum. Although learning is incidental in informal education, which has no organised curriculum, it allows learners to effectively learn soft skills since it is guided by educators. In contrast, informal learning is referred to as learning activities that go beyond the walls of educational institutions. It is important to note that Livingstone's perspective points to the role of educators by looking at how much guidance comes from educators in learning spaces to suit teaching soft skills.

Formal, non-formal and informal learning are defined by the EC (2001, p. 32–33) as follows:

- **Formal learning**
Learning typically provided by an education or training institution, structured (in terms of learning objectives, learning time or learning support) and leading to certification. Formal learning is intentional from the learner's perspective.
- **Non-formal learning**
Learning that is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's perspective.
- **Informal learning**
Learning resulting from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases is non-intentional (or incidental/random).

The above definitions draw attention to the fact that if soft skills are taught in formal learning, they can be assessed and this can lead to certification. In addition, the structured formal learning and non-formal learning are intentionally learned by learners in contrast to unstructured informal learning, in which learning is generally non-intentional. Further, teaching soft skills in formal and non-formal learning can be enhanced by explicitly informing learners of the learning objectives.

Colley et al. (2003) abstract from a large variety of sources 20 main criteria that differentiate the relationship between formal, non-formal and informal learning to produce ideal types of formal and informal learning. This work is done with the assumption that non-formal learning is a combination of the two. Their analysis organises the different positions into four clusters:

- **Process**
Learner activity, pedagogical styles and issues of assessment are among the important aspects to look at. This includes the learning practices and the relationships between learners and others who may act as teachers/trainers etc.
- **Locations and setting**
Looking at the location of learning – whether it is primarily education, community or workplace – and its context (which includes, for example, timeframes, curriculum, objectives and certification) can facilitate specification of terms.
- **Purposes**
This refers to whether learning is the secondary or primary purpose, and whether learners' or others' purposes are central.
- **Content**
This includes issues as to what is actually learned by learners. It is important to look at the issue of knowledge acquisition whether it is the well-established expert knowledge/application, or the new construction. It is also important to look at whether the focus is on propositional knowledge or situated practices and whether or not the focus is on high status knowledge.

These four clusters may assist in understanding formal, non-formal and informal learning in various contexts, and their relationships need to be further investigated within particular contexts such as learning in the workplace, a lifelong learning policy, and adult and continuing education (Colley et al., 2003). Colley et al. also look at how formal, non-formal and informal learning are connected in most learning situations. This view can help in understanding the complexities of soft skills teaching.

Relating to the workplace context, in his blog *E-Learning Curve* Hanley defines formal, non-formal and informal learning as follows (as cited in Mattox, 2012, p. 50):

- **Formal learning**
Learning objectives are set by the training department, which also provides the learning product. Formal learning often leads to certification.
- **Non-formal learning**
Someone in the organization who is not part of the learning department (for example, a line manager, supervisor or a business leader) sets learning objective or task. [Typically] learning does not lead to certification.
- **Informal learning**
The learner set the goals and objectives. Learning is not necessarily structured in terms of time and effort; it is often incidental and unlikely to lead to certification.

Clark (n.d.1) further illustrates Hanley’s work in the following figure (Figure 2.2):

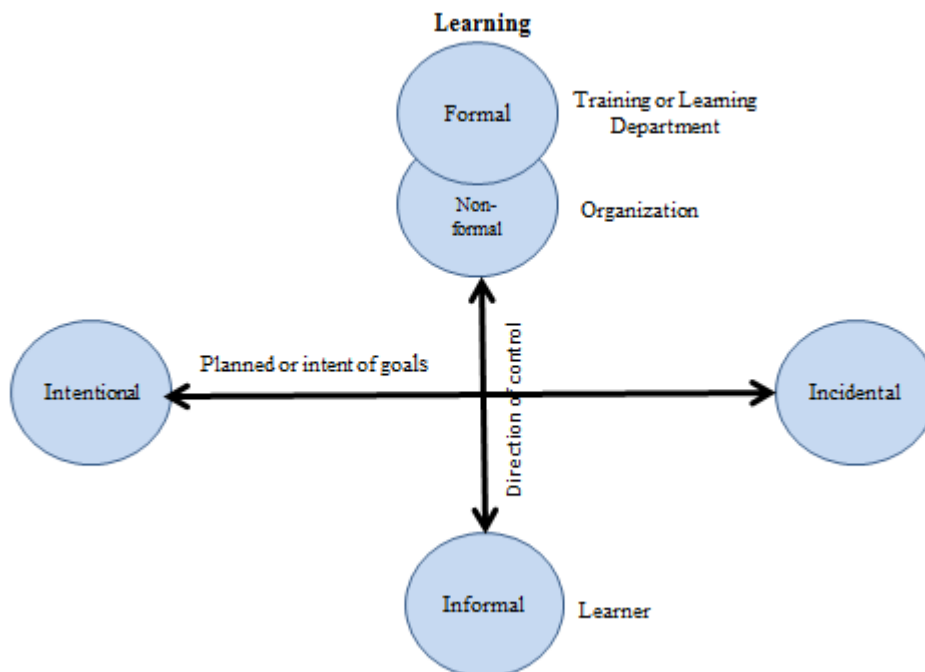


Figure 2.2: Formal, non-formal and informal learning in the workplace

Note: Adapted from “*Formal & Informal Learning,*” (p. 3), by D. Clark, n.d.1. Retrieved from <http://www.knowledgejump.com/learning/informal.html>

From the above perspective, formal, non-formal and informal learning are defined by looking at who controls the learning objectives. In informal learning, learners are given the freedom to choose their own learning objectives, in contrast to formal learning, which is controlled by the training or learning department, and non-formal learning,

which is controlled by the organisation. Likewise, in educational settings, whoever controls the learning objectives will determine what to learn and how to learn. In the structured curriculum, the involvement of educators to develop soft skills is to be expected. In this context, the role of educators as the controllers of learning objectives is important and therefore could be considered in teaching soft skills. Clark (n.d.2) conceptualises formal and informal learning as illustrated by Figure 2.3.

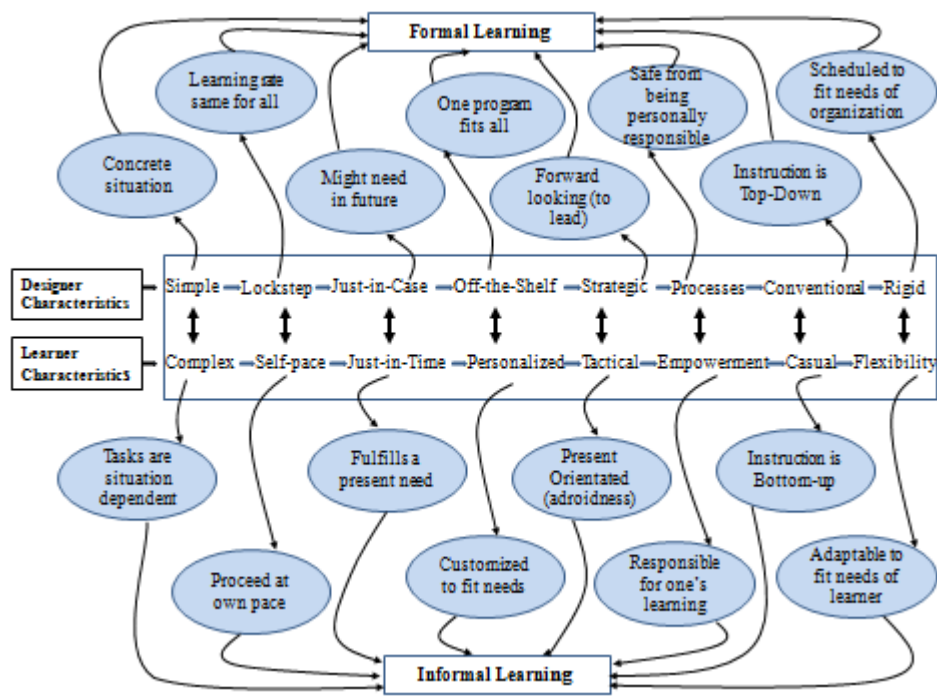


Figure 2.3: Formal and informal learning

Note: Adapted from “Characteristics of Formal and Informal Learning Episodes,” (p. 1), by D. Clark, n.d.2. Retrieved from <http://www.knowledgejump.com/learning/characteristics.html>

The learning process is determined by looking at the characteristics of the designer (educator) and learner. This has important implications for soft skills development and for those responsible for soft skills development. The diagram captures the essence of informal learning, which is surrounded by key elements such as *complexity*, indicating the extent to which the task is situation dependent; *empowerment*, indicating

responsibility of learner in learning; and *flexibility*, indicating that learning is adaptable to fit the needs of learners. The interaction of these learning spaces points to the role of educators. This articulation of the learning spaces suggests that responsibilities for developing soft skills may be co-developed based on formal and non-formal learning objectives.

Given the fact that learning involves formal, non-formal and informal learning, it is also useful to look at the dimensions of formality and informality, the connection between them, and the context of learning including its background (historical, social, political and economic) and philosophy (Colley et al., 2003). Based on the review of formal, non-formal and informal learning, it can be concluded that the responsibility to develop soft skills points to the interaction between educators and students. This form of analysis is carried out in Chapter VI.

2.5.2 Theories of teaching and learning

Within learning spaces the role of educators can be diverse. Theories of teaching and learning can assist in understanding the role of educators in formal, non-formal and informal learning structures. Theories of teaching emphasise the manner in which educators influence students to learn, whereas theories of learning emphasise the manner in which students learn (Knowles, Holton, & Swanson, 2011). A number of teaching and learning theories in the extant literature (see Knowles et al., 2011) can be drawn upon.

Given that soft skills development has been formalised at the HEIs in Malaysia in which this study is taking place, it is pertinent to look at this effort from the perspective of the teaching theories and learning theories such as pedagogy, andragogy and heutagogy. In this study, further discussion focuses on the ideology and assumptions of each model

with the aim of choosing a model suitable for learning, rather than emphasising that the controversy stems from a difference in philosophy attached to the models and the distinction between youth and adult learners. Most important is that the visibility of each model has broadened our perspectives on individual learning.

Pedagogy is a teaching theory that focuses on child education (Knowles et al., 2011). The term comes from the Greek words *paid* for ‘child’ and *agogus* for ‘guide’ or ‘leader’. Thus, this term implies the art and science of teaching children. Below are the six assumptions identified by Knowles et al. (2011) about learners from the perspective of the pedagogical model:

1. The need to know

Learners’ need to know is surrounded by learning to pass and get promoted.

2. The learners’ self-concept

Learners’ self-concept is structured around a dependent personality. Educators are responsible for making all decisions in regard to learning. But the degree of dependency decreases as individuals grow up (Figure 2.4). Knowles et al. (2011) argue “The problem is that the culture does not nurture the development of the abilities required for self-direction, while the increasing need for self-direction continues to develop organically” (p. 61).

3. The role of learners’ experience

Learners’ experience plays a small role in learning. Other resources such as educators’ experience and teaching methods are amongst the important means in teaching.

4. Readiness to learn

Learners are ready to learn when they become aware of their need to know, which is surrounded by learning to pass and get promoted.

5. Orientation to learning

Learners are subject centred and focused on learning the subject content.

6. Motivation

External motivators such as educators and grades motivate learners to learn.

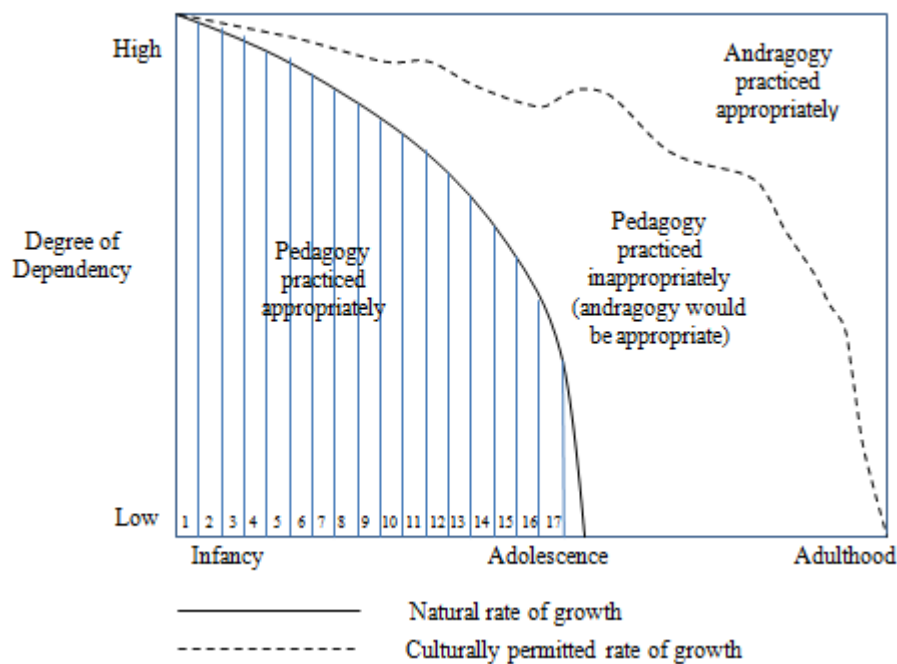


Figure 2.4: The natural maturation toward self-direction as compared with the culturally permitted rate of growth of self-direction

Note: Adapted from “*The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (7th ed.),” by S. M. Knowles, E. F. Holton, and R. A. Swanson, 2011, Boston: Elsevier, p. 61.

The basis of pedagogical design is “transmission” which is usually “teacher directed” (McAuliffe, Hargreaves, Winter, & Chadwick, 2009). The educator manages the delivery of the subject matter, which includes deciding on the content, the means for passing it on, and the series of learning. Learning is seen as a passive process and of a low level order. The teacher-centred approach is congruent with pedagogy (Muduli & Kaura, 2010). This approach gives less opportunity to learners to decide about their learning, and the experiences of learners play a small role in learning (Ozuah, 2005). In this scenario, learning is driven by external motivators rather than internal motivators. Harris and Cullen (2008) argue that instructional practices in higher education are dominated by the teacher-centred approach, with knowledge being transmitted from the educator to the students (Bok, 2006; Weimer, 2013), particularly using the lecture

method (Chaudhury, 2011; Svinicki & McKeachie, 2011). The suitability of the pedagogical model, which is teacher centred, is questioned as the ideal way to support soft skills development (see Kahl & Venette, 2010).

Educators who over-control their students in terms of imposing their wills can cause tension, resentment and resistance (Heimstra & Sisco, 1990). This is especially relevant in HEIs where learners are considered to be emergent adults and require environments that support their becoming. Nelson and Padilla-Walker (2013, p. 67) describe Arnett's theory of emerging adults by identifying emergent adults as those who are between the ages 18 and 30 and characterised by: *feeling in-between* (emerging adults do not see themselves as either adolescents or adults), *identity exploration* (especially in the areas of work, love and world views), *focus on the self* (not self-centred but simply lacking obligations to others), *instability* (evidenced by changes in direction in residential status, relationships, work and education), and *possibilities* (optimism in the potential to steer their lives in any number of desired directions). Thus, the pedagogical model, which is characterised as being educator directed, can be used to support soft skills learning, and this is supported by the learning culture in Malaysia. However, the role of educators in this model is appropriate in certain contexts and this position is supported by Pratt and associates (1998) who argue that in teaching adults there is no single and universal best perspective.

Andragogy is a learning theory that focuses on adult education (Knowles et al., 2011) and takes into account the characteristics of emergent adults. The term comes from the Greek words *aner* for 'adult' and *agogus* for 'guide' or 'leader'. Thus, this term implies the art and science of assisting adults to learn. This term was coined by Alexander Kapp in 1833. In 1967, Malcolm Knowles further developed Kapp's work and

formulated a theory of adult education. In contrast with pedagogy, Knowles et al. (2011) make different assumptions of adult learners:

1. The need to know

Before learners pursue learning, they need to know the reasons for doing it.

2. The learners’ self-concept

Learners’ self-concept is structured around an independent personality. Learners are self-directed and responsible for making decisions in regard to their learning. But there is a possibility that learners may act according to their past experience at school. Grow (1991) argues that adults do not have a full capacity for self-teaching and personal autonomy in every learning situation. The author proposes that self-directed learning (SDL) is situational. The teacher needs to match styles with the student, as shown in Table 2.4.

Table 2.4: Learning autonomy

Stage	Student	Teacher	Examples
Stage 1	Dependent	Authority, coach	Coaching with immediate feedback. Drill. Informational lecture. Overcoming deficiencies and resistance.
Stage 2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal-setting and learning strategies.
Stage 3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
Stage 4	Self-directed	Consultant, delegator	Internship, dissertations, individual work or self-directed study group.

Note: Adapted from “Teaching Learners to be Self-directed,” by G. O. Grow, 1991, *Adult Education Quarterly*, 41, p. 129.

3. The role of learners’ experiences

Learners bring with them to learning a greater volume of experience, which means educators are dealing with a more diverse group of learners. Learners’ experiences are the richest resources of their learning, and learners create their self-identity through internal definers that refer to their experiences.

4. Readiness to learn

Development tasks that derive from internal and external sources influence learners’ readiness to learn. Internal sources such as learners’ maturity influence whether they are ready for certain learning. External sources such as exposure to certain knowledge and skills influence whether they are ready for the higher level

of learning. Pratt (1988) suggests that the level of support and direction may vary from learner to learner. This is shown in Figure 2.5. For example, some may need high support and high direction (Quadrant 1). The true androgogical approach is represented by Quadrant 4 where level of support and direction are low.

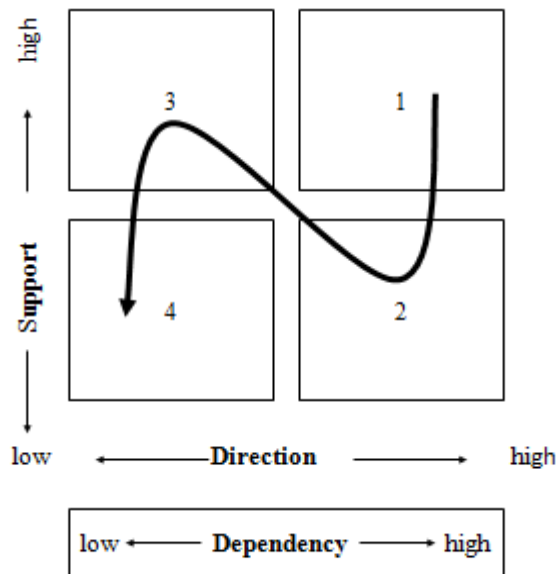


Figure 2.5: Direction and support in learning

Note: Adapted from “Andragogy as a Relational Construct,” by O. Pratt, 1988, *Adult Education Quarterly*, 38, p. 167.

5. Orientation to learning

Learners are life-centred oriented in which they focus on learning something in order to deal with their life situation. Thus, they learn effectively in the real life context.

6. Motivation

Internal motivators such as self-esteem and job satisfaction motivate learners to learn with greater significance than external motivators such as promotions and higher salaries.

The basis of andragogical design is “transaction” which is usually “student directed” (McAuliffe et al., 2009). This model highlights the role of the educators as facilitators rather than teachers in the process of acquiring content. Educators facilitate learners to identify their learning needs and plan strategies to satisfy those needs. Learning is seen as an active process and at the higher order. Learners are able to identify the

educational practice and apply experiential methodology. Building this ability is important for learners' future learning and this model is associated with lifelong learning and as such can be better aligned to the development of soft skills. The andragogical model, which is characterised as being student centred, is expected to be a better means of developing those soft skills where experience is seen as a greater source of learning. Student-centred learning (SCL) associated with SDL is, however, considered to be a "Western approach" to learning; as such, developing countries may experience setbacks in implementing it with respect to limited resources and different learning cultures (O'Sullivan, 2004). Learner and educator beliefs, and their familiarity with SCL, have been identified as being among the important elements to address in successfully implementing this approach (O'Neil & McMahon, 2005). Thus, the andragogical model, which is characterised as being student centred, can be used to support soft skills learning. However, the most challenging aspect is the level of acceptance of this model by educators and students. The current learning culture in Malaysia may not value this approach as much as it is valued by the learning culture in developed countries.

A heutagogical model, which is based on theories of self-determined learning, is seen as an extension to pedagogy and andragogy theories (Hase & Kenyon, 2007). The term heutagogical comes from the Greek words *heut* for 'self' and *agogus* for 'guide' or 'leader'. Thus, this term implies the art and science of encouraging individuals to learn. This term was coined by Steward Hase and Chris Kenyon in the late 1990s (McAuliffe et al., 2009). Hase and Kenyon (2001) refer to the student-centred approach that was conceptualised by Carl Roger through five hypotheses to support principles of heutagogy:

1. Learners cannot be taught by teachers directly which means educators can only facilitate learners in the process. Thus, focus should be shifted from what the teacher does to what is happening in the learner.
2. Learners will attend to and learn those things which they perceive as significant to them in the continuing, improving and constructing of self. Thus, they learn those things that are relevant to them.
3. Learning experiences which challenge the sense of self in terms of its organisation are likely to be resisted via discounting or misrepresenting the information.
4. The learner should be free from threat in order to learn, especially when learning is seen as the learner's responsibility. Thus, it is important to create an accepting and supportive environment to support learning as a threatening environment can cause the learner to become more rigid.
5. Effective education situations are ones that promote ideas and reduce threats to the self to a minimum and assist the learner to see other people's points of view.

In contrast with andragogy, heutagogy uses a non-linear approach of double-loop learning where learning is not necessarily planned, and is an active process (Hase & Kenyon, 2001). Individuals may learn from their experience by performing so-called reflection and learning that goes beyond problem solving. The heutagogical model not only comprises elements of capability and reflection, which is recognised by action learning, but also consists of environmental scanning and valuing experience and interaction with others. The six assumptions of learners by Knowles et al. (2011) can be adapted to outline the principles of heutagogy as follows:

1. The need to know

Learners need to know in order to cope with rapid changes.

2. The learners' self-concept

Learners' self-concept is structured around a truly independent personality.

3. The role of learners' experiences

Learners' experiences are the key resources of their learning particularly in complex and super complex situations.

4. Readiness to learn

Learners' are ready to learn when they have determined the need to learn.

5. Orientation to learning

Learners are capability centred in order to cope with rapid changes.

6. Motivation

Learners are completely driven by internal motivators such as self-efficacy.

The basis of heutagogical design is “development of capability” which is usually “self-determined” and allows learners to engage with the real world (Hase & Kenyon, 2001).

Hase and Kenyon (2007) refer to complexity theory in contextualising this model. That is, as the world is experiencing continuous rapid change, learning is needed in order for the organisational system to adapt. There is a two-way interaction between organisational systems and the environment. Therefore, the development of capability is seen as important, especially the capability to adapt and adopt in uncertain situations.

Barnett (2006) emphasises that rapid change has led to a new world order of complexity and super complexity. Situations of complexity can be understood but situations of super complexity cannot even be described with unanimity. The individual, according to Barnett, is at the core of the process of adaptation to complex and super complex situations. The focus here is also on the issue of individuality and authenticity.

Barnett’s view is that an individual’s own ideas are crucial to adaptation and, as part of this, particular challenges are faced by students from collectivist cultures. Barnett also promotes the idea of self-monitoring capabilities. According to this view the individual is responsible for developing their soft skills.

McAuliffe et al. (2009) illustrate the principles of heutagogy based on the work of Hase and Kenyon in 2001, as shown in Figure 2.6.

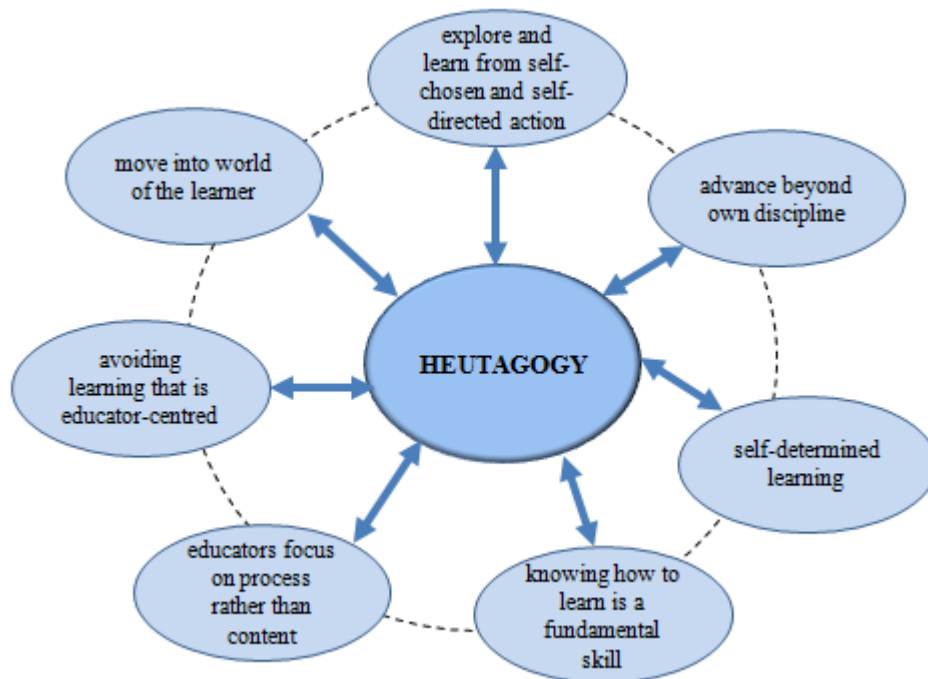


Figure 2.6: Principles of heutagogy

Note: Adapted from “Does Pedagogy Still Rule?,” by M. McAuliffe, D. Hargreaves, A. Winter, and G. Chadwick, 2009, *Australasian Journal of Engineering Education*, 15, p. 15.

Knowing how to learn is a fundamental skill (Hase & Kenyon 2001). Within the heutagological framework, learners are allowed to be involved in designing the course of study, and manage their own learning. The assessment process can be controlled by learners. The assessment is conducted not to evaluate learners’ achievement but to expose them to the learning experience (Hase & Kenyon, 2007). Thus, in the heutagological model, the role of educators has been taken away to ensure real participation of learners (McAuliffe et al., 2009). This is problematic because the educator role is significant in a credentialing institution. The question then arises as to what extent this model can be used to develop soft skills at HEIs if the role of educators is limited in the assessment process. Limiting the role of educators, however, leads to real participation by learners, where they learn from their experience.

Learning is seen as empowering the learners and at the highest level. At this level of learning, learners are capable of coping with rapid changes and are able to apply competencies in familiar and unfamiliar contexts. This capability is built from one's learning how to learn. Learning should be seen as a separate process from knowledge and skills acquisition. Work-based learning (WBL) is able to develop one's capability (Graves, 1993; Hase, 1998; Ismail, Mohamad, Omar, Yee, & Tee, 2015; Lester & Costley, 2010; Stibbe, 2013).

Heutagogical principles are not limited to structured education but applicable to all learning contexts (Chapnick & Meloy, 2005). Hase and Kenyon (2007) claim that heutagogical thinking has been used and needs to be used in various contexts and ways, including in the development of online and e-learning, particularly for "Gen Y" learners who are living in a highly technological society (McAuliffe et al., 2009). Thus, the heutagogical model, which is characterised as being truly self-directed, can be used to support soft skills learning which includes all kind of aspects such as skill components, attitudes, values and dispositions.

Table 2.5 illustrates the principles of the above models in a simplified form. Given the Malaysian learning culture, pedagogical approaches are likely to be implemented in HEIs over other approaches, and educators are seen as the core focus for developing student soft skills.

Table 2.5: Principles of pedagogy, andragogy and heutagogy

	Pedagogy	Andragogy	Heutagogy
Orientation to learning	Subject centred (content)	Life centred (interests and needs)	Capability centred (process)
Process design	Transmission	Transaction	Adaptation
Central focus	Educator directed/ educator centred	Student directed/ student centred	Truly student directed/student centred
Learning process	Educator managed	Moving from educator to student managed	Student managed
Role of instructor	Presenter	Facilitator	Consultant
Emphasis	Wisdom of others	Wisdom of others is adapted to self-interests and needs	Wisdom of self (own ideas)
Best learning environment	Formal	Informal	Informal

Table 2.5 identifies that the andragogical and heutagogical models are best learned in the form of informal learning. Knowles (1950) suggests that adults learn best in informal settings. Non-threatening surroundings that are comfortable and flexible encourage people to learn. Tough (1999, p. 11) claims that “If we just free them up, what we find is that people learn more and they learn more enthusiastically”. Tough also argues that informal learning is a very natural human activity and on average people spend 15 hours a week doing it. Thus, soft skills development is expected to take up the form of informal learning if the andragogical and heutagogical models are to be used.

Each model impacts learning in certain ways, and knowing these distinctions can imply the success or failure of educators in developing soft skills among students. Despite opposing views of each model, their ideologies and assumptions continue to influence educational practices (see Henschke, 2011).

The above theories are applicable depending on the learning situation and can be associated with student motivation in learning (Pew, 2007). Using these models can show and clarify the responsibility of educators in developing student soft skills. This

will determine whether educators are primarily responsible, whether they share responsibility with students, or whether students are solely responsible for their soft skills development. The review of theories of teaching and learning indicates the need for a flexible role for educators in soft skills development. There is, however, a lack of evidence specifically examining the types of approaches used to guide the role of educators in teaching and learning soft skills. Examining the perceptions of educators about their role in developing soft skills and the experiences of educators when they are teaching and assessing soft skills can lead to a better understanding of these issues.

2.5.3 Soft skills training in practice

Many studies have examined the development of soft skills and analysed the approaches that suit training for these skills (Abu et al., 2008; de la Harpe et al., 2009; Fallows & Steven, 2000; Hanover Research, 2014a; Knight & Yorke, 2000; Precision Consultancy for the BIHECC, 2007). Regardless of which approaches are selected by HEIs for soft skills development, the role of educators is important in determining success. Gillespie (n.d.) argues that soft skills development varies widely across HEIs, with no single national picture of uniform development. The author highlights examples of initiatives in the UK that pay attention to the materials to support the development of soft skills and the systems to enable students to build up portable personal academic records. Those initiatives focus on facilitating learners to manage their academic knowledge and soft skills.

Walker (1998) argues that the patterns of soft skills development are shaped by the mission, history and culture of HEIs. The author provides a (non-exclusive) list that shows the different patterns resulting from decisions made by HEIs in the UK (Table 2.6). The initiatives to develop soft skills are driven by the policy of each institution.

Table 2.6: Patterns practised by HEIs in the UK

Policy	No policy	Developing policy	Agreed policy
Participation	voluntary	compulsory for some programmes	compulsory for all
Tutors	volunteer tutors	specialist tutors	all tutors
Scope	add on (special course I workshops)	integrated in academic courses	both
Methodology	directed learning	work-based learning	active learning
Content	closed	selective – choice from a menu	open – negotiated learning contracts
Assessment	not explicitly assessed	self-assessed against criteria	tutor/employer assessed
Evidence	academic learning outcomes	Accreditation of Prior Experiential Learning (APEL)/extra-curricular	both – portfolio
Recording	implicit in learning outcomes	record of achievement	academic transcript
Certification	none	included within the university's award	external – e.g. National Vocational Qualifications (NVQ)
Levels framework	none or home made	NVQ/General National Vocational Qualifications (GNVQ)	South East England Consortium (SEEC)

Note: Adapted from *Key Skills and Graduateness*, by L. Walker, 1998. Retrieved from http://www.heacademy.ac.uk/assets/documents/resources/heca/heca_ks11.pdf

Using 17 case studies in the UK, the US and Australia, Fallows and Steven (2000) demonstrate a range of institutional styles and circumstances in integrating soft skills into courses and institutions. These authors claim that it is unrealistic to expect integration for a single implementation model as the practice differs across the system according to the historical background and future perspectives of HEIs, which result in each HEI having its own departmental policy and approaches. When moving from conception to implementation of soft skills at HEIs, a few key issues need to be addressed. These include decisions on whether implementation will be universal or department by department, whether a single or multiple models will be used, whether to

set out the single set skills expectations or to set out progressively more onerous expectations, and whether skills will be focused to a skills module or embedded into the general curriculum. Issues such as the level of institutional support, and resources such as staff development and implementation costs, also need to be addressed as success depends crucially on these factors.

De Corte (1996, p. 123–124) identifies the following features as powerful learning environments:

They:

- have ‘a good balance between discovery learning and personal exploration, on the one hand, and systematic instruction and guidance, on the other’;
- require students to ‘progressively increase’ their ‘share of self-regulation ... at the expense of external regulation’; ‘provide opportunities to use a rich array of resources’ and for ‘social interaction and collaboration’;
- ‘allow for the flexible adaptation of the instructional support to accommodate individual differences and stages of learning’;
- ‘facilitate the acquisition of general learning and thinking skills’ throughout the curriculum.

The above learning environments facilitate learners in developing their soft skills by providing flexible approaches that allow learners to explore and experience learning. Furthermore, the role of instructors to guide learners is acknowledged as essential to the process.

Moy (1999, p. 24) argues that active approaches are highlighted by research as the best way to develop soft skills which exhibit the following features:

- adult learning principles
- learner-centred approaches
- advanced training techniques
- training to transfer

- active and interactive learning
- the conscious use of reflection
- performance of multiple roles by teacher/trainer such as facilitator, coach and mentor that include modelling the key competencies to learners
- inclusive approaches to teaching/training
- holistic approaches to assessment.

The above features indicate the importance of pedagogical approaches in teaching and learning soft skills, which points to the role of educators in learning spaces. According to Walker (1998) the challenge is to ensure that the soft skills fit not just into the complex environment but also into the pedagogical uncertainties that require resolution. If educators are expected to fill multiple roles such as a teacher, facilitator and consultant, educator reflection is critical.

Table 2.7: Principles of good teaching consistent with the development of employability skills and attributes

Students' teaching encounters across a programme and in any one year of it should ...

- Alert them to the 'rules of the game' – make them aware of what is valued and how it may be produced, both in general and in each case.
- Use the requisite variety of media (face-to-face, audio-visual, online conferencing, asynchronous information and communications technology).
- Use the requisite variety of methods (presentations, Action Learning Sets, work experience, seminars, proctoring, tutorials, Computer-assisted Instruction, independent study project).
- Use a variety of styles (coaching, instructing, facilitating, clarifying).
- Meet the standard indicators of good teaching; namely interest, clarity, enthusiasm.
- Be structured across the programme as a whole so that they get progressively less help and guidance from teachers as they encounter more complex situations, concepts, arrangements, etc.
- This entitlement should be explicit in a programme-wide teaching summary.

Students' learning activities across a programme and in any one year of it will be largely determined by their teaching entitlement. In addition:

- There should be opportunities for depth study.
- Curriculum should not be so crowded that 'surface' learning is encouraged at the expense of understanding.
- Information and communications technology should be treated as a normal learning tool.
- They should expect to work collaboratively, whether learning tasks require it or not.
- Time for strategic thinking, reflection, planning and portfolio making should be written into the programme; students should know that; and they should know that they are expected to engage with these learning activities involving peers, friends and tutors.
- There should be plentiful feedback that is intended to help future performance (rather than identify information lapses), especially by encouraging self-theories that value effort and mindfulness.
- This entitlement should be explicit in a programme-wide learning summary.

Note: From *Skills Plus: Tuning the Undergraduate Curriculum* by P. Knight & M. Yorke, 2000. Retrieved from http://www.heacademy.ac.uk/assets/documents/resources/heca/heca_ks11.pdf

Knight and Yorke (2000) provide principles of good teaching that are consistent with the development of employability skills and attributes, as outlined in Table 2.7. How educators teach what they teach can lead to the development of soft skills in students. The principles emphasise the importance of media, methods and styles that require soft skills being made explicit, and learning being supported by sound reflection and feedback.

Crebert et al. (2004) found that teamwork, collaborative learning and being given responsibility were the most important factors for effective learning at university, during

work placement and in employment. Virgona and Waterhouse (2004) found that the primary context for the development of soft skills is work and that the primary mode of acquisition is experiential learning. Soft skills in students can also be built up by looking at soft skills as a counterpart to subject mastery, and that students will improve their soft skills as part of the process of learning their subjects (Kurtis, 2000). Hager and Holland (2006) argue the focus should be given to the ways people learn best rather than on the ways to develop soft skills. They found that a common theme in the literature shows that making soft skills explicit for students contributes to greater chances of learning success.

The process of developing soft skills is not just about the curriculum design but involves educators who are expected to teach the skills. What educators have experienced and how they experienced this needs to be explored, including the individual and institutional factors that influence educator perceptions on teaching soft skills. Given there are many approaches to teaching soft skills, a study on how educators are adopting or why they are not adopting these approaches, and what obstacles educators are facing, will provide new insights to help them take their teaching to the next level. This also includes examining the emphasis, confidence and willingness educators place on teaching these skills. In addition, it is also important to undertake research into the implications for educators adopting or not adopting the teaching of soft skills. Walker (1998, p. 7) argues that “A rude introduction of key skills as a national requirement of undergraduate courses would undoubtedly produce resistance in academics, many of whom are experiencing the forced narrowing of their discipline”. Thus, while the role of educators and their approaches to teaching and learning are important to soft skills development, if this to be successful, the perceptions of educators must be taken into account.

2.5.4 Assessment and reporting

Assessment speaks to the direct role of educators in soft skills development. Again, regardless of which approaches are selected by HEIs for assessment and reporting, educators are important in determining success. Despite widespread implementation of soft skill assessment little is known about how well it is practised (Gibb, 2014). As there is no agreed explicit definition of soft skills, it is difficult to establish the most effective method of documenting soft skills development (Manathunga & Wissler, 2003). Assessment of soft skills requires construct, face and technical validity (DEEWR, 2011) and it becomes more complicated as these skills change according to the industrial economic structure (Curtis, 2004a, McCurry, 2003). As a result, both soft skills development and their assessment are complex (Julian, 2004). Despite this, educators cannot avoid taking responsibility in assessing soft skills, thus how they accept this responsibility needs to be investigated.

Assessment of soft skills serves multiple purposes but is primarily designed to assist learning, to measure individual achievement and to evaluate programs (Airrasian, 1994; Pellegrino, Chudowsky, & Glaser 2001; Wood, Thomas, & Rigbi, 2011). The curriculum and behaviour of students and staff can be shaped via assessment (Biggs & Tang, 2007; Ramsden, 2003). If assessment is perceived by educators as a process, this corresponds to teaching, whereas if assessment is perceived as a product, this corresponds to learning (Cimatti, 2016). In addition, educators may focus on ‘assessment of learning’, ‘assessment for learning’ or ‘assessment as learning’ in the assessment process (Earl, 2006). The role of educators in assessment of learning is to assess how well students are learning and assessment is usually summative, whereas their role in assessment for learning is to monitor the progress of students and assessment is usually formative. Both concepts are different from assessment as

learning. Assessment as learning focuses on the student role to manage their own learning. Without assessment, soft skills are seen as less important (Curtis, 2004b). Assessment also encourages learners with low motivation to develop their soft skills (Callan, 2004). In general, assessment encourages a “deep” approach rather than a “surface” approach to a task (Entwistle, 1996). There are two important elements in soft skill assessment: measurement and reporting (Curtis, 2004b) and these point to the need for an assessor of soft skills development, and reinforce the role of the educator. Thus, the role of educators in the assessment process is equally as important as teaching and learning. However, educators perceived that the most confronting task they face in the process of developing soft skills is changing their assessment practice (Radloff et al. 2008). While it is undeniable that assessments serve a variety of purposes, how educators perceive these purposes in the context of soft skills development needs to be examined.

Previous studies have highlighted a few models of soft skills assessment: holistic judgements, portfolio assessment, workplace assessment and standardised instrumental assessment (see Australian Council for Educational Research [ACER], 2001; Curtis, 2004b; Feast, 2000; Griffin, 2000; Hanover Research, 2014b; Herl et al., 1999; Kruger, 2015; McCurry & Bryce, 1997; National Industry Education Forum, 2000; Queensland Department of Education, 1997; Reynolds, 1996). Each of these models has certain advantages and disadvantages. For example, holistic judgements offer high validity as educators are involved in the process (Curtis, 2004b). Authentic and consistent judgements within a school could be made if educators have sufficient training on the assessment standard. However, this model has low reliability when judgements are compared between schools as each school may perform different assessment standards. Another drawback of this model is that educators can monitor students in one context

but not in others. Additionally, this method does not give students the opportunity to learn as it is a summative assessment rather than formative assessment. This approach leads to the important role of educators as assessors; thus, how educators accept their role and whether they have sufficient training needs to be investigated.

Portfolio assessments differ from holistic judgements as, in a way, the students themselves become the assessors. Students are in charge of writing their own soft skills achievement in the portfolio assessment (Curtis 2004b) and research suggests that students focus on writing about what they learned, mastered and can perform rather than what they did (Kruger, 2015). This provides a rich source of information and gives students more learning experience in addressing gaps (Hanover Research, 2014b; Kruger, 2015; Precision Consultancy for the BIHECC, 2007). Conversely, this model has low reliability when compared with other individuals, as it is not standardised (Curtis, 2004b). This model also has low content validity as it is strongly influenced by student writing ability and other factors. Thus, it is suggested that portfolio assessments should be used only for low-stakes purposes and not for high-stakes purposes such as hiring decisions. However, businesses and universities perceive the e-portfolio as a practical method for graduates to list and explain their soft skills (Hart Research Associates, 2015; Precision Consultancy for the BIHECC, 2007) because it can indicate a way forward to the comprehensive achievement, and overcome challenges surrounding the assessment of soft skills (Yorke & Harvey, 2005). How educators accept their role in this capacity needs to be explored.

Significantly, workplace assessment has high validity, as it is done in the working context (Curtis, 2004b). Moreover, if feedback is given, this model provides a high opportunity to learn (Adams, 2013; Embo, 2015). This model's pitfalls include that there is no standard assessment and as a result it is not possible to make comparison

(Curtis, 2004b). Furthermore, this model is strongly influenced by the training of assessors and the opportunities presented by the work context (creating low reliability). Again, how educators accept their role, including those with an industry role as supervisors for student learning in the workplace, needs to be explored.

Standardised instrument assessment has high reliability and precision, as comparison can be made across individuals and occasions, but low validity and authenticity. Two examples of standardised instrument assessment are Graduate Skills Assessment (GSA) (Australian Council for Educational Research [ACER], 2016; Curtis, 2004b) and problem-solving assessment (Curtis, 2004b). Both use summative assessment, which limits learning potential among students. It is also important to explore the perceptions of educators about summative and formative assessment of soft skills.

In their principles of good teaching, Knight and Yorke (2000) also include the assessment of soft skills. As illustrated by Table 2.8, a good assessment should take a form of various methods, modes and feedback, which should be made explicit throughout soft skills learning. Feedback is important not only to improve the performance of learners but also to build their confidence and sense of achievement (see Yorke, 2001; Knight, 2001). The use of portfolios and self-assessment support soft skills development in a way that enables learners to manage their own learning through the curriculum and extra-curricular activities. Other researchers also propose best practice for soft skills assessment (see Cinque, 2015; Hanover Research, 2014b; Nicol & Macfarlane-Dick, 2006; Pellerrey, 2015; Pritchard, 2013). Thus, regardless of which assessment approaches educators use, it is important to explore whether, in taking up their role as developers of soft skills, educators make these approaches explicit or implicit.

Table 2.8: Assessment: principles of good teaching

Students' assessment encounters across a programme and in any one year of it should be compatible with their teaching and learning entitlements. That implies, for example, encountering a variety of assessment methods and modes and getting good feedback from a variety of sources. In addition:

- Summative assessment has the important function of providing trustworthy grades for significant learning achievements. However, by no means all achievements can be affordably and reliably graded with validity. This means that some achievements should not be summatively assessed by academic staff.
- Most assessment will be 'low stakes' assessments, which are intended to improve understanding, or skills, or reflection, or the development of self-theories that sustain achievement.
- Learning criteria should be available at programme and module levels. In many cases these will be 'fuzzy' criteria that guide assessment conversations in low stakes assessment.
- There should be plenty of occasions to get feedback on performance, which will tend to be conversational feedback.
- Peers (other students) will often provide feedback.
- As the programme progresses, students will learn how to become adept at self-assessment.
- Opportunities and support should be provided to help students create learning portfolios that document their claims to educational and employability achievements. For some achievements, this is the best alternative to summative assessment.
- These principles should be explicit in a programme-wide assessment plan.

Note: From *Skills Plus: Tuning the Undergraduate Curriculum* by P. Knight & M. Yorke, 2000. Retrieved from http://www.heacademy.ac.uk/assets/documents/resources/heca/heca_ks11.pdf

Given the above facts, regardless of which approaches are in place for soft skills assessment, it is important to explore what educators have experienced and how they experienced this from their own perspectives. This includes examining what individual and institutional factors influence educator perceptions on assessing soft skills and to what extent educators are implementing the approaches selected by their HEIs. Further, if educators are implementing the approaches, what obstacles are they facing? In regard to willingness, they might be willing to assess but it is important to discern the extent to which they emphasise assessment and their level of confidence in implementing it. If they are not implementing the approaches, what are their reasons for not doing so? Alternatively, are they being selective in choosing the approaches to implement because, as mentioned earlier, each approach has its advantages and disadvantages. Furthermore, assessment of soft skills is "fundamentally different" from academic

knowledge (Hanover, 2014b, p. 8); soft skills are difficult to assess and there is no single “one size fits all” model. Thus, by understanding educator perceptions of assessment it is possible to determine what has to be in place for educators to successfully assess their students’ soft skills.

In general, studies conducted in the US, the UK and Australia (Kearns, 2001) reveal two approaches relevant to the measurement of soft skills: holistic and pragmatic. The US model is more holistic, broad and flexible, unlike the British and Australian models that are more instrumental and narrow, as a result of competency-based training being adopted by both countries. In addition, in Australia particularly, only a few universities have formalised academic standards for measuring their student achievement in these skills (Vu, Rigby, & Mather, 2011) and it is not clear to what extent HEIs are actively developing these skills across their programs and other opportunities (Norton & Cherastidtham, 2014). Despite this, perceptions of educators about their role in assessing soft skills and how assessment of soft skills is managed needs to be examined and explored.

2.6 Conclusions

Many tensions exist in the literature about what soft skills are, who is responsible, how teaching and learning occurs, and how assessment of soft skills is managed. These tensions make the role of the educators “fuzzy”, contributing to a need to better understand educator perceptions and how they conceptualise their role by looking at their teaching and learning of soft skills. This will help to identify the most appropriate learning spaces, and the most appropriate modalities of teaching and learning that link to teaching and learning theories, and can therefore inform practice.

There is strong support at the government level for efforts to equip students with the skills that employers require. One element of this has been to make soft skills a part of the curriculum in HEIs; this is particularly the case in Malaysia. Many HEIs, both within Malaysia and more generally, at least at the policy level, are committed to soft skills development (see Bennett et al., 1999; Cimatti, 2016; Cinque, 2013; Curtis & McKenzie, 2001; McDonalds, 2015; Singh, Thambusamy, & Ramly, 2014; Sung, Ng, Loke, & Ramos, 2013). Despite this, there is still little research in evidence that examines the processes and approach to soft skills development at the higher education level from the perspective of individual educators.

This study will look at the responsibility of HEIs towards delivering soft skills and, more specifically, at educator perceptions of the soft skills module in Malaysian public HEIs, to identify the impact of such an approach.

The review of literature has demonstrated gaps in the overall understanding of the role of educators in teaching and learning soft skills at HEIs. There are many unexplored issues surrounding the teaching and learning of soft skills, including framework, delivery approaches, assessment and reporting, and the role of HEIs in soft skills development.

It is argued therefore that research is needed to explore what educators have experienced, and how they experienced it, that will address some of these gaps to develop an understanding of teaching and learning soft skills. There is no single global model of soft skills development. Hence, it is appropriate to consider the soft skills module, as set out by the Malaysian system, and to seek educator views on its operation.

Given the strong government impetus, it is important to clarify the roles HEIs and individual educators have in developing and maintaining soft skills, regardless of

teaching and learning or assessment approach. This study will seek to address this issue and provide a perspective which is hitherto unexplored; that of the educator. Understanding educator perceptions is the linchpin in understanding how to teach and assess soft skills. It is appropriate to undertake this study using multiple data sources and research methods to gain a suitably in-depth understanding about the educators' role in developing soft skills and their experiences in teaching and assessing soft skills. The next chapter presents the research approach and the associated research processes.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research approach in this study, including the theoretical and philosophical foundations on which it is based. The research design, research paradigm, research methodology and research methods are explained. The research methods section details the steps taken by the researcher including data collection and analysis. Establishing trustworthiness and authenticity; the notions of validity and reliability; and a study validation framework (VF) are also discussed, followed by presentation of the ethical considerations of the study, and then a conclusion. The stance that this thesis adopts is argued and defended in this chapter. It discusses why the phenomena of teaching and assessing soft skills should be investigated:

- within singular and multiple realities (ontology)
- using a practical approach (epistemology)
- taking multiple stances (axiology)
- employing mixed methods research (methodology)
- by adopting formal writing style (rhetoric)

3.2 Selecting a research design

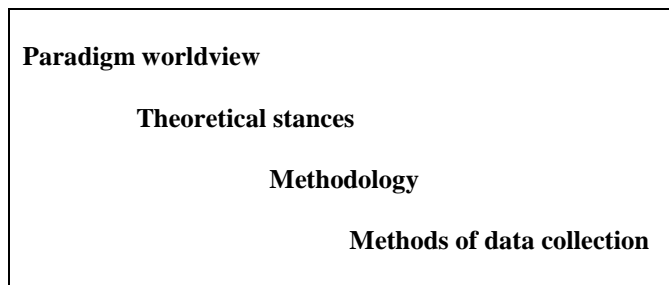
Research is conducted in the natural and social sciences to acquire greater knowledge about a phenomenon of interest. The theoretical lens and philosophical assumptions are pertinent to this process, and understandings of the paradigm, ontology, epistemology

and methodology are used to position the research, provide consistency in approach, and increase the veracity of outcomes.

The term paradigm refers to the beliefs that researchers hold about inquiry, defined by Guba and Lincoln (1994, p. 105) as the “basic belief system or world view that guides the investigation”. Ontology focuses on how the researcher views the world by describing the nature of knowledge, while epistemology focuses on how knowledge is gained by looking at the relationship between the researcher and their subjects (Creswell & Plano Clark, 2011). The theoretical lens explains the theoretical foundation, providing the direction for a study. The methodological stance of the researcher is based on the philosophy and worldview adopted, and determines the methods of data collection and analysis. Crotty (1998, p. 3) defines methodology as “the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes”.

When designing research, a framework which can position the philosophy of a study is needed. There are a number of different frameworks that provide considerable overlap in defining and explaining the crucial terms of research design including paradigm, ontology, epistemology, theoretical lens and methodological approach, and that suggest different research processes for each level of the research (e.g. Burrell & Morgan, 1979; Creswell, 2014; Crotty, 1998; Sarantakos, 2013). This discussion focuses on the framework conceptualised by Crotty (1998), which proposes four different levels for developing a research study (see Table 3.1). It starts with the paradigm worldview, which is followed by the theoretical stances where the theoretical foundation of the research – such as feminist, racial and social science theories – might be used by researchers. The third and fourth levels are the methodological approach, and methods of data collection.

Table 3.1: Crotty’s model of developing a research study



Note: Adapted from *The Foundations of Social Research: Meaning and Perspective in the Research Process* (p. 5), by M. Crotty, 1998, London: Sage.

Ethnography, experiment and mixed methods are examples of methodological approach, whereas interviews, checklists and instruments are examples of methods that can be used for data collection.

Creswell and Plano Clark (2011) use the term *worldview* to describe philosophical assumptions. They suggest four worldviews or paradigms that refer to the shared beliefs of researchers: postpositivism, constructivism, participatory and pragmatism. Table 3.2 describes the basic characteristics of these four worldviews. There are of course other variants in the literature (see Guba & Lincoln, 2005; Sarantakos, 1998) but “... these worldviews provide a general philosophical orientation to research and ... they can be combined or used individually” (Creswell & Plano Clark, 2011, p. 40). Therefore, a single worldview or a combination of these views that generates both quantitative and qualitative data can be used.

Table 3.2: Basic characteristics of four worldviews used in research

Postpositivist worldview	Constructivist worldview	Participatory worldview	Pragmatist worldview
Determination	Understanding	Political	Consequences of actions
Reductionism	Multiple participant meanings	Empowerment and issue oriented and issue oriented	Problem centered [sic]
Empirical observation and instrument	Social and historical construction	Collaborative	Pluralistic
Theory verification	Theory generation	Change oriented	Real-world practice oriented

Note: Adapted from *Designing and Conducting Mixed Methods Research* (p. 40), by J. W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, CA: Sage.

The postpositivist worldview, which is often associated with quantitative approaches, is characterised by cause-and-effect relationships, interrelated variables, empirical observation and measurement, and theory verification (Slife & Williams, 1995). This positivism approach focuses on objective thinking. In contrast, the constructivist worldview is typically associated with qualitative approaches, and understandings are created through interaction (Creswell & Plano Clark, 2011). Individual views are expanded to broad understandings in this interpretivist approach, which is based on subjective thinking. In the participatory worldview, political concern is seen as essential, with this worldview usually associated with qualitative approaches rather than quantitative approaches. This worldview is empowerment and issue oriented; collaboration and change are promoted. The pragmatist worldview, which takes the practical stance, is often associated with mixed methods research. This worldview focuses on the effect of research, the questions asked, and the multiple methods of data collection.

As can be seen from Table 3.2, the selection of research worldview posits the research in a particular set of approaches. Thus, in conducting research, the understanding of theoretical lens and philosophical assumptions are as important as the research problems and questions, because all contribute to creating the foundation for the process of inquiry (Creswell & Plano Clark, 2011).

3.3 Selecting a research paradigm

The research paradigm selected for this study is the pragmatist view, which combined a constructivist-interpretivist approach and an objectivist-positivist approach. Elements of worldviews or paradigms, and implications for practice that include this approach, are further explained by Creswell and Plano Clark (2011) as presented in Table 3.3. While ontology, epistemology, axiology, methodology and rhetoric are the common elements of the four worldviews, each worldview has different stances that determine ways of conducting and reporting research.

Table 3.3: Elements of worldviews and implications for practice

Worldview element	Postpositivism	Constructivism	Participatory	Pragmatism
Ontology (What is the nature of reality?)	Singular reality (e.g. researchers reject or fail to reject hypotheses)	Multiple realities (e.g. researchers provide quotes to illustrate different perspectives)	Political reality (e.g. findings are negotiated with participants)	Singular and multiple realities (e.g. researchers test hypotheses and provide multiple perspectives)
Epistemology (What is the relationship between the researcher and that being researched?)	Distance and impartiality (e.g. researchers objectively collect data on instruments)	Closeness (e.g. researchers visit participants at their sites to collect data)	Collaboration (e.g. researchers actively involve participants as collaborators)	Practicality (e.g. researchers collect data by ‘what works’ to address research question)

Worldview element	Postpositivism	Constructivism	Participatory	Pragmatism
Axiology (What is the role of values?)	Unbiased (e.g. researchers use checks to eliminate bias)	Biased (e.g. researchers actively talk about their biases and interpretations)	Negotiated (e.g. researchers negotiate their biases with participants)	Multiple stances (e.g. researchers include both biased and unbiased perspectives)
Methodology (What is the process of research?)	Deductive (e.g. researchers test an a priori theory)	Inductive (e.g. researchers start with participant views and ‘build up’ to patterns, theories and generalizations [sig])	Participatory (e.g. researchers involve participants in all stages of the research and engage in cyclical reviews of results)	Combining (e.g. researchers collect both quantitative and qualitative data and mix them)
Rhetoric (What is the language of research?)	Formal style (e.g. researchers use agreed-on definitions of variables)	Informal style (e.g. researchers write in a literary, informal style)	Advocacy and change (e.g. researchers use language that will help bring about change and advocate for participants)	Formal or informal (e.g. researchers may employ both formal and informal styles of writing)

Note: Adapted from *Designing and Conducting Mixed Methods Research* (p. 42), by J. W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, CA: Sage.

The first aspect of differences among the worldviews is ontology. This refers to the assumptions made by the researcher about the world that relate to “the science or study of being” (Blaike, 1993). Postpositivism refers to the perspective where reality is “out there” to be found, and researchers face investigating a singular reality (Hesse-Biber & Leavy, 2006; Creswell & Plano Clark, 2011). This is in contrast to constructivists who believe reality is “in here”, and deal with multiple realities. In participatory research, reality is always negotiated with participants, whereas in pragmatism – the stance adopted in this thesis – both singular and multiple realities are investigated to explain the phenomenon of study. To provide a better understanding of teaching and assessing soft skills within the Malaysian HEIs context, it is imperative to explore how teaching and assessing soft skills are experienced by educators by making assumptions that are based on both realities. The assumption that reality is “out there”, can be captured in a

simple way, and can be explored as a single meaning (that is, that there is no need to look for hidden meanings within the topic) is combined with the assumption that the reality is “in here”, is constructed by the lived experience, and consists of multiple realities. This combining of assumptions provides the best understanding of a research problem, given that, as Creswell and Plano Clark (2011) suggest, one data source, either qualitative or quantitative alone, is insufficient to fully understand the problem. This is especially the case for complex issues such as the perceptions and experiences of educators, which include their beliefs about teaching and assessing soft skills. In this study, there is a need to confirm the qualitative experiences of educators with quantitative measures and to explain quantitative results. Therefore, the orientation of pragmatists is real-world practice and emphasises *what works* rather than *what truth is* (Creswell, 2014).

The second aspect of differences among the worldviews is epistemology. In simple terms, this is the ways researchers discover knowledge (Creswell & Plano Clark, 2011). Postpositivists support the idea that the research process can be objective and their relationship with participants is identified as disengaged and independent. This, too, is in contrast with constructivists, who are subjective in dealing with participants’ realities, and who assert that the interaction between the researcher and participants in the research process constructs meaning. On the other hand, participatory research is about establishing equality in researcher-researched relationships and encouraging the active participation by researched subjects in the co-creation of knowledge about themselves (Swain & French, 2004). A pragmatist position was adopted for this thesis in which elements of practicality became the main concern of the researcher, with the researcher using diverse approaches to address the research questions. Pragmatists value both being objective and being subjective in dealing with participants’ realities (see Morgan,

2007) and give priority to the importance of the research problem and question (Creswell & Plano Clark, 2011). In this study, many different perspectives will be accepted and steps to reconcile those views through pluralistic means will be taken to best understand educator experiences with teaching and assessing soft skills.

Another aspect of differences among the worldviews is axiology. This refers to the role feelings, values and attitudes play in research (Creswell & Plano Clark, 2011). In other words, it explores to what extent the biases and interpretations of researchers are allowed to enter into the research process. In postpositivist research, the researchers use checks to reduce the likelihood of bias. In constructivist research, the values of researchers must be considered as part of the research process. Participatory researchers find biases always negotiated with participants, while pragmatists take multiple stances by including both biased and unbiased perspectives – the stance taken in this thesis. For example, in this mixed methods study (in which the researcher works as an educator at one public HEI and experiences teaching and assessing soft skills), axiological matters related to biased perspectives held by the researcher and unbiased perspectives generated from quantitative study are addressed by taking multiple stances. These biased and unbiased perspectives are balanced with valid and purposefully analysed quantitative and qualitative data.

The methodology, which identifies the procedures and techniques employed in the research, is also different from one worldview to another. Postpositivists tend to rely on deductive logic from the top down, using hypothesis testing to verify an existing theory. In contrast, constructivists base their thinking on inductive logic from the bottom up, examining the world as socially constructed to generate a theory (Creswell & Plano Clark, 2011; Hesse-Biber & Leavy, 2006). In participatory research, researchers work together with participants in all stages of research including data collection and analysis.

However, in pragmatism the researchers collect both quantitative and qualitative data, using both deductive and inductive logic in the analysis – the methodology adopted in this thesis. Thus, this mixed methods study focuses on a real problem of teaching and assessing soft skills, chooses a balanced approach to research, and attempts to complement and verify results.

Furthermore, not only is the process of research in each worldview different, so too is the language of research, or rhetoric. In postpositivism research, the formal style is preferred rather than the informal style common in constructivist writing. However, in participatory research, language that assists change and advocacy in participants is employed. The style of writing in pragmatist research could be either formal or informal, or both. This thesis adopts the formal style.

Pragmatism is the methodological stance of this thesis – the mixed methods approach that is outlined in Section 3.5 below.

3.4 Selecting a theoretical lens

The theoretical lens refers to “the philosophical stance informing the methodology thus providing a context for the process and grounding its logic and criteria” (Crotty, 1998, p. 3). The direction of a research study is determined by the theoretical stance that the researchers might employ (Creswell & Plano Clark, 2011).

This study takes a contextual approach in grouping the practices of the Ministry of Higher Education (MOHE) soft skills module according to formal, non-formal and informal learning. The context of learning is often left out in a study of teaching and learning soft skills. A clear understanding of the contextual nature of a research study is

important in order to generalise the reported data (Sechrest & Sidani, 1995). The researcher used theories of teaching and learning originating from social science theory, which include pedagogy, andragogy and heutagogy, to facilitate in explaining the interpretation of the results. These learnings and theories were discussed in Chapter II (see section 2.5.2).

3.5 Selecting a research methodology

A number of approaches and steps for inquiry are determined by research methodology. As mentioned earlier, Crotty (1998) identifies mixed methods research as one type of methodological approach. In this study, the researcher used mixed methods research to determine the procedures, strategies and techniques to adopt.

In terms of a worldview that provides a foundation for mixed methods research, there are again considerable overlaps among scholars in proposing the use of either a single worldview – such as pragmatism, critical realism or transformative emancipatory – or multiple worldviews (Creswell & Plano Clark, 2011). This thesis does not intend to delve further into the aspect of transformative emancipatory (see Mertens, 2003) or critical realism (see Maxwell & Mittapalli, 2010).

Tashakkori and Teddlie (2003) argue that in pragmatism, the researchers should not divide postpositivism and constructivism, and should not employ the metaphysical concepts such as truth and reality. They further suggest the research question and a practical approach should be fundamental in conducting mixed methods research, using both quantitative and qualitative methods in a single study. According to Creswell and

Plano Clark (2011), a pluralistic stance is a basis for choosing a pragmatism worldview.

They argue that:

If, instead of implementing the different approaches in phases, a mixed-methods researcher collects both quantitative and qualitative data in the same phase of the project and merges the two data bases, then an all-encompassing worldview might be best for the study. We would look to pragmatism (or a transformative perspective) as that worldview, because it enables researchers to adopt a pluralistic stance of gathering all types of data to best answer the research questions. (p. 46)

On the other hand, Greene and Caracelli (1997a) argue that the dialectical perspective in multiple worldviews, which is featured by contradictory thinking, should be valued but cannot be reconciled.

In this study, the researcher adopted a single worldview: pragmatism, as discussed in Section 3.3 above. The methodological contribution is a dialectic stance of a researcher who uses diverse philosophical positions in which they utilise assumptions from both quantitative and qualitative paradigms. Through dialectical discovery the researcher takes the opportunity to transform tensions created by these two different paradigms into new knowledge (see Greene, 2007). A pragmatic perspective suggests that the researcher mix quantitative and qualitative to discover a workable solution to research questions (Johnson & Onwuegbuzie, 2004).

The mixed methods research design, utilising multiple data sources, best assists in fully understanding the processes involved and/or outcomes resulting from the implementation of a given intervention (Creswell & Plano Clark, 2011) – in this case the perceptions and experiences of educators in teaching and assessing soft skills. Åkerlind (2004) suggests that the perceptions of educators about teaching and learning, including beliefs about their role, are important but are given less attention. The beliefs that educators hold are central to their teaching practice and these form the basis for

attempting to integrate soft skills at HEIs (Radloff et al., 2008). In this study, the research question elements suggested by Schutt (2015), such as originality, complexity, ambiguity and authenticity, have also been considered. A complexity that quantitative findings identified, such as educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills, was clarified by qualitative data. In this study, the research questions also have ambiguous implications, and suggest a challenge for an authentic identification of a causal context, such as educator perceptions about their role and how they approach their teaching and assessing. Thus, this methodology capitalises on the strengths of both qualitative and quantitative approaches to enhance the breadth and depth of the understanding of a complex problem. The value of this design is further explored in this thesis.

3.5.1 Research methodology selected: mixed methods research

The first evidence of mixed methods research can be traced back as early as 1959, with the idea spreading throughout countries and disciplines in the 1980s (Creswell & Plano Clark, 2011). The development of mixed methods can be divided into five stages including the formative period, paradigm debate period, procedural development period, advocacy and expansion period, and reflective period. Each stage pays attention to the writers or researchers who contributed to this development (see Creswell & Plano Clark, 2011). Mixed methods research is newly accepted by scholars as one of the methodological approaches available to inquiry, with some researchers considering this approach as the “third methodological movement” (Tashakkori & Teddlie, 2003, p. 5) or “third research paradigm” (Johnson & Onwuegbuzie, 2004, p. 15).

Those who combine qualitative and quantitative studies by being pragmatic in looking at the research problem are known as pragmatists (Hesse-Biber & Leavy, 2006). In

contrast, purists support one method over another, either quantitative or qualitative. Purists argue that these two approaches, sometimes referred to as positivism and interpretivism, cannot be mixed. The debate between purists and pragmatists has been described in the literature as contributing to a “paradigm war” (Hesse-Biber & Leavy, 2006; Tashakkori & Teddlie, 1998, 2003).

The definition of mixed methods research also differs amongst authors in terms of breadth and depth (see Table 3.4).

Table 3.4: Authors and the focus or orientation of their definition of mixed methods

Author(s) and year	Focus of the definition
Greene, Caracelli and Graham (1989)	Methods Philosophy
Tashakkori and Teddlie (1998)	Methodology
Johnson, Onwuegbuzie and Turner (2007)	Qualitative and quantitative research Purpose
Journal of Mixed Methods Research (JMMR) (call for submissions)	Qualitative and quantitative research Methods
Greene (2007)	Multiple ways of seeing, hearing and making sense of the social world
Creswell and Plano Clark (2007)	Methods Philosophy
Creswell and Plano Clark (2011)	Methods Philosophy Research design

Note: From *Designing and Conducting Mixed Methods Research* (p. 3), by J. W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, CA: Sage.

For instance, Greene (2007) defines mixed methods research as multiple ways of seeing, hearing and making sense of the social world, whereas Johnson, Onwuegbuzie and Turner (2007) focus on mixed methods research as a combination of quantitative and qualitative research.

Creswell and Plano Clark (2011, p. 5) offer a comprehensive definition of mixed methods as an approach that:

- collects and analyses persuasively and rigorously both qualitative and quantitative data (based on research questions)
- mixes (or integrates or links) the two forms of data concurrently by combining them (or merging them), sequentially by having one build on the other, or embedding one within the other
- gives priority to one or both forms of data (in terms of what the research emphasizes [sic])
- uses these procedures in a single study or in multiple phases of a program of study
- frames these procedures within philosophical worldviews and theoretical lenses
- combines the procedures into specific research designs that direct the plan for conducting the study.

This is achieved by effectively focusing on the core characteristics in three contexts: methods, philosophy and research design.

The use of a mixed methods research offers many advantages. Research problems can be investigated in the context of an overall picture taken in by the research process. Using one method only might limit the researchers from understanding all the aspects of a phenomenon under investigation in which the “voices” of some participants may not get heard (Creswell & Plano Clark, 2011) and some groups may not be included (Greene & Caracelli, 1997b). Given the high level of complexity of research problems, the practicality of mixed methods can aid researchers to develop a multileveled understanding (Hesse-Biber & Leavy, 2011).

The choice to proceed with a mixed methods approach presents many challenges. The challenges can be seen from the perspective of the approach itself and also of the researcher (Creswell & Plano Clark, 2011; Hesse-Biber & Leavy, 2011). The scholarly

community is divided in accepting the approach, and contradictory findings may occur that require careful handling. It is important to consider the time, skills and resources needed to undertake this approach. Given the numerous advantages of mixed methods research, reams of such studies can be found in various disciplines including higher education (see Creswell & Plano Clark, 2011; Punch 2005).

The decision to proceed with using mixed methods was manifold. Greene, Caracelli and Graham (1989) demonstrate five primary purposes for adopting mixed methods: triangulation (the weakness of one method would be addressed by strength of the other methods), complementarity (clarification of the results from one method with findings from the other methods), development (the use of results from one method to help inform the use of other method), initiation (discovering contradictions that lead to the reframing of research questions) and expansion (extending the breadth and range of inquiry using different methods for different inquiry components). Punch (2005) suggests that a decision to conduct mixed methods research requires sound research problems and questions. This was considered to be the case for this study, where the primary focus was on understanding the perceptions and experiences of educators in teaching and assessing soft skills. In this approach, the perceptions and experiences of educators in teaching and assessing soft skills is seen as important because of their role as trainers to produce work-ready graduates. In particular, the research sought to better understand:

- a. The individual and institutional factors that influence educator perceptions on teaching and assessing soft skills (addressed by employing quantitative research – major).
- b. The perceptions of educators about their role in developing soft skills (addressed by employing qualitative research – major).
- c. The experiences of educators when they are teaching and assessing soft skills (addressed by employing qualitative research – major).

A mixed methods approach was seen as the most applicable design to address these areas of investigation.

Additionally, it was apparent that one data source would be insufficient to understand the complexities and challenges faced by educators when they are teaching and assessing soft skills. In particular, a mixed method approach was considered useful in expanding on existing research into an understanding of soft skills, which was shown in the literature to be particularly fragmented (see Van Loo & Toolsema, 2005). The approach was also considered useful in generalising exploratory findings such as problems in teaching and assessing soft skills. Moreover, the use of this approach would address current limitations in the extant literature relating to an in-depth understanding of educator perceptions and the role of individual and institution-based characteristics on these perceptions. A theoretical stance and a research objective of this study also drove the need to gather both qualitative data and quantitative data. Creswell and Plano Clark (2011) support such reasons for the use of a mixed methods approach.

The literature suggests there are a range of options when designing mixed methods research (see Creswell, 2014; Creswell & Plano Clark, 2011; Morgan, 1998; Teddlie & Tashakkori, 2003). Morgan (1998) suggests four designs that are surrounded by two concerns: priority, and sequencing of method. The priority and sequencing of method are determined by the usage, which is linked to the aims and objectives of a research study.

A choice of six designs – convergent, explanatory, exploratory, embedded, transformative and multiphase – is proposed by Creswell and Plano Clark (2011).

In aiming to construct a more complete picture, it is insufficient to simply join methods. This has the potential to create opacity and will not aid understanding. Paramount to the choice of design is an appropriate mix of quantitative and qualitative strands “in order to answer the posted research questions” leading to “coherent and insightful study” (Heyvaert, Hannes, Maes, & Onghena, 2013, p. 16). A convergent design was selected in this study and the prototypical version of this design is portrayed in Figure 3.1.

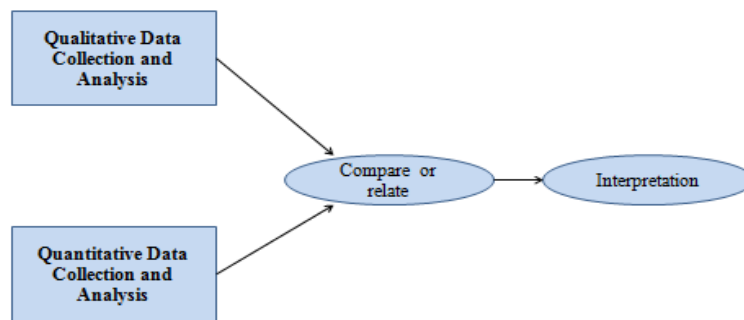


Figure 3.1: Prototypical version of the convergent design

Note: Adapted from *Designing and Conducting Mixed Methods Research* (p. 69–70), by J.W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, CA: Sage.

In this figure, the qualitative and quantitative strands are implemented concurrently, the methods are prioritised equally, and the strands are kept independent during analysis with the results then mixed during overall interpretation (Creswell & Plano Clark, 2011). In other words, integration occurs at the data analysis stage.

However, as the researcher faced resource and time constraints, a modified convergent design was employed to suit this study. Instead of qualitative and quantitative strands being implemented concurrently, the strands were implemented sequentially and the priority was the qualitative data collection, with the quantitative data collection playing

a lesser role. In terms of analysis, both strands remained independent and the results were mixed during overall interpretation to assess their convergence, divergence, contradictions and relationships as suggested by Creswell and Plano Clark (2011). Although analysed independently, the qualitative and quantitative data from the linked parts of the study were synthesised, and then interpreted in concert with each other in an iterative manner, thus meeting the criteria of a mixed research design. The mixing process demonstrated the mixed methods purposes of triangulation, complementarity, development, initiation and expansion as proposed by Greene et al. (1989).

This study features several of the characteristics outlined by Creswell and Plano Clark (2011). It focuses on the collection and analysis of both qualitative and quantitative data to address the research questions, and uses multiple phases to develop a specific research design that directs the study plan.

3.5.1.1 Qualitative methodology selected: phenomenological study

Phenomenology as “a philosophical approach to the study of ‘phenomena’ (appearances) and human experience” (Holloway, 1997, p. 116) and an approach that can provide “a deep understanding of a phenomenon as experienced by several individuals” (Creswell, 2013, p. 82) has been chosen in approaching the qualitative study. The phenomena under investigation is teaching and assessing soft skills. Phenomenology in general has been developed as a method for conducting research in fields such as education as it provides useful insights to understand the individual who experiences a particular phenomenon (Friesen, Henriksson, & Saevi, 2012). Qualitative data were collected and interpreted using this approach, in which attention is given to the essence of the experience.

The main purpose of the phenomenological study is to understand educator perceptions about their role in developing soft skills, and their experiences in teaching and assessing soft skills. It is important for the researcher to use bracketing – to put aside the researcher’s prior assumptions about a phenomenon – in the process of data collection and analysis. This is to ensure that the findings about what participants have experienced and how they experienced it are as close to what they mean as possible.

3.5.1.2 Quantitative methodology selected: cross-sectional study

A cross-sectional study that involved participants from diverse segments, particularly university category and discipline, was selected to provide quantitative data. Quantitative data were collected and analysed to explain and predict the phenomena under investigation. The main purpose of the cross-sectional study was to understand the individual and institutional factors that influence educator perceptions about teaching and assessing soft skills. Data collection and analysis were conducted independent of the feelings, values and attitudes of the researcher.

3.6 Research method

Research method refers to the steps taken by a researcher to collect and analyse data. There are a range of methods for data collection and analysis. The research problem is central in the process of data collection and analysis.

3.6.1 Data collection method

This study derives evidence from two phases of data collection: phase 1 was conducted via in-depth interview to gather qualitative data and phase 2 via a web survey to gather quantitative data. The qualitative study was carried out over a two-month period and

followed by the quantitative study over a five-month period. The quantitative study was conducted about a year after the completion of the qualitative study. Given the HEIs are operating in a dynamic environment, changes in policies, procedures and practices are expected but this study only considered the environment in which it took place.

The MOHE Malaysia Bachelor Degree Program framework examined in this research was based on the soft skills module, which included communication skills, critical thinking and problem solving skills, teamwork skills, lifelong learning and information management, entrepreneurship skills, moral and professional ethics and leadership skills (Kementerian Pengajian Tinggi [KPT - Ministry of Higher Education], 2006). As mentioned in Chapter I, the MOHE soft skills curriculum suggests three approaches for development of soft skills in students: incorporation into the formal activities of teaching and learning in an embedded or standalone model, parallel support programs that have academic or non-academic foci, and skills development through campus life experiences including on-campus and residential college activities.

3.6.1.1 In-depth interview

A semi-structured in-depth interview was employed to gather data about educator perceptions and experiences about teaching and assessing soft skills. Given the active role of the researcher in asking and listening, an in-depth interview can generate rich data in the form of thick descriptions of social life (Hesse-Biber & Leavy, 2011). In this meaning-making process, the gap between the researcher and the subject is small because of their collaboration. Given the richness of in-depth interviews, patterns can emerge and meanings can be constructed by the researcher.

Sampling technique: purposive sampling

This study employed purposive sampling, which enables the researcher to gather essential information from specific groups (Sekaran & Bougie, 2009). The five participating public HEIs (which included a mix of well-established and young universities, the latter being those established between 30 and 25 years ago) experienced soft skills development prior to the introduction of the soft skills module in 2006. These HEIs are referred to as A to E in the study. A few HEIs even specifically identified a set of soft skills for their graduates. The soft skills module works as a guideline, with HEIs left to their own discretion in implementing the module.

These public HEIs were grouped into four categories: research-intensive university (A & B); specialised university in engineering and technology (C); broad-based university (D); and specialised university in management education (E). These four categories provided diverse settings. A stratified purposive sample was employed as it allowed the researcher to select samples with different characteristics (Hesse-Biber & Leavy, 2011). Educators from different disciplines were grouped into two groups: senior leadership and non-senior leadership. The senior leadership group in this study refers to those appointed at one of three levels: university, faculty or residential college. At the university level the sample involved positions such as director and dean of Student Affairs, at the faculty level it included dean and deputy dean, and at the residential college the positions included principal. For a phenomenological study, the typical number of participants ranges from one to 10 (Creswell, 2013; Starks & Trinidad, 2007). However, the process of collecting information using this approach can involve as many as 325 participants (Polkinghorne, 1989). Twenty-five participants were involved in this interview, including all possible segments (e.g., senior leadership group vs. non-senior leadership group).

Designing semi-structured interviews

An interview guide listing all domains of inquiry⁵ was constructed in two versions – Malay and English – and reviewed by two language teachers. This interview guide also included a few questions asking educators to give yes/no responses and rank their views or give responses in terms of percentages where applicable. This approach was part of a nested method that allowed better comparison of certain elements of the data (Hesse-Biber & Leavy, 2006). The evidence generated from the nested component was given lower priority.

The interview centred around four topical areas: establishing context (including defining soft skills, and the value of soft skills and their importance for finding jobs); the role of educators; teaching soft skills; and assessing soft skills. Establishing context presented general ideas about the study, while the role of educators, teaching soft skills and assessing soft skills comprised the main focus of the study. The role of HEIs in developing soft skills was explored in the interview. Every interview focused on the identification and exploration of issues and problems associated with delivery effectiveness, and assessment and reporting. The development of data collection instruments considered existing research, including key elements of a Malaysian study (see Abu, Kamsah, & Razzaly, 2008).

Pilot interviews

Pilot interviews were conducted to identify the presence of any unclear statements, points of confusion and omissions in the interview framework. Four educators participated in this exercise, and amendments were made to the framework based on

⁵ This terminology was used in Hesse-Biber & Leavy, 2006.

their feedback. For instance, instead of asking participants about their willingness to embed soft skills in their teaching, they were asked about the percentage they would assign to academic knowledge and soft skills in their courses, together with their justifications for their preferred approach. Although the evidence generated from the nested component was given lower priority, it allowed better comparison of the data.

Main interviews

Given this study involved educators from five different locations in West and East Malaysia, good planning was important. In planning when to collect data, the researcher took into account the academic calendar of each public HEI, avoiding examination week. The interviews took place after a mid-semester break and ended two weeks before the scheduled revision week.

Educators were invited to participate in the study via a direct email based on information obtained from their university's web page. The information sheet and consent forms (see appendices B1 and B2) were sent through requesting them to sign up for the interview. In the majority of cases, the potential educators responded within a week but if no reply was received the researcher contacted them by phone to ask about their interest in taking part in the study. The researcher called them again a week before the scheduled interview to ensure their participation, and then a day before the interview to reconfirm the interview time and location. Few participants rescheduled their interview unless it was unavoidable, such as because they were required to attend an urgent meeting. One educator provided a proxy to complete her interview. Another educator did not complete a scheduled interview due to being unexpectedly occupied with important tasks. Another educator declined to be interviewed and audio recorded. Most of the interviews were conducted at the participants' offices, where they were in

familiar surroundings. In one situation the venue had to be moved to outside of the department because of a power failure during the course of the interview. In another situation, the educator requested the interview be conducted at her residence to accommodate her tight schedule.

Educators were given options to respond in either Malay or English during the interview, and some of the interviews were conducted bilingually. This allowed educators to respond more authentically to the interview questions, with minimal language barriers. This view is supported by Squires (2008, p. 265) who asserts that “Failure to address language barriers and the methodological challenges they present threatens the credibility, transferability, dependability and confirmability ...”. Five participants responded primarily in English.

Preliminary information about each public HEI and soft skills development practices was gathered before the interview to equip the researcher with general background information. The researcher arrived at each location 30 minutes before the scheduled time to gain familiarity with the surroundings and ensure recording devices were ready. By virtue of the insider status (in which the researcher works as an educator), the researcher was able to establish trust and rapport to encourage participants to respond. The establishment of trust and rapport facilitates the interview process in such a way that authentic information is more likely to be generated by researchers (Sekaran & Bougie, 2009). As a scholarly community, educators were aware of the importance of this academic exercise for knowledge sharing, in general, and for career advancement of the researcher, in particular. Issues of teaching and learning soft skills are considered pertinent to educators, and the researcher was encouraged to share findings using available channels established by each university such as scholarly journals and other academic publications.

The interview started with a brief explanation of the study and approvals (see appendices A1, A2 and A3). Cards were used as aids to educators during the interview process. For example, a card listing delivery approaches was used so that educators were clear in responding to questions related to such approaches (see Appendix B4). As much as possible, the researcher attempted to balance two concerns: gathering data, and managing the feelings of educators, who were involved in a lengthy interview. The average duration of the interview sessions was 90 minutes. Audio recordings were utilised for all sessions. Given the duration of the in-depth interview, taking short breaks facilitated participation of educators, but only a few interviewees elected to take breaks.

3.6.1.2 Web survey

In the second phase of data collection, a web-based survey was undertaken to explore the research agenda. Cobanoglu, Warde, and Moreo (2001) support that using email to contact the educator population may lead to a higher response rate at a lower cost than more traditional data collection strategies. Hence, this approach was used in this study.

Sampling technique: convenience sampling

The same five public HEIs in West and East Malaysia identified earlier for the qualitative study were again involved in this phase. As mentioned earlier, the five public HEIs, grouped into four categories, provide different settings for this study. Based on MOHE data available in 2009 (MOHE, 2009), a total sample of 8305 educators was identified. A convenience sample was used as it provided convenient accessibility to participants. The deputy vice chancellor (DVC) (Student Affairs and Alumni) of each public HEI was contacted about the survey and they agreed to participate in the study by disseminating information about the web survey through

group emails to educators. A total of 613 responses were received through the web survey. Exact response rates could not be calculated as the dissemination of the group email inviting educators to participate in the study was beyond the control of the researcher. However, the rate is considered to be representative of the educator population in Malaysia. Furthermore, this is a significant sample size and more than comparable with other such work (see de la Harpe et al., 2009). The sample size decision, which was simplified by Krejcie and Morgan (1970) who suggest a sample of 368 for population size of 9000, is representative. Roscoe (1975) argues that samples sizes more than 30 and less than 500 are suitable for most research, with a minimum size of 30 for each category of subsamples.

Designing the web survey

This study employed a web survey to explore educator beliefs about soft skills (see Appendix C). The Murdoch Online Survey System (MOSS) was utilised to create this survey, and access to this survey was available on the internet via a URL link. This survey was licensed under a Creative Commons Attribution-Non-commercial-Share Alike 2.5 Australia License.

The web survey was adapted from the “*bfactor* project: Understanding academic staff beliefs about graduate attributes” (see de la Harpe et al., 2009). In this study, the Malaysian soft skills framework, which focuses on seven soft-skill components – communication, critical thinking and problem solving, teamwork, lifelong learning and information management, entrepreneurship, moral and professional ethics, and leadership – replaced the *bfactor* framework and the researcher reduced the use of open-ended question. The researcher also added a few sections with the aim to collect data on the standalone course for each skill taught by educators and the specific approaches

used by the Malaysian universities to develop soft skills. However, the researcher was not able to report the reliability and validity of the *bfactor* instrument because they are not made available for public reference. The principles of social exchange theory suggested by Dillman (2000) were used in this study as a basis for understanding ways to get response rates to an acceptable level. This theory stresses that people tend to engage in rewarding behaviour and stay away from disappointing behaviour. Elements of trust, rewards and social costs (as presented in Table 3.5) were included in the process of designing and implementing the web survey. For example, personal information was kept to a minimal level to encourage participation.

Table 3.5: Aspect of rewards, social costs and trust

To establish trust	To increase rewards	To reduce social costs
<ul style="list-style-type: none"> • Provide token of appreciation in advance • Sponsorship by legitimate authority • Make the task appear important • Invoke other exchange relationship 	<ul style="list-style-type: none"> • Show positive regard • Say thank you • Ask for advice • Support group values • Give tangible rewards • Make the questionnaire interesting • Give social validation • Communicate scarcity of response opportunities 	<ul style="list-style-type: none"> • Avoid subordinating language • Avoid embarrassment • Avoid inconvenience • Make questionnaire short and easy • Minimize [sig] requests to obtain personal information • Emphasize [sig] similarity to other requests

Note: Adapted from *Mail and Internet Surveys: The Tailored Designed Method* (p. 27), by D. A. Dillman, 2000, New York: John Wiley & Sons, Inc.

The survey consisted of a combination of closed and open-ended questions. The 116 items measured the importance of soft skills as a focus for the university and within the curriculum; familiarity with the university’s list of soft skills; the importance of soft skills for students’ employability; teaching soft skills as standalone courses; the emphasis placed on teaching and assessing soft skills; the confidence and willingness to teach and assess soft skills; the importance of delivery approach; obstacles in teaching and assessing soft skills; and factors that influence teaching and assessing soft skills.

Participants assessed levels of emphasis placed on teaching and assessing soft skills on a five-point scale with endpoints labelled 1 indicating participants did *not at all* emphasise the teaching and/or assessing of soft skills and 5 indicating a *high* level of emphasis on the teaching and/or assessing of soft skills. A five-point scale was also used to identify levels of confidence and/or willingness in teaching and assessing soft skills (1 = *low* to 5 = *high*).

The demographic data captured information about gender; university category; discipline; employment status (FT/PT)⁶, type and level; industry experience (y/n)⁷ and years of industry experience; years of university teaching experience; and formal teaching qualifications. The discipline areas were modified from a list provided by the Australian Government Department of Education, Science and Training (DEST) (2008) as this list consisted of a similar core to the one from Malaysia. The web survey was created in English given that English is widely used at the HEIs, and it is unlikely language was an issue because the survey was simple and participants were given the opportunity to select one or multiple answers from a defined list of choices.

Pilot study

The web survey instrument was pilot tested on 33 educators from public HEIs excluding the five universities in this study. This was to ensure that the pilot study participants did not influence the actual survey responses. Educators were asked to notify the researcher about problems in completing the survey and to identify difficulties in understanding the questions. In regard to sample size, a minimum of 30 is suitable for reliability during a pilot study (see Hill, 1998; Isaac & Michael, 1995; Leon, Davis, & Kraemer, 2011).

⁶ FT indicates *full-time* and PT indicates *part-time*.

⁷ y indicates *yes* and n indicates *no*.

The final version of the survey instrument incorporated revisions as suggested by these educators and outcomes of Principle Component Analysis (PCA). For example, the title and sub-title of each section was highlighted to help participants answer the survey. The PCA provided no evidence to further collapse the existing items (consisting of seven soft skills) into constructs; hence the original survey items were retained.

Main study

The web survey was opened for five months with different launching dates for each public HEI depending on the arrangement with DVCs. Again the researcher's concern was the academic calendar of HEIs. The survey was launched in teaching weeks and remained open through revision weeks, examination weeks and a lengthy semester break. This provided educators flexibility in responding to the survey. Emails to DVCs of five public HEIs were sent requesting support for the study. Participant information and approval letters were attached. All DVCs agreed to either disseminate the email to educators themselves or to appoint their representatives to do so. The average duration to complete the web survey was 15 minutes. An Amazon voucher of USD50.00 was offered to one participant from a prize draw as an inducement to increase response rate.

Initially response was slow but this gradually increased after follow-up reminders were sent to educators. At least five follow-up reminders were sent to participating HEIs, which took a standard form and were sent to DVCs (or their representatives) to be forwarded to educators. The follow-up reminders thanked those who had participated in the study and encouraged those who had not yet responded by highlighting the importance of their participation. In these reminders, the researcher avoided using words such as *reminder* or *study/research* in the email subject title, and the original email about the study was copied below the reminder email. The researcher's intention

was to encourage participants to feel as enthusiastic as possible about participating and to get them to at least open the email before making the decision to decline. The tone of the follow-up reminders was more personal, and educators were updated with the number of responses already received. Notification was received from the public HEIs each time they emailed participants so the researcher could track the number of responses after each reminder was sent.

3.6.2 Data analysis method

There are specific, structured methods of analysis advanced in phenomenology, such as suggested by Colaizzi (1978) and Moustakas (1994). However, in this study the researcher used thematic analysis as a foundational method for qualitative analysis. This analysis method was driven by the research questions and broader theoretical assumptions. Several steps were taken to prepare the data for the thematic analysis.

3.6.2.1 Qualitative data: thematic analysis

Data were transcribed verbatim by the researcher and analysed in the first instance using a thematic approach. In this study, translation was made where applicable as determined by the researcher, who held insider status in the research process in terms of context and language. Temple and Young (2004) indicate that holding translator status facilitates researchers to talk about points in the text with their “true” meanings as long as the researcher remains objective in conveying the message. In this process, the researcher was guided by the steps as summarised in Table 3.6 by Broun and Clarke (2006, p. 87). It is important to note that the entire data set was constantly referred to throughout the analysis process, which allowed the researcher to capture new meanings within its ambiguous features.

Table 3.6: Phases of thematic analysis

Phase	Description of the process
1. Familiarizing [sic] yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to research question and literature, producing a scholarly report of the analysis

Note: Adapted from "Using Thematic Analysis in Psychology," by V. Braun and V. Clarke, 2006, *Qualitative Research in Psychology*, 3, p. 87.

Phase 1: Familiarising yourself with your data

In the transcribing process, the researcher listened to audio recordings as often as necessary in order to produce accurate written forms of verbal data. The researcher was facilitated in this process by quiet surroundings with no interruption. Not only were written transcripts produced through this initial process, but a thorough understanding of the data was also developed. Although the process was enormously time consuming and tedious, the researcher progressively became familiar with the data. This process allowed the researcher to search for meanings and patterns.

Phase 2: Generating initial codes

When the researcher read and re-read the transcripts, full attention was given to every aspect of data, which included individual or repeated patterns that may account for interesting results. This process allowed the researcher to create various possible initial

codes from the data. This process involved the coding and recoding of the extracts in order to produce consistent patterns throughout the data set.

Coding was performed manually and systematically by writing notes. The researcher was aware of the availability of qualitative software packages, such as NVivo, but chose not to use any because, given the small number of participants and the richness of the in-depth interviews, data was better managed manually. By handling the data manually, the researcher was able to capture the essence of the data in terms of their meanings and patterns, with minimal possibilities for these aspects to be overlooked them. In this process the researcher was able to critically analyse the data at an interpretative level, rather than just presenting a description of the data. Thematic analysis at the interpretative level reflects the constructionist viewpoint (Braun & Clarke, 2006). Other researchers such as Coffey, Holbrok, and Atkinson (1996), Easterby-Smith, Thorpe, and Lowe (1991), Lonkilla (1995), Noble (2002), Tesch (1991) and Webb (1999) share the same preference by clarifying their positions corresponding to the above reasons.

Phase 3: Searching for themes

Interpretative analysis occurred in this sorting process. The researcher identified potential themes, and codes were combined under each theme based on their relationship. There were also possibilities to create sub-themes. Codes which did not fall under any themes or sub-themes were grouped individually. At this stage no code was discarded. The researcher used tables or thematic maps when and where applicable to facilitate this process.

Phase 4: Reviewing themes

The researcher looked for possibilities to combine, refine and separate, or discard the themes and sub-themes. In performing this task, the researcher referred to the coded extracts of each theme to ensure they fitted well, and looked into the entire data set to check for accuracy of meanings and confirm no unencoded data was left out.

Phase 5: Defining and naming themes

The analysis of data was based on defining and refining themes. A detailed analysis was created from each theme by focusing on its essence and aspect. Overall analysis of the existing themes was tied to the research questions. In a few instances, the researcher changed the working titles of the themes to different names to increase clarity in terms of their meanings.

Phase 6: Producing the report

In reporting the analysis, the researcher described the results by providing evidences from data extracts and explained the findings by providing arguments in relation to the research questions and extant literature.

3.6.2.2 Quantitative data: SPSS statistics

The data were screened using the SPSS program (Version 17). A pairwise deletion of missing cases was used and outliers were examined to ensure extreme values did not influence the results. The assumptions of normality, linearity and homoskedasticity were assessed by examining skewness and kurtosis values and scatter plot diagrams (Tabachnick & Fidell, 2012).

Descriptive statistics were run to identify the sample profile. A one-way ANOVA was run to identify the role that demographic variables have on perceptions about the

importance of soft skills as a focus for the university and within the curriculum; familiarity with the university's list of soft skills; the importance of soft skills for students' employability; the emphasis placed on teaching and assessing soft skills; the confidence and willingness to teach and assess soft skills; and obstacles in teaching and assessing soft skills. The demographic variables examined were gender; university category; discipline; employment status (FT/PT), type and level; industry experience (y/n) and years of industry experience; years of university teaching experience; and formal teaching qualifications.

A brief summary of the important facts about this research is shown in Table 3.7 and Figure 3.2. Table 3.7 presents how this research design operated by highlighting its main features adapted from the work of Creswell and Plano Clark (2011). Figure 3.2 displays the link between the qualitative and the quantitative data. The basic approaches to analysing data as suggested by Caracelli and Greene (1993), Onwuegbuzie and Teddlie (2003), and Bazeley (2009) have been used in this study where applicable. Caracelli and Greene (1993) suggest four strategies: data transformation, typology development, extreme case analysis, and data consolidation or merging, whereas Onwuegbuzie and Teddlie (2003) propose seven stages: data reduction, data display, data transformation, data correlation, data consolidation, data comparison, and data integration. Bazeley (2009) discusses six emerging ways of analysing data: through a substantive common purpose for a study; through employment of the results in one analysis in approaching the analysis of another form of data; through synthesis of data from several sources for joint interpretation; through conversion of one form of data into the other; through the creation of blended variables; and through multiple, sequenced phases of iterative analyses. Specifically in this convergent design, the analysis was guided by a series of steps suggested by Creswell

and Plano Clark (2011) which consist of two types of data analysis: merging data analysis to compare results, and merging data analysis through data transformation.

Table 3.7: Main features of this mixed methods research

Feature	
Content area and field of study	<ul style="list-style-type: none"> • Teaching and assessing soft skills (higher education studies)
Philosophical foundations	<ul style="list-style-type: none"> • Pragmatism
Theoretical foundations (social science or advocacy)	<ul style="list-style-type: none"> • Theories of teaching and learning (social science)
Content purpose	<ul style="list-style-type: none"> • To understand the individual and institutional factors that influence educator perceptions about teaching and assessing soft skills • To understand educator perceptions about their role in developing soft skills • To understand educator experiences in teaching and learning soft skills
Qualitative strand	
Sample	<ul style="list-style-type: none"> • 25 educators were purposely selected
Data collection	<ul style="list-style-type: none"> • One-on-one in-depth interviews
Data analysis	<ul style="list-style-type: none"> • Thematic analysis
Quantitative strand	
Sample	<ul style="list-style-type: none"> • $N = 613$ educators across four university categories
Data collection	<ul style="list-style-type: none"> • Cross-sectional online survey design • Including multiple scales to measure impact of demographic variables on educator perceptions about the emphasis, confidence and willingness in teaching and assessing soft skills
Data analysis	<ul style="list-style-type: none"> • Descriptive statistics • A one-way analysis of variance (ANOVA)
Mixed methods features	
Reason for mixing methods	<ul style="list-style-type: none"> • Need to relate qualitative descriptions of educator experiences about teaching and assessing with quantitative measures of educator perceptions to develop a more complete picture
Priority of the strands	<ul style="list-style-type: none"> • Qualitative priority
Timing of the strands	<ul style="list-style-type: none"> • Consecutive: Qualitative followed by quantitative
Primary points of mixing (point of interface)	<ul style="list-style-type: none"> • Interpretation
Mixing of the strands	<ul style="list-style-type: none"> • Merge/integrate: Phenomenological results and cross-sectional results to examine facets of a phenomenon – educator experiences about teaching and assessing soft skills • Interpretation: Discussed how comparisons across the two data sets provide a better understanding
Mixed methods design	
Mixed methods design type	<ul style="list-style-type: none"> • Convergent
Notation	<ul style="list-style-type: none"> • QUAL + quan = in-depth understanding

Note: Adapted from *Designing and Conducting Mixed Methods Research* (p. 134–139), by J. W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, CA: Sage.

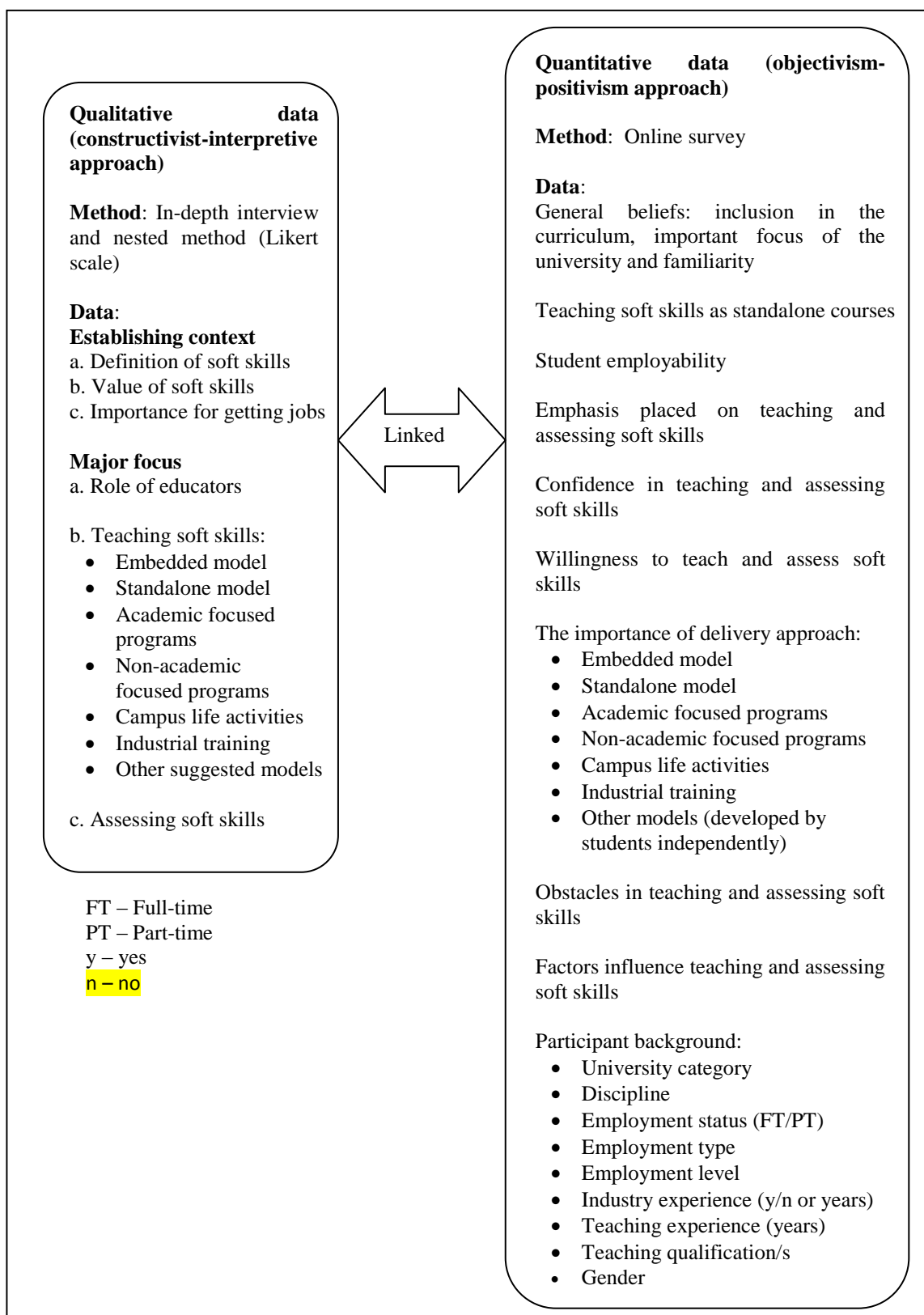


Figure 3.2: Linked studies: qualitative and quantitative data

3.7 Quality of research

Quality of research is important for both qualitative and quantitative studies in order to establish credibility. Many frameworks can be used to assess the quality of mixed methods research (see Collins, Onwuegbuzie, & Sutton, 2006; Creswell & Plano Clark, 2011; Curry, Nembhard, & Bradley, 2009; Tashakkori & Teddlie, 2010), although to date no single approach has been favoured over another (see Heyvaert, et al., 2013; Ivankova, 2014). In this study, the researcher evaluated the quality by looking at the data, findings and their interpretation. The quality of this research was evaluated by establishing trustworthiness and authenticity for qualitative findings, and validity and reliability for quantitative findings. Finally, as suggested by Leech, Dellinger, Brannagan, and Tanaka (2010), the VF was used to evaluate overall the data, findings and interpretation of this mixed methods research.

3.7.1 Qualitative data: establishing trustworthiness and authenticity

A scan of the literature suggests that in assessing their quality qualitative studies and quantitative studies require different procedures from one another (Creswell, 2014; Erlandson, Harris, Skipper, & Allen, 1993; Guba, 1981; Guba & Lincoln, 1989; Hesse-Biber & Leavy, 2006; Koch, 1994, 1996; Lincoln & Guba, 1985; Sandelowski, 1986). Trustworthiness and authenticity are alternative forms of the scientific concepts of reliability and validity used in quantitative studies (Lincoln & Guba, 1985). While trustworthiness refers to the ability to demonstrate the reality of participants, authenticity refers to the ability to use the appropriate approaches for authentic presentation of reports. Trustworthiness criteria consist of credibility, transferability, dependable and confirmability (see Table 3.8).

Table 3.8: Summary of techniques for establishing trustworthiness

Criterion area	Technique
Credibility	(1) Activities in the field that increase the probability of high credibility (2) Peer debriefing (3) Negative case analysis (4) Referential adequacy (5) Member checks (in process and terminal)
Transferability	(6) Thick description
Dependability	(7a) The dependability audit, including the audit trail
Confirmability	(7b) The confirmability audit, including the audit trail
All of the above	(8) The reflexive journal

Note: Adapted from *Naturalistic Inquiry* (p. 328), by Y.S. Lincoln and E. G. Guba, 1985, Beverly Hills, CA: Sage.

On the other hand, authenticity – the other term used by Lincoln and Guba – pays attention to fairness, ontological authenticity, educative authenticity, catalytic authenticity and tactical authenticity, as presented in Table 3.9 (as cited in Holloway, 1997).

Table 3.9: Component of authenticity

<p>Fairness Research must be fair to participants and gain their acceptance throughout the whole of the study. Continued informed consent must be obtained. The social <i>context</i> in which the <i>participants</i> work and live must also be taken into account.</p> <p>Ontological authenticity This means that participants gain an understanding of their human condition through the research.</p> <p>Educative authenticity The understanding that individual gains should enhance the way in which they understand other people.</p> <p>Catalytic authenticity Decisions that are made by the participants which follow the research should be enhanced by the method of inquiry.</p> <p>Tactical authenticity After decisions are made, the actions of the participants should have an impact on their lives. The research should empower them.</p>
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Note: Adapted from *Basic Concepts for Qualitative Research* (p. 162), by I. Holloway, 1997, Oxford: Blackwell Science.

In this study, the researcher used the self-reflective process of bracketing, which included consulting the research supervisors in relation to new thoughts and ideas. The researcher coherently described the reality of participants using excerpts, and the translations were presented with their original version to ensure the authenticity of the results.

3.7.2 Quantitative data: establishing validity and reliability

Validity and reliability are the concepts used to determine the quality of a quantitative study (Hesse-Biber & Leavy, 2006). Researchers are dealing with the validity issue when accurate measures of constructs are their main concern. In contrast, the reliability issue involves the consistency of a measure, and attention is given to the ability of scientific findings to be replicated. Establishing a balance between these two concerns produces authentic representations of the social world.

In this study, the researcher fulfilled the criteria of the above concepts to the extent that the instrument was adapted from a study conducted in Australia, and a pilot study was carried out to improve the instrument's applicability to the current context.

3.7.3 Mixed methods data: validation frameworks

As a pragmatist, the researcher also considered the VF to evaluate the quality of this research. The VF focuses on organising information to address the legitimisation of data, and for evaluating the study inferences (Leech, et al., 2010). The framework concentrates on appraising the foundational element, where the role of the literature review in informing the study design is examined; evaluating the construct validation or legitimisation of the design approach; determining if the inferences are consistent with the research literature and study design; commenting on the value of the findings and how and by whom they will be utilised; and highlighting the consequences of the findings.

3.8 Ethical considerations

In keeping with the need to conduct ethically sound research, in all circumstances measures were taken to not violate the self-respect and self-esteem of participants. Ethical considerations of this research were evaluated by looking at the approval requirement, the procedure of participation, and data management and reporting.

3.8.1 Approval

In this study, the researcher sought two approvals. One was from the Research Promotion and Co-ordination Committee, Economic Planning Unit (EPU), Prime Minister's Department, Malaysia (see Appendix A3) which approved both the qualitative and quantitative study components at public HEIs for a period of three years. The other was from the Murdoch University Human Research Ethics Committee (see appendices A1 and A2), which approved the qualitative and quantitative studies for a period of three years for each separate study.

3.8.2 Participation

Participation was sought by informing participants about the study, which included their voluntarily participation and their ability to withdraw from the study at any time. Ways of contributions and participation procedures were clearly outlined, together with the contact details of the researcher, research supervisor(s) and the Murdoch University Human Research Ethics Committee. In the quantitative study, an Amazon voucher of USD50 was offered to one participant via a prize draw, with consideration given to the ethical considerations of giving a small token to increase response rate.

3.8.3 Data management and reporting

As mentioned earlier, the web survey was licensed under a Creative Commons Attribution-Non-commercial-Share Alike 2.5 Australia License. The requirements and attribution to the original works were fulfilled by the researcher. Data for both studies were kept securely and confidentially. Access to data was restricted to the researcher. Transcripts were not given to participants unless they requested a copy of their own interview transcript.

In reporting the data, every effort was made to respect the anonymity and confidentiality of the participants. In the discussion of the qualitative data, educators are identified by the letter designating their university (A–E), and by the interview number assigned by the researcher. Besides this, all identifiers were deleted in order to secure the anonymity and confidentiality of the participants and HEIs. Approval was also solicited from the participating university in cases where the use of generic name or other similar names may have allowed the university to be identified such as specialised university in management education.

Data information was only disseminated for PhD thesis, scholarly journal articles and conferences papers. To date, a sub-set of the findings has been presented at three international conferences and two papers have been published in a fully refereed international journal (see Appendix E).

These activities have served to address research ethics considerations.

3.9 Conclusion

In this chapter, the stance taken in choosing the research design, paradigm, methodology and method has been justified by reviewing historical and contemporary literature. The reasons for investigating phenomena of teaching and assessing soft skills using a combination of phenomenology study, where the researcher collected qualitative data, and cross-sectional study, where the researcher collected quantitative data, in specific approach known as mixed methods research has been discussed. The implementation of the research design was explained in detail including information about data collection and analysis. The credibility of this mixed methods research was also presented in light of establishing trustworthiness in qualitative study, establishing reliability and validity in quantitative study, and VF in mixed methods study within their ethical considerations. A dialectic stance of a researcher is the methodological contribution of this research.

CHAPTER IV

QUALITATIVE RESEARCH RESULTS

4.1 Introduction

This chapter presents the research results from interviews with 25 educators from five Malaysian public higher education institutions (HEIs) located in West and East Malaysia. The aim of this chapter is to address the following research questions:

Question 1: What are the individual and institutional factors that influence educator perceptions on teaching and assessing soft skills? (minor)

Question 2: What are the perceptions of educators about their role in developing soft skills? (major)

Question 3: What are the experiences of educators when they are teaching and assessing soft skills? (major)

The interviews generated a wealth of data on the views of educators about soft skills, which have been discussed below in four sections. The first section focuses on defining soft skills, and the value of soft skills and their importance for getting jobs, to establish the context for investigation of the issue. The next three sections focus on the role of educators, and their beliefs around teaching and assessing soft skills.

This chapter presents only the views of participants and the analysis of data involved in the identification of themes, using thematic analysis. The researcher's views are set aside until the discussion chapter to avoid ambiguity between participants' views and researcher's views. Furthermore, in presenting the findings, the researcher uses the narrative style – which includes quotations where applicable – to ensure originality.

4.2 Participant profile

A total of 13 males and 12 females across five HEIs participated in the interviews. The profile of educators is presented in Table 4.1.

Table 4.1: Profile of participants ($n = 25$)

Demographic characteristic	<i>n</i>
University category	
Research-intensive university – A: 5 & B: 4	9
Specialised university: management education – C	6
Specialised university: engineering and technology – D	5
Broad-based university – E	5
Discipline	
Management	7
Society and Culture	6
Sciences	5
Engineering	2
Education	2
Information Technology	2
Health	1
Employment load	
Full-time	25
Employment status	
Permanent	25
Employment level	
Professor	2
Associate Professor	11
Senior lecturer	9
Lecturer	3
Tutor	0
Teaching experience	
More than 10 years	18
6–10 years	6
1–5 years	1
Less than a year	0
Gender	
Male	13
Female	12
Job position	
Senior leadership group:	15
a. university	3
b. faculty	7
c. residential college	5
Non-senior leadership group	10

For the purposes of this discussion, educators are referred to by their interview numbers and higher education institutions (A–E). In keeping with confidentiality agreements, no information that would allow identification of individuals was included. Details that may identify participants further are only offered where this is needed to provide context for responses.

4.3 Research results

The following format is employed to present evidence from the study as illustrated in Table 4.2.

Table 4.2: Research findings

Category	Subcategory	Sub-subcategory
Establishing context	Defining soft skills	-
	The value of soft skills	-
	Importance for getting jobs	-
Role of educators	Educator views on “my role and your role”	Who is the most responsible?
		What about “individual responsibility”?
	Educator views on “industry collaboration”	Link between university and industry
		Collaboration between university and industry
Teaching soft skills	Delivery context	Educator awareness and involvement
		Educator views on focus of students
		Support and resources for delivery purposes
		Integration of soft skills
	Delivery approaches	Delivery in educational settings
		Delivery in workplace settings
		Approaches and concluding thoughts

Category	Subcategory	Sub-subcategory
	Implementation of delivery approaches	Perceptions about delivery
		Problems encountered in developing soft skills
		Suggested delivery options
Assessing soft skills	Assessment context	Educator views on student level of understanding
		Support and resources for assessment purposes
	Assessment methods	Assessment in educational settings
		Assessment in workplace settings
		Methods and concluding thoughts
	Implementation of assessment methods	Perceptions about assessment
		Problems encountered in assessing soft skills
		Suggested assessment options

Educator experiences in developing soft skills is the main phenomenon investigated in this study, and soft skills development within the Malaysian public higher education sector is the main concept examined by the researcher.

As mentioned in Chapter III – Methodology, the educators were also expected to respond to closed-ended questions such as ‘specify yes/no’, ‘rank your views’ or ‘indicate percentage where applicable’. The purpose of having closed-ended questions was to explore the variations in educator responses instead of finding generalisations. The translation of finding themes is attached in Appendix D1.

4.3.1 Establishing context

Context for the investigated issue is presented in the first three subsections.

4.3.1.1 Defining soft skills

When the Ministry of Higher Education (MOHE) introduced the soft skills module to HEIs in Malaysia, they used the term *soft skills*. The interviews with 25 educators from five public HEIs verified that they were familiar with this term; they gave a variety of definitions, with some giving multiple responses. Their responses are categorised into three themes: complementary skills, personal skills, and marketing skills. Skills and personal attributes were grouped together.

The majority of educators (18) viewed soft skills as complementary, extra or value-added skills. They constructed a distinction between soft skills and academic knowledge. Educator 4D metaphorically described soft skills as “vitamins” while educator 13B highlighted these skills as “accessories”. According to educators 13B and 17A, these skills are needed together with academic knowledge for students to succeed beyond university.

Some educators (10) also referred to these skills as personal skills and part of individual personality. Rather than being accessories or extras, personal skills are integral to individual make-up.

*... to me those [the skills] ... which form what is called one's personality ...
(22E)*

Educators also highlighted that “personality” cannot be acquired like academic knowledge, that is, by attending classes.

Personality development through experience and knowledge, can't be taught academically [using a similar approach to academic knowledge] ... (8C)

Several educators (3) identified soft skills as marketing skills that are important for interacting with customers. If an individual is able to make customers feel comfortable or is good at marketing, they possess a high level of soft skills.

... my hint is if you want to see whether a person has soft skills or not is when he or she entertains a customer, is it easy for him or her to talk to the customer? If it's easy that means he or she has a high level of soft skills ... (6E)

Educators associated soft skills with two clear contexts: work and life, with the former mentioned more frequently. Soft skills were seen as important elements in performing a job in an employment context.

... we tend to call them professional skills because professional skills are other skills you require to get the work done ... (10C)

In the latter context, educators recognised the need for soft skills in interaction.

... this means it starts with the way he or she thinks, it starts with the critical thinking then effective communication, his or her interaction with family, friends and society, all those ... (21E)

Educators were also asked to list other terms that refer to soft skills. Their responses are as follows: generic skills or competencies (9), people skills (3), employability skills (2), student or graduate attributes (2), core skills (1), transferable skills (1), non-technical skills (1), humanistic skills (1), professional skills (1), complementary skills (1) and inner skills (1). This shows limited consistency among educators in listing other terms that refer to soft skills.

When MOHE introduced the soft skills module to public HEIs in 2006, there was a tendency to use the term *kemahiran insaniah* from the Malay language. The data indicates the majority of educators (22) were aware of this term. Although *kemahiran*

insaniah as a term in the Malay language did exist, about one third of the educators (8) indicated a preference for using the term soft skills from the English language. According to educator 16A, a senior lecturer at the Faculty of Languages and Linguistics, *kemahiran insaniah* is a new term with a vague meaning, and this may lead to misunderstanding.

... if we say “kemahiran insaniah”, it’s unclear what “kemahiran insaniah” is, but if “kemahiran insaniah” is a new term, we ourselves have to learn the term, what does “kemahiran insaniah” mean ...

One educator (identifier deleted), who was part of a committee to look into this matter before the soft skills module was introduced to HEIs, confirmed that *kemahiran insaniah* was considered to be a new term in the Malay language. This educator clarified that the committee had difficulties in choosing a term in the Malay language to define soft skills.

Educator 19A suggested that using *kemahiran insaniah* as a term gives the impression that soft skills are exclusively for Malay people. Educator 8C stressed it would be difficult for other races (e.g. Chinese and Indians) in Malaysia to accept it on an emotional level. Educator 8C added the view that this term has spiritual elements when compared to *generic skills*, which has commercial elements.

... “kemahiran insaniah” is in Malay but when you say “insaniah” they have element of spiritual, okay when you say “kemahiran insaniah” the element of spirituality is there but when you say generic skills is more on when you want to talk about commercial, and then ... non-Muslim they can understand better ... (8C)

In addition, based on religion some elements may be permissible or not permissible, which can cause confusion to others, as pointed out by educator 8C.

... the clash ... of ideas and also beliefs, values, sometimes their [Chinese] culture. They like to play poker, for example, to them [this] is okay, is part and parcel of ... what we call their life [way of interaction – communication skills] and on top of that it just for [the] seek[ing] of fun but to the Muslim [Malay] it's not permissible ...

In agreement with educator 8C, educators 17A and 23E discussed the fact that the term *kemahiran insaniah* captures nuances from the Malay culture that are not defined by the term soft skills. These include the concept of *akhlak* which refers to ‘grace’ or ‘politeness’ and implies the manner of interaction.

... when we say [use] ... the “insaniah” term, it has a broad meaningful definition because it includes, morals are there, all are there ... (17A)

In contrast, educators 13B, 15A and 16A argued that soft skills as a term is simple, uncomplicated and quick to absorb. Further, educator 19A felt that this term is internationally understood. In addition, about a quarter of the educators (6) preferred to use a term previously used by their university. For example in university B, the educators were familiar with *generic competencies* as a term. At universities C and D, these skills were called generic skills. In contrast, at university E these skills were previously developed in a specific program referred to as the Soft Skills Concept (identifier deleted). On the other hand, at university A no specific term had previously been used.

The educators believed they have a good understanding of the soft skills concept ($M = 5.84$), where a score of 7 represented participants having a very high understanding. Those in the senior leadership group (i.e. the deans and residential college principals) had clear ideas about soft skills ($M = 6.27$). The understanding of educators in the non-senior leadership group was slightly lower than that of those in the senior leadership group ($M = 5.20$), and one of the educators rated this as low as 2. The educators have

listed and described the examples of soft skills, which include skills such as communication, critical thinking and problem solving, and teamwork, and personal attributes such as adaptability and flexibility. The most common soft skills mentioned were communication skills.

The majority of participants (19) were aware that their university has a policy on soft skills. About a quarter (6), however, indicated they were not sure whether their university had a policy on soft skills, but were able to describe the steps that had been taken by their university to develop soft skills among students.

... for now I'm not sure about it, but the head of department has warned [informed] us about this, soft skills, we know the guidelines it has to be like ... (5D)

Interestingly, four out of six educators who stated they were not sure were in the non-senior leadership group.

The majority of educators (21) were aware and able to name the seven skills as nominated by MOHE. Three educators were not aware that those skills were suggested by the Ministry but two of them were able to name the seven skills and one was able to name a few. One educator was not aware and was not able to name the seven skills. These four educators were in the non-leadership group.

4.3.1.2 Value of soft skills

All participants acknowledged the importance of soft skills. When asked to rate the importance of soft skills on a Likert scale, the majority (23) rated it at 7 (highest possible) and the remaining two rated it at 6. Educators gave many reasons to explain their response, with these divided into two categories: work and life. For work,

educators stated that these skills are needed to perform a job and are equally important to academic qualifications.

I think it's very important because even though you have academic knowledge but if don't have some required skills for the job you can't do the job ... (3D)

They also stressed that many complaints from employers were about graduates lacking these skills.

... most employers they complained, they complained graduates they are lacking of soft skills ... (2D)

For life, educators stated that those skills can be applied regardless of their roles.

... can be applied in his or her life, throughout his or her life so it's not only necessary for jobs ... (9C)

... our interaction as a child ... as a student and then on whatever role that we have as human being ... (21E)

Educators were also asked to list the three skills that students were most interested to learn. The most frequently mentioned types of skills by participants were communication skills (13), teamwork skills (12), entrepreneurship skills (8) and leadership skills (8). Educators believed students are interested in learning communication skills because of the importance of interacting with others, preparing for interviews and performing future jobs.

However, some participants (6) were reluctant to respond to the above question. Educator 9C was unwilling to evaluate student interest because there was no complete observation of the students. Furthermore, in reference to the support program approach, specifically co-curricular activities, students may end up taking a co-curricular activity in which they have no interest if the quota for the activity they are interested in is full.

Educator 10C argued that student interest comes from the learning environment and not from the specific skills. Educator 11B had a different opinion, stating that the development of soft skills at the university is not through learning but through the assessment of students' activities at the colleges, the faculties and the Centre for Student Training (Pusat Latihan Pelajar; PLP, identifier deleted). Educator 16A was reluctant to comment on this as this educator felt some soft skills are mandatory (e.g. entrepreneurship skills) for students as standalone subjects. Thus, this participant felt it was not possible to generalise. Another participant, educator 18A, observed that it depends on the group of students. For example, if they are majoring in counselling all seven skills except entrepreneurship are covered in their core subjects. Finally, educator 24E commented that students are actually lacking in these skills, adding that this educator could not see that students are interested in learning.

The skills consistently identified as lacking in students as nominated by educators are communication skills (15), critical thinking and problem solving (14), and lifelong learning and information management (12).

4.3.1.3 Importance for getting jobs

Soft skills were rated highly important ($M= 6.76$) by educators for getting jobs, where a score of 7 represented participants having a very high view. None of the participants rated below 5. The educators stressed that soft skills are important in a competitive job market as they are in high demand from all industries. They also claimed that graduates with soft skills are able to get jobs not necessarily in their field of study.

... not necessary to become a manager you need to take up, the business line ... he [a guest speaker] said anthropology ... as well as other [other programs] ... with soft skills you are able [to be hired as a manager] because they will look up at you ... (13B)

Educator 6C said those who have soft skills are adaptable and flexible.

... an individual who has transferable skills he or she will react according to situations, take a different approach for a different situation, should have high adaptability, it involves changes, adaptable and flexible are the requirements for today's jobs ...

Soft skills are what set graduates apart from their peers.

These [soft skills] can distinguish an individual from another, which means those who have soft skills absolutely they are different from those who do not have [soft skills] ... (6C)

Educators believed employers always prioritise academic qualifications but both academic knowledge and soft skills will add value to graduates and form the right balance for an individual. This is supported by educator 17A who said graduates need to have above average soft skills for career success.

Professional field, supported by soft skills, must be excellent in soft skills, it's not hard but it means must be above average.

Educators also associated soft skills with personality and making an impression on others.

... okay, to me soft skills can help you make an impression ... (15A)

Educators perceived the top three soft skills wanted by employers as communication skills (22), critical thinking and problem solving skills (19), and teamwork skills (18). The educators claimed that these three skills are fundamental for new recruits and are associated with each other. Communication skills as well as critical thinking and problem solving are required for all jobs. The educators also stressed that graduates need to work with other employees, and that problems are better solved by working in

groups. Educator 8C also emphasised these three skills are important to becoming leaders.

Educators were asked if there are other skills they wish to add to the MOHE list. Just under half of the participants (10) said this set of skills almost covers everything needed by employers. However, they suggested skills such as research skills, personal development skills, time management, cross-cultural awareness, counselling skills, versatility, department skills, talent management, stress management and self-monitoring, and personal attributes such as aesthetic values, self-reliance, adaptability, creativity, innovation, emotional intelligence, spiritual values, good attitudes and internal values.

Educators had a moderate view that students were managing their employability in the context of the most recent requirements for soft skills; the mean response was 4.21 on a Likert scale where 7 was a high level of preparation. The distribution of responses is as follows: 7(4%), 6(8%), 5(40%), 4(32%), 3(8%) and 2(4%). The educators who rated 5 and above said there was a group of students who realised to some extent the requirements for jobs and are preparing themselves to fulfil these requirements. Educators acknowledged that they needed to play their role in improving student awareness, adding that awareness can be improved through activities and programs, including those already in place.

Educators identified that after they have completed industrial training, students become more aware of job requirements, and then prepare themselves to fulfil these requirements.

Once they have undergone their practical training [internship] then only they are aware ... (14B)

Educators are also concerned about the tight job market and changing requirements. To cope with these constraints, universities offer alternatives such as entrepreneurship education.

Conversely, the educators who rated 4 and below on level of preparation for employment claimed that graduates may only realise the importance of managing their employability once they found out it was difficult to get a job. Reasons given for this include students' lack of exposure to life outside the university and that most of students' time is spent living in residential colleges. The education system is seen to give more attention to academic achievement, leading students to treat soft skills as less important than academic knowledge and therefore to pay them less attention. Educator 5D argued that some students just expect to take instructions and for educators to manage their employability.

Sometimes they said okay, management [managing employability] will be done by the person [educator] who teaches me, you know so I just obey, [be a] follower ...

In establishing a context for this study, these three sections have explored the perceptions of educators on the soft skills they have to deliver, the students to whom they have to impart skills, and the industry to which they have to provide the skills.

4.3.2 Role of educators

This section explores educator perceptions of their role and the role of other actors in developing soft skills.

4.3.2.1 Educator views on “my role and your role”

Educators pointed out that family, the student, school, university, government, industry and community are all responsible for developing soft skills among students.

4.3.2.1.1 Who is most responsible?

Educator responses to the most responsible actor for soft skills development show limited consistency: school (6), university (5), student (3), government (3) and family (2). Variation in responses was explained by educator beliefs about soft skills development. These beliefs show multilayered responsibility, given these skills are developed over time.

School

Educator 11B highlighted that the development process is divided into a few stages, organised by age. This educator said that the first stage of education starts when an individual is born and continues until age seven. From seven to 14 is a development stage, which includes soft skills development. Following this is the implementation stage where students will apply skills and an assessment system can be put in place. This educator stressed this as one of the reasons why the university is implementing assessment in its approach. However, this educator disclosed that few students have these skills when they enter university.

Very few [students] have [these skills when they enter university] thus, if [we] want to improve [handle this issue] we need to have [initiatives] such as conducting courses and so on ... [but to develop these skills] systematically is at school.

This educator added that it is difficult to develop these skills at university while acknowledging that it might be done through workshops or courses. This educator felt it was more systematic for schools to develop these skills and for university to then improve upon them. This educator also recommended links among the key actors (e.g. school, university and industry), given their interrelationship in developing student soft skills.

Educator 12B asserted that soft skills should be developed in school, arguing that students spend more years in school than in university and that those years are very critical. They felt students entering university should be a semi-finished product.

I think soft skills have to be developed from a very beginning ... from students, during their school days ...

Educator 14B said soft skills development should start as early as kindergarten, asserting that this cannot be initiated at the tertiary level.

... should start at the young age, from kindergarten, [they are the] thing that relates to human development [and] should not out of sudden develop at tertiary level, have to... start from kindergarten, from primary school ...

Educator 15A associated soft skills development with lifelong learning. This participant said soft skills were developed throughout one's life from young to old. This participant believed the idea of emphasising soft skills development at primary and secondary levels of education has been overlooked.

... we have been overlooked, actually it's not at the university we integrate soft skills, this is a lifelong learning which should start from school ...

There was an agreement among educators that the exposure to soft skills learning at an early age is important, especially at schools. Educator 15A stressed that there are many differences between those who are exposed to soft skills at an early age and those who are not (e.g. language and computer skills), with the former having a broader mindset. Their skills are used to gain more knowledge. This participant emphasised that student soft skills are shaped in many ways by their lifelong learning, especially in school.

Educator 17A argued that if students are not exposed to a learning environment at an early age, it is too late to develop soft skills in university. Educator 13B said that

university can only assist with extra skills that are not taught in detail, or professional skills that are not developed in school, and can only polish student soft skills. Thus, university can partly develop these skills in students during their years of study and the others should be developed by family and school.

... university can assist, especially professional areas ... university will polish ... add in skills which are not delivered in school, maybe in school those are not taught thoroughly ...

University

Five educators who expressed the view that university bears the most responsibility for developing soft skills among students justified this by indicating that university is the last stage in the transition from study to work. Thus, all hope is centred on university and on educators to produce work-ready graduates. Although soft skills can be learned anywhere, learning is more manageable at university, and university is expected to produce graduates with certain characteristics, as one participant said:

... we are aware that these [soft skills] can be obtained anywhere but if at the university by right it's more manageable ... and community put so much hope on university ... (16A)

This view was also supported by educator 4D who indicated that the most dynamic environment in which to learn soft skills is formal education, with university being the most well-informed entity on the current needs of industry.

... university is the one who [acquainted with the information and able to] convey the current needs [of industry], the most dynamic is formal education, school and university but the most important is the Department of Student Current Affairs (Bahagian Hal Ehwal Pelajar; HEP), which means university.

In terms of timing, educator 21E emphasised that it seems that university – as the main actor in managing the transition of graduates from higher education to employment – is

the most responsible to polish these skills. This educator emphasised that this did not involve initiating the skills.

... polish only... not initiating, they [students] should be able ... soft skills are in them just ... to make them, they have to improve ... it's a university transition to, before they get employed.

Students

Three educators believed that the most responsible actors for soft skills development are the students themselves. Educator 9C stressed that students should be aware of the need for soft skills, and should recognise their own weaknesses.

... because the individuals [students] themselves should be aware of ... their weaknesses, their soft skills ... they should possess those soft skills ... thus, they themselves should be looking for soft skills instead of all are delivered to them.

Educators indicated that even though many activities have been conducted for them, if students are not aware, they will not receive any benefits. Furthermore, educator 5D said students cannot simply develop the skills without them.

... they [students] have to play an important role ... [I] strongly believe because they can't just follow, they can't just, you know take [develop], take without really applying it ...

Government

Three educators indicated that the government is most responsible for developing soft skills among students. These educators asserted that most systems are controlled by the government, in particular the education system, and that government agency determines the direction of the education system. Educator 2D claimed that the government has conducted a few studies in regard to soft skills and has recognised the weaknesses of

school leavers and graduates. Those studies led to the proposition of soft skills development at university but the educators felt that little effort was made in communicating the findings to those engaged in the process, especially educators, and that the role of school was disregarded.

They [government] have conducted a few studies, they are aware of student weaknesses when the students leave school, from university to employment but they didn't fully inform the public [including educators about the research findings] ...

According to educator 7C, soft skills development at the lower level of the education system (primary school) is the most crucial. Soft skills should be introduced in school (at childhood education level) by the Ministry of Education (MOE) rather than in university by MOHE.

I placed this responsibility to the Ministry of Education, I didn't say the Ministry of Higher Education ... I think the most important ... our lower level of the education system.

Educator 10C stated that in fact the government is the one who creates culture for developing soft skills.

They [government] control everything. In fact the money, infrastructure all that, if we carefully think about ... to create the culture that we need ... [it's controlled by] the government.

Regardless of their opinion on who is the most responsible, educators suggested that the government should improve the education system and make some changes.

... I think the education system has to be revamped... in such a way that the students develop their soft skills ... during their school days rather than at university so I strongly believe should be done from the beginning not at university ... (12B)

Family

Two educators believed that the most responsible actor for soft skills development is family. Educators who indicated that family are the most responsible for developing soft skills among students emphasised that parents play an important role, given they provide early exposure to soft skills. Soft skills in children should be built and developed through encouragement by parents. Educator 25E stressed that “the family can make who you are”.

Educator 1D divided responsibility for soft skills development into three levels by highlighting the different roles, and corresponding responsibilities, at each level – parents for building their children’s soft skills, teachers for enhancing student soft skills, and universities for polishing student soft skills.

*... parents are very important also, to encourage this [soft skills development]
... I think parents are playing a very significant role ... in building their
[students’] soft skills ...*

Thus, as family lays the foundations for this multilayered responsibility, educators were of the opinion that family plays a vital role in the development of soft skills.

4.3.2.1.2 What about “individual responsibility”?

Although many actors are responsible for soft skills development, participants were in agreement that the individual is most responsible for their development of these skills. Other people, which included educators, were seen as providing support roles.

In this section, the educator perceptions about “individual responsibility” are further explored. Educators agreed it is an individual student responsibility to develop soft skills ($M = 6.2/7$).

Individual is the “key”

Educators indicated that students are responsible for soft skills acquisition and that no one is better than them in controlling their own learning. Educators claimed that the changes can only be made by students, and they should realise the importance of soft skills and make full use of opportunities to develop these skills.

... definitely an individual has his or her own responsibility if we want to blame ... all [actors] have their own parts to be blamed okay, but for a particular individual to change [improve their soft skills], he or she must follow the steps (11B)

Furthermore, educators argued that students are able to recognise their own strengths and weaknesses, which is important in managing their own social capital.

... their weaknesses are on what and they [students] know what they are going to achieve so they have to change towards the steps ... (21E)

As stressed by some educators earlier, while many activities have been organised, if students are not aware of them these activities will not be of benefit. In addition, students should not only develop the skills but also apply them. Educator 1D said even in cases where nobody is teaching soft skills to students, if they are responsible and aware, they will learn by any means.

... although people are not teaching anything [to students], nothing [is taught], if you have your own awareness “this is important I have to” ...

“Assistance” from others

Educators perceived their role as being an individual who provides assistance to students in developing their soft skills. Educator 9C also highlighted that while some skills can be acquired independently by students, some are hard to obtain. For example, entrepreneurship skills are challenging to learn, and students need assistance.

... although they [students] are most [responsible] but to acquire this individually is also hard. Some can be obtained by themselves, some needed a kind of, assistance from others ... [to obtain] the skills ... such as entrepreneurship ...

Educator 20E stressed that to leave it to students is not quite right; the role of educators is also important. Full comprehension cannot be achieved without educators who facilitate and direct learning.

... how you [students] are going to ... understand ... the field that you are studying if no one inform you, "this can't, this doesn't suit, this you can do" ... [you] must have teachers to direct [you]...

Educators can also point out what should and should not be done.

... lecturers will give support and then show you [students] the way, inform okay you are, "if like this you should do this or this", so you are aware of what you are lacking ... but the bigger responsibility is the person himself, [it's about] individual responsibility. (21E)

Some educators highlighted that students are not clearly informed about the importance of soft skills. It is the educator role to convey this message to them.

... currently this is not clearly conveyed to students ... if they are informed that's their responsibility, I think they will understand that's their responsibility. (2D)

Thus, the educators described roles as facilitators, motivators, mentors or supervisors as being important for soft skills development.

... they [students] need support, need help, they need guidance, they need people to point out, they need role models because they just can't develop on their own ... (18A)

According to educator 18A, some things are out of student control – for example, their environment – and they need support from others in order to learn soft skills. In

addition, success in learning soft skills depends on the psychological make-up of an individual as some students are very dependent and some are independent.

... they [students] don't have much control over the environment especially the younger ones ... some they're very dependent on others, some are quite independent [refer to their ability to learn]. Again it depends on the psychological make-up of a person, how have they been brought up.

Furthermore, the students are young and cannot see their future.

... I think they [students] are still young, they can't see the future so ... there should be ... a group of responsible people around them, meaning like university to help them ... to acquire soft skills ... (25E)

Despite the fact that educators perceived it is individual responsibility to develop soft skills, they acknowledged the role of others and themselves as educators in supporting individuals to develop their soft skills.

4.3.2.2 Educator views on industry collaboration

This section includes information about the link between universities and industry, and about collaboration between universities and industry in developing soft skills in students.

4.3.2.2.1 Link between universities and industry

The majority of educators (21) said that universities are informed by employers about their changing needs, which include soft skills. The participants highlighted that a few channels have been used by employers to stress the importance of soft skill training: industrial training; dialogues; curriculum reviews; guest speaker seminars; external assessors; industry-university committees/industry advisory panels/industry academic

advisors; industry courses and programs; and alumni. These channels facilitate communication between HEIs and industry.

4.3.2.2.2 Collaboration between universities and industry

There was agreement among educators that industry does collaborate with HEIs but not exclusively on soft skills. Educators rely strongly on industry feedback. However, they disclosed that they only receive general feedback in terms of soft skills and that industry involvement was minimal in this respect. Educators said that most efforts are initiated by universities because of their interest in updating their knowledge on the needs and requirements of industry.

*... cooperation is there but who initiates? ... I would say more from university
... (9C)*

Educator 17A stressed that industry does not have much time for collaborations as it is focused on profit making. Industry will only invest to train those who already have both hard skills and soft skills for specialising in business.

... they [industry] have no time to think about this one, they only think about money and profit ... they have many choices [in terms of graduates] ... unless they ... go for specialisation ... in their business context. That one they will give training but to give [training] ... for the one [soft skills] that you are going to create [develop] there is no time ... and then in fact they're not going to invest.

Educator 8C was of the opinion that industry should cooperate in terms of training and information sharing in shaping the skills for work curriculum but felt that at present this was lacking. This was due to many issues such as concerns about a generic labour force that is able to move between sectors rather than an occupational skills-specific labour force.

... the problem is industry, they are not cooperative ... because they are afraid of ... you won't get a 100% [cooperation] ... because their mindset is "if I give you this ... will use it against me" that's it ...

Educator 11B suggested that industry should also contribute towards soft skills development instead of exclusively looking for work-ready employees. So far in terms of human capital development, industry offers many scholarships but most are meant for academic knowledge. Industry expects students to acquire soft skills indirectly. However, if they wish to contribute directly to this effort, they can invest money and collaborate with universities.

... many companies provide scholarships but most are meant to train skills in ... the areas they are interested in but not on soft skills. In terms of soft skills, they hope students indirectly acquire this but if they are going to directly contribute, they have to invest a small amount of money, have to make connection with university ...

The evidence from the interviews suggests that educator personal beliefs were an influential factor on the role of conflict in soft skills development.

4.3.3 Teaching soft skills

Three subcategories relating to teaching soft skills emerged from the data: delivery context, delivery approaches, and implementation of delivery approaches.

4.3.3.1 Delivery context

The results are classified into three groups: educator awareness and involvement; educator views on focus of students; and support and resources for delivery purposes and integration of soft skills.

4.3.3.1.1 Educator awareness and involvement

The majority of participants (21) were very much aware of how soft skills should be delivered through tertiary education ($M = 5.92/7$).

Educators 2D and 20E highlighted that their universities were working on soft skills development before the soft skill curriculum was introduced in 2006. In terms of delivery approaches, educators 5D and 9C acknowledged that they were not aware of the categories of each approach, but recognised that soft skills development had been implemented at their universities. Educator 6C mentioned that despite students being unaware of the delivery options, they understood that a lot of activities had been conducted to develop students' soft skills.

The soft skills curriculum refers to three approaches of delivery: formal activities of teaching and learning consisting of embedded and standalone models; a support program comprising academic and non-academic focused activities; and campus life activities.

With reference to the three approaches, all educators were involved in the embedded model of formal teaching and learning of soft skills, and more than half (14) were also involved in a standalone model of delivery. In terms of the parallel programs, more than half of participants (16) were involved in the academic focused approach, and more than a quarter (7) in the non-academic focused approach. Less than half of the educators (11) were involved with campus life activities in residential colleges, with the majority (22) being involved in on-campus activities.

The interviews also revealed that educators perceived soft skills development opportunities not tied to the university environment – such as family, community and the workplace – to be important ways to deliver soft skills.

More than half of the participants (14) were involved either directly or indirectly in structuring teaching and learning strategies for soft skills. Their involvement spanned four levels: national (e.g. a meeting with MOHE), university, faculty or residential college. Eight educators were not involved in structuring the teaching and learning strategies for soft skills, and for three further educators involvement was unidentified.

4.3.3.1.2 Educator views on focus of students

Most educators (18) were of the view that students are more focused on academic knowledge than soft skills. They expressed the belief that this is partly because the education system itself emphasises student achievement in academic knowledge, both in schools and in universities. Consequently, students may place less importance on learning if it is not related to their academic knowledge, not realising the importance of soft skills. The students only view soft skills as a complementary (added value) to their academic knowledge. Furthermore, where the focus of assessment is on academic knowledge rather than soft skills, this view is reinforced.

... because schools nowadays focus on academic, if get an A, if get a B or get a C ... this is the practice and this continues in universities ... (2D)

On the other hand, two of the educators perceived students as focused on both academic knowledge and soft skills. For instance, through assigned projects, educators indicated that students are learning both academic knowledge and soft skills. For example, for students in the Marketing discipline, the focus is on academic knowledge and soft skills

as they need both components to complete their assignments. Especially in cases where the awareness and learning culture are there, students are focused on both areas.

... both they are good at, if awareness is there but somehow if the whole class is okay, [this is because] the culture is there ... (10C)

Three further educators had opinions that showed the range of focus areas that students may take. Educator 23E expressed the opinion that 50 per cent of students are focused on academic knowledge and 50 per cent had no focus, with uncertainty as to whether any focus was given to soft skills. Educator 20E grouped students into three areas: the first group focuses on academic knowledge; the second on soft skills (with a further subdivision into moderate and low achieving students) and the third is without focus. Educator 5D had a different opinion, saying that 10 per cent of students are focused on theory (academic knowledge), 40 per cent on practical (technical knowledge) and 50 per cent on both (academic and technical knowledge, which also includes soft skills).

4.3.3.1.3 Support and resources for delivery purposes

According to educators, most of the training on soft skills development was conducted by the university training centre. More than half of participants (14) advised that they had attended training to improve the ways they develop soft skills in students. They highly valued this training ($M = 6.54/7$). Most of the training sessions attended, however, were not directly focused on soft skills. For example, training such as the competency level appraisal (Penilaian Tahap Kecekapan; PTK) indirectly includes ways to improve soft skills development but this is not the primary objective. However, the evidence from the interviews suggests that most of the methods used by educators to develop soft skills in students were learned from their formal education or via their own

experiences. Educators also indicated that discussion with their colleagues was helpful in improving the ways they develop soft skills in students.

Educator 12B acknowledged that educators in the field of education may have sufficient training when compared with educators from other discipline areas.

... but for example like those people in education ... this is their field [so] maybe they have ... sufficient training ...

Most of the training is optional for educators.

... they [the university] do have courses but then they don't make it compulsory, it's not compulsory, optional ... (12B)

Educator 14B disclosed that the training was not attractive and was conducted in a superficial manner.

... a briefing to be acquainted with; overall comment, it's like attending a "school" ... there is a briefing but we get bored.

There was a moderate level of agreement among educators that sufficient training is provided by the university to develop soft skills ($M = 4.57/7$). There was also a moderate level of agreement among educators that sufficient infrastructure is provided by the university to develop soft skills ($M = 5.27/7$).

Nine of the educators had not attended any training on soft skills development, despite being aware of its availability.

4.3.3.1.4 Integration of soft skills

Educators were fairly consistent in their responses to the question asking them to identify which soft skills have been well integrated into teaching and learning and which have not. The top three skills identified as having been integrated well were

communication (19), teamwork (16), and critical thinking and problem solving (12). Conversely, educators identified that moral and professional ethics (15), entrepreneurship skills (14), and lifelong learning and information management (11) were not well integrated into the system of education.

Educator awareness and involvement, educator views on the focus of students, support and resources for delivery purposes, and integration of soft skills have established a context for teaching soft skills.

4.3.3.2 Delivery approaches

The results are classified into three groups: delivery in educational settings, delivery in workplace settings, and approaches and concluding thoughts.

4.3.3.2.1 Delivery in educational settings

Delivery in educational settings refers to formal activities of teaching and learning, support programs, and campus life. Educators were provided with the opportunity to offer their own perceptions of the advantages and disadvantages of each delivery approach. Three major elements emerged during analysis of their perceptions: teaching and learning, assessment, and application. Each model will be discussed in turn with respect to each of the three elements, as summarised in Table 4.3, Table 4.4 and Table 4.5.

Advantages and disadvantages of formal activities of teaching and learning

The first two approaches – embedded model and standalone model – are based on understanding that soft skills are developed more as part of inside class activities rather than outside class activities. The advantages and the disadvantages of formal activities of teaching and learning as discussed by participants are listed in Table 4.3.

Table 4.3: Advantages and disadvantages of formal activities of teaching and learning

Approach	Formal activities of teaching and learning			
	Embedded model		Standalone model	
Theme	Advantages	Disadvantages	Advantages	Disadvantages
Teaching and learning	Simple model	Indirectly learned	High student involvement	The same mindset of students
	High student involvement	(students may not aware)	Directly learned (students are aware)	Formal learning environment
	Indirectly learn (reduce burden)	Formal learning environment	Focus on the specific skills (train to excel)	Specialist may not know the requirement of profession
	Discipline educators/facilitators have full control	The same mindset of students	Methods and techniques are trained by educators/specialist staff	Focus more on knowledge rather than skills
		Ineffective without skills, willingness and understanding of facilitators (in managing and controlling)		Ineffective without appropriate teaching and learning strategies
		Lack of recognition for soft skills development		
		Lack of coordination with other approaches		
Assessment	Assessment can be put in place without difficulty	High educator workload (for skill assessment)	Assessment can be put in place without difficulty	High educator workload (for skill assessment)
	Educators know the students and are able to observe them	Nature of soft skills does not allow educators to assess them similar to the academic knowledge	Educators know the students and are able to observe them	Problem in assessing if many educators involve in teaching the same subject in different class

Approach	Formal activities of teaching and learning			
	Embedded model		Standalone model	
Theme	Advantages	Disadvantages	Advantages	Disadvantages
		Indirectly learn (students will focus on passing the examination)		Students will focus on passing the examination as it's offered as a subject
Application	Connection between soft skills and the disciplinary context	Lack of practice (e.g. limited to class activities, focus on the academic knowledge)	Focus on the specific skills	Lack of practice (e.g. limited to class activities) May have no connection between soft skills and the disciplinary context

The evidence is that the embedded model, which uses the approach of integrating soft skills in teaching and learning activities across the curriculum, occurs in a controlled learning environment (educator directed) and with formal learning as a predominant mode. Educators were of the opinion that although there are disadvantages, the embedded model offers significant advantages. They especially highlighted the importance of the disciplinary context, which points to the role of educators as academic knowledge experts to integrate soft skills into the curriculum. Similarly, the standalone model, which uses the approach of developing soft skills through specific courses, also occurs in a controlled learning environment (educator directed) and with formal learning as a predominant mode. One significant view of educators is the importance of being a specialist in terms of teaching and learning, application and assessment. Further views on the advantages and disadvantages of formal activities of teaching and learning are outlined in Appendix D2.

Advantages and disadvantages of support programs

The second two approaches, academic focused and non-academic focused, are based on understanding that soft skills are developed through both inside and outside class activities. The advantages and disadvantages of support programs are listed in Table 4.4.

Table 4.4: Advantages and disadvantages of support programs

Approach	Support programs			
	Academic focused		Non-academic focused	
Theme	Advantages	Disadvantages	Advantages	Disadvantages
Teaching and learning	Self-motivated learning (voluntary/freedom to choose)	Low student involvement if optional	Self-motivated learning (voluntary/freedom to choose)	Low student involvement if optional
	Non-paying/minimal cost	May burden the students (outside learning contact hours)	Non-paying/minimal cost	Indirectly learned (students may not aware)
	Flexible time	Educators/specialists do not have full control	The different mindset of students	May burden the students (outside learning contact hours)
	Directly learned	Ineffective if the educators are not trained		Lack of coordination with other approaches
	Methods and techniques are trained by educators/specialist staff	Lack of coordination with other approaches		
	Recognition in performance appraisal	Involve extra effort (budget and time)		
Assessment	Attendance is acknowledged or grade is given (i.e. self-training group; STG) and Student-advisor Programs)	Ineffective if the educators are not trained and are not the experts	Attendance is acknowledged or grade is given	

Approach	Support programs			
	Academic focused		Non-academic focused	
Theme	Advantages	Disadvantages	Advantages	Disadvantages
Application	Practice can take place inside or outside class environment		Practice can take place inside or outside class environment	

The evidence is that the academic focused approach, in which students are helped to acquire soft skills associated with academic matters, occurs in semi-controlled learning environment (university directed) and with non-formal learning as a predominant mode. This is similar to the non-academic focused approach, in which students are assisted to acquire soft skills not related to academic matters but to personality and professional development. The significant view of educators about these two approaches is that both support self-motivated learning as students are given freedom to choose among many options to develop their soft skills and this reflects the role of educators in the semi-controlled learning environment. Further views on advantages and disadvantages of support programs are outlined in Appendix D2.

Advantages and disadvantages of campus life activities

The third approach – campus life – is based on the understanding that soft skills are developed through involvement in outside rather than inside class activities. The advantages and disadvantages of campus life activities are listed in Table 4.5. The evidence is that the campus life activities approach, in which students are assisted to acquire soft skills in the conducive campus grounds, also occurs in semi-controlled learning environment (university directed) and with non-formal learning as a predominant mode. One significant opinion of educators is that this approach allows all

soft skills to be developed through activities and this reflects the role of educators outside rather than inside class. Further views on the advantages and disadvantages of campus life activities are outlined in Appendix D2.

Table 4.5: Advantages and disadvantages of campus life activities

Approach	Campus life	
Theme	Advantages	Disadvantages
Teaching and learning	All soft skills can be developed through activities	Indirectly learned (students may not aware)
	Non-formal learning environment	May burden the students (outside learning contact hours)
	Freedom to learn	Low student involvement if optional
	Flexibility to learn	Less control
	Sense of ownership	Lack of coordination with other approaches
	May involve many students	
	High resources/facilities	
	The different mindset of students	
Assessment	Attendance is acknowledged	Difficult to get to know the students and to observe them
Application	Practice can take place inside or outside class environment	Practice in the context of university training

4.3.3.2.2 Delivery in workplace settings

This section describes soft skills development in industrial training or work integrated learning. Once again, three major elements emerged during analysis of their perceptions: teaching and learning, assessment, and application.

Advantages and disadvantages of industrial training

The industrial training approach is based on the understanding that soft skills are developed through involvement and application in the workplace. The advantages and disadvantages of industrial training are listed in Table 4.6.

Table 4.6: Advantages and disadvantages of industrial training

Approach		Industrial training	
Theme	Advantages	Disadvantages	
Teaching and learning	High student involvement	Indirectly learned (students may not aware)	
	Learning in context	Insufficient monitoring	
		Short duration	
		Lack of cooperation between universities and organisations	
Assessment		Less attention is given or indirectly assessed	
Application	Connection between soft skills and the disciplinary context		

The evidence is that the industrial training approach, in which students are helped to acquire soft skills in the workplace, also occurs in semi-controlled learning environment (university directed) and with non-formal learning as a predominant mode. One significant opinion of educators is that this approach allows learning in context and this reflects the role of educators as university supervisors. Further views on the advantages and disadvantages of industrial training are outlined in Appendix D2.

Steps taken by university in dealing with industrial training

There was a moderate level of agreement among educators that their university has made full use of industrial training to develop student soft skills ($M = 5.09/7$). The

analysis of their perceptions grouped their responses into two conditions: steps taken by the university that assist soft skills development, and steps taken by the university that fail to assist soft skills development.

Steps taken by the university that assist soft skills development

Steps taken by the university that assist soft skills development include the university making industrial training a requirement for students to graduate. This shows that the university views industrial training as an important avenue for students to learn both academic knowledge and soft skills. Furthermore, industrial training is well documented. It involves reflective learning with students required to write a journal (log book) and submit a final report of their industrial training. Students are graded and provided with feedback from their supervisors, university and host organisation. By doing this, the universities show that they pay attention to this approach.

Steps taken by the university that fail to assist soft skills development

According to participants, a few actions taken by the university fail to assist soft skills development. This includes where industrial training is not required at all or is only optional. Students who do not undertake industrial training will not be exposed to the working environment and are not able to practice applying both academic knowledge and soft skills in these contexts. Normally, the duration of industrial training is quite short (e.g. 10 weeks) and therefore students receive limited experience. In comparison with academic knowledge, soft skills are given less emphasis. Additionally, although supervisors have been appointed from both the university and organisation, there is a risk that training may not remain on topic due to a lack of collaboration and coordination. Educator 7C identified a lack of close links between universities and organisations in this effort.

Maybe our problem nowadays is we have a very short practical training [industrial training] and we don't have a close link with industry for us to conduct a program ...

Normally, university supervisors are indirectly involved in the process. Thus, student learning significantly depends on the organisation supervisor. Furthermore, the acquisition of academic knowledge is the primary aim of workplace training, with less emphasis given to the learning and assessment of soft skills.

Evaluation form doesn't include [many] soft skills elements ... (3D)

4.3.3.2.3 Approaches and concluding thoughts

This section summarises findings related to approaches and concluding thoughts that have been grouped into three themes: which approach is best?; goal attainment for delivery approaches, and suggested alternatives.

Which approach is best?

Two contexts emerged from the educator responses about the best approach for developing student soft skills: controlled environment and semi-controlled environment. The controlled environment is created by the formal activities of teaching and learning: the embedded model and the standalone model. In this context, student soft skill learning is controlled by educators. The semi-controlled environment refers to the support programs and campus life activities (residential colleges and campus surroundings). Student soft skill learning is partly controlled by the students in the semi-controlled learning environment.

Seven of the educators indicated a preference for the controlled environment. Six out of seven supported the embedded model as the best approach and one the standalone

model. Those who indicated a preference for the controlled environment perceived that three conditions emerged in this context that facilitate learning: convenience, the simultaneous teaching of academic knowledge and soft skills, and the simultaneous assessing of academic knowledge and soft skills.

In the embedded model, educator 3D indicated that educators teach academic knowledge and expose the students to soft skills in their discipline context.

I think is embedded because you get two in one ...

Educator 9C stressed that all students will be engaged in learning soft skills through activities. Once the activities have been put in place, students have to carry out the activities as soft skills are embedded in their core subject.

... they [students] will learn because ... this you [educators] force ... because when they are forced ... they have to take it ...

In this approach the educators need to highlight the skills and become a role model for students.

... on condition that the lecturer himself knows, shows a good role model and knows how to highlight those skills to the students (18A).

In addition, educator 21E believed that because educators have control over the student results, they can train the students and keep them engaged in learning. Educator 16A and 22E emphasised that in the controlled environment, the impact can be seen as soft skills are formalised in teaching and learning.

In terms of assessment, both academic knowledge and soft skills can be evaluated simultaneously and assessment will not be a problem.

... assessment is no longer a problem ... because when ... they are embedded, there you have element of exams, lectures, all sort of things such as presentations and so forth ... (1D)

However, no mention was made of assessment moderation. Educators questioned the assessment process for both the embedded and standalone models. For example, in the teaching of Islamic and Asian civilization (Tamadun Islam dan Asia; TITAS) at one university, each faculty has their own instructors. Educator A in social sciences might be more lenient than educator B in engineering.

In the controlled environment, the embedded model is also convenient for students. The teaching and assessment of academic knowledge and soft skills is done simultaneously, thus students will not be further burdened in terms of effort and time. Educator 3D claimed that once students graduate they can implement their soft skills at the workplace, together with their academic knowledge.

Three of the participants believed the approaches in the semi-controlled environment are best. Two believed campus life is the best approach, while the other suggests a combination of support programs and campus life activities. Educator 6C indicated that most of the activities are part of campus life and all seven soft skills can be simultaneously developed through this approach.

... the most [are conducted] at the colleges [residential colleges] through activities.

This was supported by educator 10C who pointed out earlier that if the students participate and the university is able to create supportive institutional culture, campus life is an effective way to develop soft skills. In this environment, students are given the opportunity to conduct their own activities with minimal supervision. Educator 10C also highlighted that student willingness and sense of ownership are important in

motivating them to learn soft skills. Joint activities between residential colleges and student associations (at the faculty) are encouraged. Furthermore, residential colleges have more facilities to support activities. Educator 25E stressed that in the campus life approach, students have freedom, and that generates interest and creativity.

... but here [campus life approach] a lot of freedom, they will become more creative and interested.

A further group of seven educators believed in mixed approaches involving both controlled and semi-controlled environments. This group believed each approach has an impact on student learning. They were of the opinion that coordination should take place in two contexts: approaches and years of study.

Coordination of teaching and learning activities is considered to be essential as there are three approaches available: formal activities of teaching and learning, support programs and campus life. Educator 2D suggested that educators should acknowledge what each approach is doing to generate a sense of cooperation. This was also supported by educator 8C who said that problems emerge when there is a coordination issue because of “ownership”.

This is the problem, the problem is ownership, everybody wants, uh-oh! “I want to be the owner [initiator], I want to be the champion”. They [educators] refuse to accept [the contribution of others].

This participant used the analogy of making a cake to describe the ideal cooperation between the three approaches.

I always use the analogy like a cake, everything is important: the flour, the sugar, the salt, the eggs, even the water, all in, you can't say only flour is important ... so to me the most important at present is the coordination.

In contrast, educator 5D suggested the approach should change with year of study. In the first year, when students need more mentoring and guidance, soft skill learning should be done through formal teaching. In the second year, support programs would be more suitable. However, campus life activities are for all students regardless of their years of study. This was supported by educator 4D who suggested students can learn independently from other approaches in the later years as their interest in learning and awareness of the importance of soft skills increases.

... at the earlier stage in year one, in year two we teach them [students] but in the following years they already have the interest to learn [by themselves]...

Three educators perceived their role as more central than the approaches advocated. Educator 7C argued that everybody should play their role and should not be satisfied by only one means. This educator also suggested a developmental approach for soft skills development and that assessment should be established to determine student performance levels for improvement rather than to grade them.

... [assessment] embedded in all subjects and have to have the assessment ... with no scores [grades] but only the level [performance] ... thus, we group the students according to their level ...

Educator 20E further supported this by stressing that educators should be aware of their role in the educational system and should not compartmentalise responsibility according to their assigned positions. For example, principals and fellows are solely responsible for co/extra-curricular activities.

... This is lecturer perceptions uh-oh! It's [the responsibility of] principals and fellows because students they are at the colleges [residential colleges] it's their responsibility to develop [student soft skills]. They [educators] have no, they don't feel the responsibility, they don't feel that they are a part of an educational system that should be responsible in moulding an individual student ...

Educator 11B emphasised the educator role in terms of assessment regardless of the approaches. This participant suggested a joint assessment of all approaches to motivate students in learning soft skills.

Thus, the joint assessment is not a formula of [name of the vice chancellor – identifier deleted] and it's a best system. I see the system itself is the best ...

Educator 14B argued that the best approach is the one that will not burden the students “to the extent that they have no rest”. This educator stated that two approaches would be sufficient: integrated learning such as problem-based learning and co-curricular activities.

Educator responses indicated there was limited consistency.

Goal attainment of delivery approaches and suggested alternatives

The participants were given opportunities to voice their opinions on whether or not the various approaches can achieve the goals of soft skills acquisition. There was a moderate level of agreement among educators that the approaches are achieving these goals ($M = 5.18/7$). The responses have been grouped into five conditions, which were identified by participants as influencing whether the approaches are achieving the goals (see Table 4.7). For further views on the five conditions see Appendix D3.

Table 4.7: Goal attainment of delivery approaches and suggested alternatives

Goal attainment of delivery approaches	Suggested alternatives
Formalisation of soft skills development	Encouraging environment
Institutional culture	<ul style="list-style-type: none"> • Modelling by educators
Educators' role	<ul style="list-style-type: none"> • Informal approach
Students' role	Real world interaction
Element of practice	Exit training

The participants were also asked to suggest alternative delivery approaches or other models. Educator 21E expressed the view that it is difficult to find alternative approach as soft skills involve skills and personal attributes.

It's hard because ... these [soft skills] involve ... what we call spiritual, this is internal attitudes, inner, so it's quite difficult. Maybe if the subject we can control, we give exams, we get the feedback but this one we don't know ...

The approaches are listed in Table 4.7. Further views on the approaches are outlined in Appendix D3.

The above data, which focus on the delivery approaches, demonstrate the macro level efforts taken by HEIs in developing soft skills among students.

4.3.3.3 Implementation of delivery approaches

This section is divided into three parts: perceptions about delivery, problems encountered in developing soft skills, and suggested delivery options.

4.3.3.3.1. Perceptions about delivery

There are four findings related to perceptions about delivery: teaching verses learning, academic knowledge verses soft skills, embedding approaches, and promotion of the importance of developing soft skills.

4.3.3.3.1.1 Teaching verses learning

Educators were asked whether soft skills “should be taught”⁸ or “should be learned”⁹ and this links to “responsibility” as presented in Table 4.8. There is evidence here that educator beliefs surrounding teaching verses learning soft skills varies widely among individuals. In addition, educators often mentioned that soft skills cannot be taught or learned in a similar manner to academic knowledge.

... it has to be in a formal setting, well-organised structure, with the certain kinds of curriculum and input which I personally don't believe in ... (18A)

... it's like, for example, if we are teaching, it's just like in a lecture, we give theory but with soft skills actually it's the skills you need to practise, it's not just theory, you can't just read the book but you need practice (25E)

Four themes relating to educator beliefs and personal expectations about soft skills development were identified (as per Table 4.8). More than half of educators (15) believed that soft skills should be both taught and learned, with educators having joint responsibility with students for skill acquisition. Four educators believed that soft skills should be learned rather than taught, placing responsibility on students, and three educators believed that soft skills should be taught rather than learned, thus making educators responsible. Three educators believed soft skills should be assessed in order to be learned.

⁸ “Should be taught” meant the initiative is being centred on educators.

⁹ “Should be learned” meant the initiative is being centred on students.

Table 4.8: Educator beliefs about responsibility for soft skills development

Theme	The general consensus of educators' statements
Joint responsibility	<p>Core element: Shared responsibility between educators and students</p> <p>How: Educators <i>teach</i> (formal learning) and students <i>learn</i> (formal, non-formal¹⁰ and informal learning)</p> <p>Support: Formal, non-formal and informal learning</p> <p>Learning: Should be initiated and controlled by both educators and students</p>
Student responsibility	<p>Core element: Students observe and experience good practice, and will need to seek help</p> <p>How: Student <i>learn</i> (non-formal and informal learning)</p> <p>Support: non-formal and informal learning (including incidental learning), parallel programs</p> <p>Learning: Should be initiated and controlled by students</p>
Educator responsibility	<p>Core element: Educators incorporate formal activities into teaching</p> <p>How: Educator <i>teach</i> (formal learning) through activities</p> <p>Support: Formal learning</p> <p>Learning: Should be initiated and controlled by educators</p>
Assessment driven	<p>Core element: Evaluation of student skills (validity and reliability)</p> <p>How: Educators <i>assess</i> through various assessment</p> <p>Support: Assessment of formal and non-formal learning (including co-curricular activities)</p> <p>Learning: Should be driven by assessment system</p>

Joint responsibility

Most educators indicated that it is ideal to develop soft skills in students by finding a balance between teaching and learning. The educators justified their beliefs by highlighting the transition of responsibility from the educator to the student as the student becomes more proficient and gains higher level skills. The educators indicated

¹⁰ In this thesis, the term non-formal learning is an intermediate concept referring to HEI-organised activities that may have learning objectives and are not usually the focus of formal disciplined-based curriculum.

that students came into university underprepared in basic skills, including communication skills, thus placing primary responsibility on tertiary educators. There was some indication that educators felt that students with low motivation should be taught and students with high motivation would take on this responsibility for themselves.

Educators perceived that responsibility should be shared between educators and students. Educators are responsible for teaching through formal learning activities and students are responsible for their own learning through formal, non-formal and informal activities.

This means both [taught and learned] are needed, the right balance should be there for students to have some guides but normally individual easily possess [soft skills] by, he or she experiences this by himself or herself which means it's not someone teaches him or her but he or she obtains [soft skills] from the environment ... (23E)

Student responsibility

Four educators who expressed the belief that soft skills should be learned also stressed that soft skills are continuously developed over time and are a student responsibility.

... it's not like organising one workshop ... it's a continuous process they [students] should have ... internalised whatever that they have learned or acquired ... (18A)

From this perspective, learning takes place through student observation and experience.

... you [students] learn from what you observe, it's not up to us to teach them to perform. Often these skills are obtained by an individual because of his or her experience ... (1D)

According to these educators, this student responsibility approach needs a supportive environment, including role models, to encourage student efforts to learn. Educators

themselves have to show a good example. Educator responses also indicated support for informal and incidental learning.

Educator responsibility

Three of the educators who indicated that soft skills should be taught believed that the primary and secondary school system were not successful in training students to think for themselves. They perceived that students are not self-directed learners.

[They] become ... like robots, students can't think by themselves and have to be taught. (14B)

“Directing” the students to learn soft skills was seen as a way to enhance skill development, as many students may not have the initiative to take up these activities outside of the classroom. Educators acknowledged that there is an opportunity to teach soft skills through targeted activities (that is, learning by doing).

Assessment driven

Three of the educators expressed the opinion that soft skills should be assessed, and viewed assessment as a medium that can drive learning.

... these [soft skills] have been integrated through activities ... which means through practical activities. For example teamwork, we don't mention “this is teamwork” ... you give assignments and it's part of the way you assess their soft skills, through activities ... (6C)

According to educators, assessment will direct student efforts in developing soft skills. Issues of validity and reliability must be addressed by those who are involved in assessment (see assessment section for further elaboration). Educators supported the assessment of soft skills in formal and non-formal learning, which also includes assessment of co-curricular activities.

4.3.3.3.1.2 Academic knowledge verses soft skills development

Educators were asked to assign a percentage to represent the emphasis they would place on soft skills when compared to academic knowledge in the embedded model of soft skills development. Responses ranged from five to 70 per cent. The lowest response (5%) was received from educator 22E, who teaches sociology, and believed educators have to allocate more time to academic knowledge. The highest response (70%) was received from educator 18A, who teaches counselling/psychology. Educators who teach in design technology (textile and fashion), marketing and statistics assigned equal weighting to soft skills. There is evidence here that the emphasis on soft skills may vary by discipline as well as by educator beliefs.

4.3.3.3.1.3 Embedding approaches

Educators were asked about the ways they implement soft skills into their teaching. They tended to refer to the embedded model as all were involved in this delivery approach. According to educators, soft skills were developed through activities. Table 4.9 summarises their embedded implementation according to their relationship to learning objectives.

Table 4.9: Ways educators implement soft skills in their teaching

Activities	Ways of implementing	
	Not included in the learning objectives	Included in the learning objectives
Planned activities	<ul style="list-style-type: none"> Do not explain about soft skills development in the teaching Do not really train soft skills but provide guidelines 	<ul style="list-style-type: none"> Educator initiative to informally explain about soft skills development in the teaching

Ways of implementing		
Activities	Not included in the learning objectives	Included in the learning objectives
		<ul style="list-style-type: none"> Educators formally explain about soft skills development in the teaching (course outline or course proforma; or learning outcomes)
Unplanned activities (incidental)	<ul style="list-style-type: none"> Educator initiative to informally explain about soft skills development in the teaching 	

Planned activities

Most activities are planned, and fall into one of three types: planned activities without soft skills being explicitly highlighted, planned activities with informal soft skills emphasis, and planned activities with formal guidance and links to learning objectives. Ten of the educators have implemented the first approach, where group assignments, class presentations, class participations (e.g. question and answer, and group discussions), tutorials, lab work and exposure to real world experience (e.g. study visits) require students to employ and develop soft skills. In this approach educators do not provide an explanation about soft skills development and it is not listed in the activity learning objectives. Educator 15A acknowledged that educators do not really train students but do provide them with guidelines. For example, in the case of oral presentations, educators assign tasks and give guidelines but do not highlight that the purpose of the presentations is also to develop presentation skills.

... we don't formally teach them [students] the methods, we ask them to do presentations, we ask them. We only give guidelines ...

Educator 2D indicated that most educators will indirectly train their students with the traditional or more conventional skills such as communication skills, leadership skills

and teamwork skills, but certain skills are left out in their teaching because they themselves are lacking exposure to certain skills such as entrepreneurship.

And even now, actually there is a lack of exposure at lecturer level ... when the lecturers embed [soft skills in teaching] there are certain soft skills left out for example, entrepreneurship, most of lecturers they embed communication skills, leadership, teamwork but the other skills they don't, so should have a briefing to explain this.

The evidence is that as they themselves lack adequate knowledge and training in integrating soft skills, educators may be willing but not confident to develop soft skills in students.

The second approach is via planned activities where educators use their own initiative to informally explain soft skills as part of their teaching, given it is not detailed in the learning objectives. Four educators had implemented this approach. Educator 4D stated that the purpose of problem-based learning (PBL) and case studies, including the development of soft skills, is informally explained to students.

... but in the problem-based learning ... we as facilitators are not required to explain to students [about soft skills development] but I [name of the participant-identifier deleted] explain to the students ... my own initiative ...

The third approach, using planned activities, has educators formally explaining soft skills and including them in learning objectives. Four educators have taken this approach. Educator 7C indicated that the soft skills to be developed are listed in the course outline and some are posted in the e-learning forum, and stressed that some educators print and distribute these materials to their students and integrate the skills indirectly in their teaching. However, this educator was uncertain whether students were aware of this. The emphasis here is on the use of the formal medium to inform the students of the importance of soft skills development.

Unplanned activities

Educators also use unplanned, or incidental, activities to develop student soft skills even when soft skills are not listed in learning objectives. Educators take responsibility for informally giving advice and trying to motivate students to learn soft skills. One educator (identifier deleted) expressed a strong view that educator responsibility extends beyond teaching academic knowledge. This participant believed educators also have a responsibility to prepare students to be able to implement academic knowledge and soft skills for employment. Educators are *teachers* rather than *lecturers*. A teacher will educate, which is different from a lecturer, who will only impart knowledge. This educator added “a good teacher educates, a great teacher inspires”.

... if you don't bother ... as long as you get monthly salary, that's good enough for you, finish your class, students get their grades, actually as a lecturer that's why the VC [vice chancellor] is supporting concept of “good teachers educate, great teachers inspire”... (identifier deleted)

Educator 9C concurred with the above educator that educators are teachers. This educator allocates time to indirectly advise and motivate students to learn soft skills, increasing in their awareness.

... sometimes advices are given ... we talk on something to offer awareness or motivation to students ... because we are not only educators, we suppose to be teachers. (9C)

Educator 18A expressed the view that soft skills cannot be developed formally and did not believe in having those skills in the learning objectives. This participant said learning will take place incidentally during teaching time. There are instances and incidents where educators develop soft skills by pointing out the strengths and weaknesses of their students.

... To me it [soft skills development] is incidental ... it's just like during teaching ... there are instances or incidents where we can highlight that's a good way of answering ... we point out the signs [strengths] and weaknesses so that the students can see ... it's unplanned, it's not like having learning outcomes ...

Furthermore, educators should be good examples and become role models.

... the positive conducive environment where there are role models for them [students] to emulate is part of developing a person, of people skills [soft skills] ... (18A)

Most educators developed soft skills among students through planned activities but several of them explicitly highlighted the soft skills in the said activities.

4.3.3.3.1.4 Promotion of the importance of developing soft skills

Three themes emerged from the educator responses in interviews about the promotion of the importance of developing soft skills: “facilitating” or “mentoring” to develop soft skills by any means, “assessing” to develop soft skills by any means, and “pushing” to develop soft skills by any means.

Facilitating or mentoring occurs in the learning process by giving examples (e.g. role models), advice, guidelines, feedback, encouragement, acknowledgment and recognition, and incentive (extra credit or bonus marks). Nineteen of the educators promote soft skills this way. Educator 12B said the students are always encouraged to build their confidence by practising the skills.

I always tell my students so sometimes ... you know they are very shy, they are scared to talk. I say you just have to build your confidence – building a confidence is also a soft skill, try to build slowly may practice more. It's okay if you are not good for the first time, second time, third time maybe after 10, 20 times you become better so I always believe in “practise make perfect”.

Educator 1D added that in the process of learning and trying to increase their confidence, students should not worry about making mistakes.

... thus, you [students] should develop your skills, have high self-confidence and strong resilient, high self-confidence and willing to learn are important, people say that do not worry of making mistakes ... keen to give ideas, keen to discuss and so forth, all this are constructive ...

Four educators promoted the importance of soft skills by highlighting “assessment”.

Educator 4D asserted that the students are informed about the assessment and that feedback is given at the end of activities.

All of these things we assess. Provide feedback because at the end of the discussion, a facilitator [educators] will inform. Okay today's discussion is very good but I see one or two of you [students] is still quiet. Make sure that you join in, and then encourage them.

One participant highlighted that educators also “push” students to get them to participate in learning soft skills. Educator 1D mentioned that sometimes students are too passive and not willing to participate in the activities, but once educators “provoke” them by forcing them to participate, they will do it.

... sometimes students are so passive, they don't want to participate. When they are provoked then only they become responsive, they are willing to discuss and so forth, automatically such things will encourage them to talk, build in the confidence ...

This final push approach was not overtly shared by the other educators but there was some agreement with the view that students are too passive and not always willing to participate in learning soft skills.

4.3.3.3.2 Problems encountered in developing soft skills

The analysis of educator responses revealed five themes related to the problems encountered in developing soft skills: involvement, class size, time constraints, coordination, and institutional support. Further views on the five themes are outlined in Appendix D4.

4.3.3.3.3 Suggested delivery options

Educators have different opinions on how to better deliver soft skills. Their views fall into three categories: teaching and learning strategies, support and resources, and promotion and marketing.

Teaching and learning strategies

The majority of educators (20) identified the importance of teaching and learning strategies to better deliver soft skills. A strong message from educators was that students should be exposed to the soft skills learning environment from as early as primary school, and that this should continue during secondary education. Again the same themes appeared in the interviews. They expressed the view that at tertiary level, the educator role should be to polish already-acquired skills (see Figure 4.1).

... for example communication, we talk about communication from the aspect of communication, communication in English. I think environment and exposure should be given in the secondary and primary school ... those that we can polish, we will polish but to initiate soft skills at tertiary level, you are hoping for something which is very impossible [difficult] ... (17A)

In polishing, educators act as advisors or facilitators. Personal traits such as willingness, creativity and industry experience will enhance their abilities in carrying out these roles. The concept of educators as role models again emerged.

My philosophy, I should become a role model ... [it's] my strength, the advantage is I used to work with the industry ... [so] exposed [had practiced the skills] ... (7C)

Participants also identified three approaches to better deliver soft skills: indirect, interactive and attractive (see Figure 4.1).

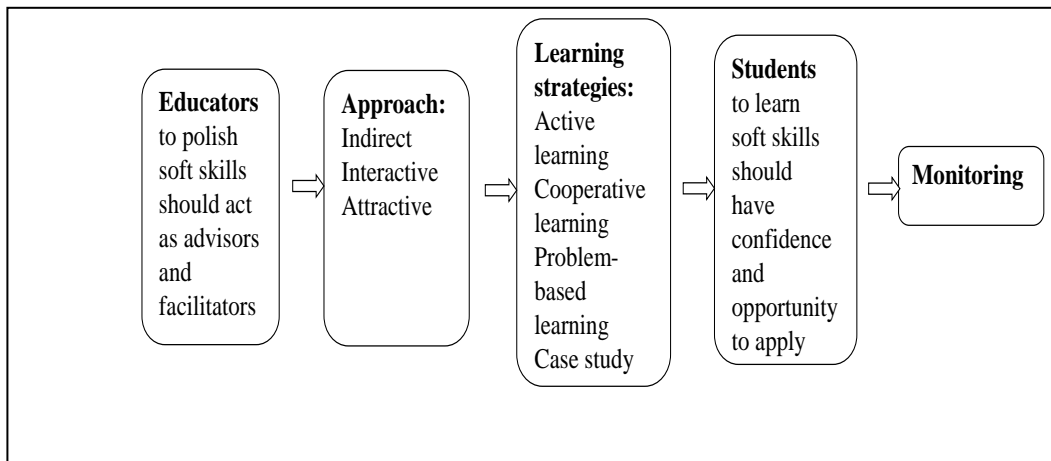


Figure 4.1: Views of educators on teaching and learning strategies

The views expressed in relation to these three approaches reflected educator views on the efficacy of the approaches already in use. For example, some educators suggested that soft skills development should be indirectly embedded in formal and informal activities to motivate students to learn. Educator 3D observed that students are more willing to learn if they are not told they are learning soft skills.

... it [soft skills] should be embedded but not in a glaring way because some students, if you ask them to read something, 'you are supposed to learn this' they don't want to learn but if you give [it to] them indirectly [through activities] then they will accept it ...

The indirect approach is rationalised by educators as being less time-consuming, as soft skills are embedded in activities and feedback is provided by educators.

... so how you [educators] embed in. I say through activities, student activities because we don't mention this is soft skills, this is soft skills don't mention but through activities and ... from our wrapping up, we know that [through] reflection ... wrapping up [we provide] feedback to students ... (6C)

Active student participation was also seen as a way to better deliver soft skills. Students are more willing to learn soft skills through this interactive process. If the incorrect approach is applied, it will not attract students to take up soft skills. The attractiveness of interactive activities could be further enhanced through improving the learning environment. Educator 13B offered examples such as inviting well-known speakers or conducting the programs outside the university environment.

... thus, we might not necessarily expensive if it's not here [in the university] ... somewhere closed by as long as outside campus okay, outside and then invite somebody, invite somebody which means if he or she is from here [the university] but he or she is not from the same department, faculty ...

In addition, some educators suggested that learning strategies such as active learning, cooperative learning, problem-based learning and case studies can be implemented to motivate students to learn soft skills through interaction (see Figure 4.1).

Educators also suggested that in order for students to learn soft skills, they should have the confidence and opportunity to practice or apply the skills (see Figure 4.1). Educators should increase the confidence level of their students by giving them advice and facilitating their learning process. In terms of creating opportunities to practise or apply, this can occur through students being exposed to real world experiences.

Apart from the above suggestions, educators also recommended an element of control be put in place such as continuous assessment (see Figure 4.1). Educator 24E said that assessment was viewed as an important element to monitor student progress in learning soft skills.

Support and resources

More than a quarter of participants (9) indicated that there is a need for resources such as human resources, and financial, physical and infrastructural support. They asserted that those who are going to develop student soft skills must be well trained. Similarly, there is a need to have adequate educators to avoid the problem of large class sizes.

Educators observed that financial support is important for the effective conduct of activities such as study visits and field trips. In addition, financial support is needed to reward educators with incentives (i.e. tokens) for their contributions, and students with awards for their achievements. They also felt that sufficient infrastructure and facilities are required to support whatever approach is taken, stating that learning will not be effective if these are lacking.

Reward or recognition for soft skills development involves direct and indirect types of rewards for both staff and students. In this scenario, the involvement or attendance by students would be recognised by issuance of a certificate or grade points. Student achievement should be rewarded by acknowledgement or by good results. The contribution of educators should be duly recognised through performance appraisal and incentives where appropriate. There was also a suggestion from educator 21E, however, to penalise students who failed to involve in the activities.

Promotion and marketing

Educator 2D suggested that an awareness-raising campaign should be conducted and students briefed about soft skills to increase their understanding of their importance.

... I think if soft skills are promoted to students through, for example, advertisements, campaigns – soft skill campaigns to emphasise the importance of soft skills – it's far better ...

The ways suggested by educators to better deliver soft skills are applicable at an individual or institutional level.

As highlighted above, educator personal beliefs are a key influential factor in teaching soft skills.

4.3.4 Assessing soft skills

Educators were generally in agreement that it was early for the Malaysian HEIs to implement assessment and reporting of soft skills development in students using a formal medium. According to educators, efforts are under way to develop data that formally highlights student soft skills, which reflects on their overall achievement rather than just a listing of the academic courses taken and the grades received. One university was developing soft skills but had not yet reached implementation to a point where student soft skills could be assessed. In general, HEIs involved in this study are in the process of identifying ways to assess soft skills and provide recognition to competent students. In one institution there is currently no standard specific exit test for soft skills in order to certify competency in students.

An open question elicited data relating to who is involved in the assessment process, how it is performed and the instruments used. All public HEIs in the study assess student soft skills in some manner of formal teaching and learning activities (in both the embedded and standalone models). However, a few HEIs have a formal medium for assessment and reporting. One example is the establishment of a self-training group (STG). The STG module includes MOHE's soft skills framework as suggested by the soft skills module. Student performance is assessed and reported in academic transcripts, with awarded either *satisfactory* or *unsatisfactory* for their achievement.

In another example of a formal medium, a few divisions are involved in multi-level evaluation: faculties (including student-advisor programs), residential colleges (including student activities), centres (including courses and co-curricular activities) and students (including merit system and self-assessment). In this system, educators at all levels jointly assess students, and students are given opportunities to self-assess. The assessment will be reported in a complementary diploma (identifier deleted) with grade points. It is important to note that a complementary diploma will only be awarded to students who are involved with the system for their entire year of study, so this is only applicable to new students who started their semester with this system. Student merit books or portfolios are also used to report soft skills. Student portfolios allow students to record personal reflections on the activities they have performed.

Educators were of the opinion that the very nature of soft skills is intangible and assessment is to some degree subjective, abstract and not concrete. They indicated that the assessment is based on the perceptions of the assessors although they may use some criteria to assess student soft skills. A few educators have explicitly informed their students of the assessments and criteria, and provide students with feedback by pointing out their strengths and weaknesses. Educator 6C stressed that competency in assessing these subjective skills depends a lot on their training and experience.

If it's me, I have no problems with perceptions [in assessing soft skills] which means even if it's perception but it's done through experience ... briefing and training should be conducted continuously especially for new lecturers ... it's [assessment] subjective which requires a high level of competency of that particular individual ...

4.3.4.1 Assessment context

The findings are classified into two groups: educator views on student level of understanding, and support and resources for assessment purposes.

4.3.4.1.1 Educator views on student level of understanding

The educators perceived students have moderate levels of understanding of soft skills assessment ($M = 4.75/7$). Educator 9C stressed that the nature of soft skills is subjective in areas such as leadership as it is difficult for students to understand the assessment and also hard for educators to conduct the assessment.

... when it comes to soft skills ... our assessment is also subjective, like what we said ... “what are his or her [students] scores for leadership aspect?” If we also [found it’s hard] to give [scores] ... to assess him or her [so do students who would like to understand the assessment].

Those who rated 7 indicated that students are well informed by their seniors or educators about the assessment and its expectations. Educator 22E claimed that assessment is accepted by students.

... they [students] understand once they accepted [the assessment], they deserve [the grades]... in fact deserve. I think so for those who obtained the grades.

Those who rated 6 and below commented that students are aware of the assessment, but there is a lack of explanation about the assessment of soft skills. In particular this may happen in the embedded model if educators briefly inform students about the assessment (such as presentations) but do not highlight the assessment of a particular skill (e.g. communication skills).

... assessment is not conducted for soft skills ... students don’t know whether we evaluate their soft skills or not. (16A)

... no we don’t tell them. (12B)

The evidence is that explanation is not explicit. Thus, educators only indirectly inform the students about the assessment of soft skills, and students perform the activities just to pass the academic knowledge aspect of the assessment.

They [students] have low understanding because they know that they have to pass that subject ... maybe they do it just for the sake of ... to get through that subject, some are not even put an effort [to improve their soft skills] ... assessment criteria for soft skills they don't know. (23E)

In addition, even if students are clearly informed about the assessment of soft skills, they may not pay attention and make an effort to improve these skills, because the weightage allocated to soft skills can only be insignificant.

Educators 4D and 20E said students do not really understand the assessment of soft skills, evidenced by the fact that educators have to repeatedly remind students to participate in the activities.

I remind the students [about the assessment of soft skills] since they don't really know the skills are important ... I do remind them but not all the time. We have to "lecture" [remind] in class ... "you have to participate" ... (20E)

4.3.4.1.2 Support and resources for assessment purposes

The data shows that only seven educators have attended training that either directly or indirectly focuses on soft skills assessment such as competency level appraisal (Penilaian Tahap Kecekapan; PTK). These educators highly valued the training ($M = 6.17/7$).

The participants also perceived that educators were under trained in assessing student soft skills ($M = 3.38/7$). The educators stressed that as the assessment of soft skills has only recently become explicit, focused training is lacking. One educator (identifier deleted) indicated that there is a lack of briefing on how to manage and assess students

in the student-advisor programs (identifier deleted). As with teaching, some educators learned to assess soft skills from their own experience and discussion with colleagues. When training is available, some educators indicated that they do not have an interest because it is optional, is minimally promoted by top management and because they receive mixed signals about the university's focus. One educator (identifier deleted) indicated that with the university focused on becoming a research university, educator attention is diverted away from the soft skills development effort.

There is evidence here that educators were in agreement that students have moderate levels of understanding of soft skills assessment and the participants also perceived educators were inadequately trained in assessing student soft skills.

4.3.4.2 Assessment methods

The delivery approaches in educational and workplace settings were discussed in detail earlier. Either part or all of each approach involves assessment, and the degree of assessment depends significantly on individual HEIs. This section briefly discusses assessment methods.

4.3.4.2.1 Assessment in educational settings

Assessment in educational settings is divided into three contexts, namely formal activities of teaching and learning, support programs, and campus life activities.

Assessment in formal activities of teaching and learning

Assessment of soft skills in formal teaching and learning involves either grade points or both grade points and performance levels (separately reported). The choice is made by individual HEIs. However, by incorporating soft skills into the academic curriculum,

overall grades will be assigned to subjects, and therefore soft skills assessment is not specified on the transcript.

As discussed earlier, educators assess student soft skills in their formal teaching and learning through activities such as presentations, projects, group work, PBL, clinical papers, final year projects, assignments, study visits, case studies, seminars, or talks and discussions. Educators indicated that in general assessment is not entirely focused on soft skills – it is primarily performed to assess academic knowledge. The exception is when educators teach soft skills as a standalone subject.

The educators elaborated on administration of assessment. They identified that each activity assessed different things, including different soft skills. Most of the time soft skills elements are indirectly assessed by educators because no clear criteria or guidelines are available to specifically look into certain soft skills. Educator 6C referred to this set of criteria as a rubric. Often assessments are based on the perceptions of educators. A joint assessment with other educators or external industry-based assessors is also conducted when and where applicable. In a few instances, students are given the opportunity to perform self-assessment and peer-assessment. Educator 9C highlighted concerns that peer-assessment is open to invalid evaluation as students will help each other for marks.

... okay you [students] assess your friends because I don't want the passengers [free riders] but usually it involves "conspiracy", [it] doesn't work ...

Educators recognised that soft skills only contribute a small portion of overall evaluation. However, at one of the HEIs, apart from student projects (e.g. presentations which may have 5% soft skills elements and 20% academic content), a comprehensive assessment of soft skills tends to be conducted separately by educators. In this

institution, educators complete forms to report the performance levels of their students rather than assign grades. They then have to provide recommendations on soft skills improvement. One educator observed that normally the assessment involves formative assessment rather than summative assessment as in this participant's opinion it is unfair to evaluate students at their early stage of learning.

I conduct a formative assessment, it's not a summative ... although I assess them [students] from the beginning then ... I have the tendency ... to take the latest one which they have improved, it's not. For me if they just started it's unfair to penalise them. But when they have improved I have to take that improvement into account. (identifier deleted)

Assessment in support programs

Assessment of soft skills in the support programs involves either grade points, pass/fail, satisfactory/unsatisfactory or certificate of attendance.

Academic focused activities such as STG involvement is mandatory for all students at one university for six semesters (one credit per semester), but is not part of the curriculum. It consists of six modules and, as mentioned earlier, student performance of either satisfactory or unsatisfactory is reported in academic transcripts. Each semester students complete 14 contact hours (a two-hour weekly meeting for seven weeks). Each lecturer will be assigned to 10 to 12 students and the session is conducted in English. Students are given learning objectives and taught the skills by educators, after which they are given opportunities to apply the skills. In this process they learn, apply and they are informed of areas needing improvement.

In the student-advisor program at one university, students are assessed according to the university standard criteria. The online assessment system can be accessed by students and assessors. The assessments involve many criteria and are challenging to manage if

the educators are assigned a large number of students. Assessments are based on the activities and interaction between students and educators outside academic contact hours. They involve a lot of observations and perceptions, which will be more difficult to achieve if students do not meet their educators.

Non-academic focused co-curricular activities are also assessed in most of the universities. Most activities are indirectly conducted for soft skills development. In contrast with STG, co-curricular activities are a part of the curriculum and made mandatory for four semesters at one university. Grade points are given to students. Educator 8C stressed that soft skills development in the co-curricular activities is more practical as students are not academically assessed, especially at the early stage of learning soft skills. This educator added that a few issues need to be considered such as the subjectivity of soft skills, the continuous development of soft skills (e.g. students may fail their co-curricular activities but later improved their soft skills), the interaction between educators and students (e.g. students may perform well when they are comfortable with their assessor) and assessment biases (e.g. leniency bias by assessors). This participant expressed the view that if assessment similar to academic knowledge was undertaken, it will be contradictory to the concept of soft skills development being part of lifelong learning.

... this [soft skills development] is ongoing so to me it's not fair for the students ... to be evaluated at the early stage, [it's] very subjective, some people yes they have the skills already so they can perform, some people they take time.

Assessment in campus life activities

In general, assessment of soft skills in campus life activities involves educators as student activity advisors. Again student involvement is acknowledged either by

assigning grades (points or pass/fail) or by issuing certificates. In some universities, student merit books or portfolios are used to monitor soft skills development. As mentioned earlier, student portfolios allow students to reflect on the activities they have performed and this record is an important reference for their future employment.

4.3.4.2 Assessment in workplace settings

Student industrial training is assessed by the university supervisor and industry supervisor. As was the case in the embedded model, only a small part of the overall assessment consists of soft skills assessment. At one university students are given either a pass or fail for their industrial training.

It is clear that each context has its own methods of assessing student soft skills.

4.3.4.3 Methods and concluding thoughts

This section summarises findings related to methods and concluding thoughts, which have been grouped into two themes: educator satisfaction with the assessment and reporting, and goal attainment for assessment methods.

Educator satisfaction with the assessment and reporting

Educator satisfaction about assessment and reporting on student soft skills was moderately high ($M = 5.18/7$). Educators who rated 7 justified their positions by placing emphasis on the activities and ways used to assess student soft skills. Educator 3D indicated that, should it be provided, a new better way will be accepted as educators intend to successfully assess student soft skills. Educator 5D stated that the mechanism has been established for internal assessors (educators) and external assessors (e.g. industry assessors) to assess students and provide feedback. One educator (identifier deleted) claimed that the assessment system at one university (identifier deleted – this

educator's university) – an assessment system which involves faculties, residential colleges, centres and students – has been developed by experts. This participant added that an assessment system that uses a joint assessment is the best, as it is effective and reliable. In using the system, educators need to be familiar, to some extent, with their students.

Educator 20E expressed satisfaction with the ways student soft skills have been assessed but stressed that educators need to be firm to put such activities in place. In addition, educator 22E was satisfied because when comparison was made, the results turned out to be consistent, implying inter-rater reliability. Educator 6C's satisfaction derived from direct involvement in soft skills development as a trainer.

In contrast, the educators who rated 6 on the scale tended to agree that soft skills are subjective and hard to assess. Educator 1D emphasised that the assessment of soft skills involves perceptions that are subject to inconsistency. One educator (identifier deleted), when discussing student-advisor programs, stressed that the educators are in favour of assessment but expressed concern that the implementation is difficult, particularly when based on very few interactions. Furthermore, educators need to assess each of the students.

... the problem is not that we don't like the system of evaluation but it just that ... how we're going to judge based on one or two interactions unless you know that this particular student ... but most students we don't know ... I think ...the system is good but ... the way it's being implemented that I feel less satisfied. (identifier deleted)

Educator 14B argued although the assessment of soft skills involves a lot of criteria, they will conduct the assessment if they are able to do so. Educator 10C claimed that the educators are trying their best to assess student soft skills and be fair to the students. In light of this, educator 17A said that whenever possible educators will put in place

joint assessment. Educator 15A did admit that soft skills are subjective but this participant was satisfied when a joint assessment ended up with consistent results. On the other hand, educator 23E said the assessment in the embedded model depends on the subjects and highlighted that the assessment focuses on academic knowledge rather than soft skills.

With reference to the embedded model, educator 24E viewed soft skills assessment as a monitoring tool. One educator (identifier deleted) emphasised the assessment as a kind of enforcement tool to get students engaged in the learning process but felt that the assessment form needs to be simplified. In this participant's opinion, soft skills development is important but assessment of soft skills is not and should not be tied to any credit. Alternatively, the activities should be made mandatory in order to involve students and they have an e-portfolio to record their reflection on activities performed. Educator 25E stressed that satisfaction is gained from the capability to assess student soft skills. Educator 13B claimed that there was an effort to develop soft skills in students but this participant was dissatisfied with what has been achieved so far regarding the assessment process.

In terms of understanding, educators 8C and 16A stated that not everybody is clear on the assessment of soft skills. Educator 8C was not in favour of assessing soft skills as it will put student performance at risk, as mentioned earlier.

I'm not in the favour of ... assessing soft skills because you will jeopardise the students ... I think you should be doing this [activities to develop soft skills] then they learn from that, so by the end of the day whatever you have taught ... they are able to do it, it's enough, only the degree level of course ... they won't be like you, why because they have only one semester, one year [to learn] ...

In addition, educator 4D disclosed that sometimes educators overlooked those soft skills are, in fact, good due to a lack of proper documentation on student performance.

... sometimes we overlooked, there are students who ... are active, students who are extraordinary but don't notice ... this [performance level of soft skills] is not documented.

Goal attainment for assessment methods

Educator agreement about goal achievement on soft skills assessment was moderately high ($M = 4.81/7$). The educators viewed assessment as a medium for achieving the goal of developing student soft skills. One educator (identifier deleted) stressed that the assessment pushes students to master the skills and educators to evaluate these. This participant also claimed that one university (identifier deleted – this participant's university) is ahead in achieving this goal because of its assessment system has a big impact on soft skills development. One educator (identifier deleted) argued while assessment is not important some forms of enforcement are needed to develop soft skills. This participant expressed the view that educators' workloads (e.g. preparing the course files that include assessment of soft skills) will increase once all these are incorporated into their performance appraisal next semester. The two sides to the views on goal attainment are represented in the views of educator 24E, who thought assessment is needed to monitor student performance, and educator 23E, who believed the assessment is needed to stimulate student interest.

The educators highlighted competency of the educators as an area that may adversely affect their universities' goal attainment. Educator 24E was concerned that educators impart academic knowledge but do not really know how to assess student soft skills.

... the evaluators, are they aware about this [how to assess soft skills]? [They] are not aware so how we are going to conduct the assessment, we only impart the knowledge ...

This view was also supported by educator 15A who felt that the university was not serious in putting effort towards soft skills, as the educators are not well informed about either the objectives or how to assess soft skills.

... it seems they [university] are not serious ... firstly we are not clearly informed about soft skills in terms of the objectives, how to go about assessment?

Consequently, educators rely on intuition and experience to assess soft skills and, while the assessment may achieve consensus, the process was tedious. The educators believed that their university places low priority on soft skills. Educator 15A also added that although soft skills development appears in the policy, they are not familiar with the assessment aspect. In particular, educators are uncertain what assessment approach to use compared to academic knowledge assessment. This educator had suggested that a workshop be conducted to clearly brief educators about soft skills and their assessments but felt this initiative had not been seen by one university (identifier deleted – this educator's university) as particularly necessary. As a result, there is difficulty performing the assessment.

Educators identified that soft skills development takes time, with improvement only seen over an extended period. Educator 4D felt they could not comment on goal attainment as the impact can only be seen after students have entered the job market.

... in terms of soft skills, if we want to judge whether the goals are achieved or not is when our students graduated and maybe 10 years after the students graduated and entered the job market people will say wow! He or she ... is good ... this is the product of XYZ University (identifier deleted).

4.3.4.3 Implementation of assessment methods

This section presents data on perceptions about assessment, problems encountered in assessing soft skills, and suggested assessment options.

4.3.4.3.1 Perceptions about assessment

One educator (identifier deleted) did not agree with giving pass or fail grades for STG and believed students should be given grade points similar to assessment of their academic knowledge, to encourage them to take soft skills seriously. The educators argued that because the students are used to an exam oriented-culture, having experienced this through primary school, grade points will motivate them to learn.

... we have to give grades [points] otherwise students they won't feel "satisfactory" ... "unsatisfactory" ... in fact no effect thus, we have to have because this goes back to the core of acculturation ... what's the core, they prefer grades, they emphasise on obtaining excellent grades, exam oriented, our culture is exam oriented ... (identifier deleted)

Some educators (9) suggested soft skills should not be assessed at all. Their reasons centred around three major considerations: the nature of soft skills, the context of the assessment, and the need for assessment.

The first argument against assessing soft skills is associated with their very nature as subjective, meaning any assessment must also be subjective. Given this, educators 9C and 25E indicated that educators cannot directly assess soft skills such as leadership, communication, lifelong learning and information management, and entrepreneurship.

Educator 9C argued that skills can only be observed in students' practice.

... but if communication or leadership and other skills, most of them can't directly exam [assess], thus, for instance, communication we only can see from the practice ... [from the] practical.

Educators 8C, 14B and 18A stressed that soft skills are developed over time, and educators 8C and 21E argued that while educators can train students, they cannot really assess them. Educators can only make the students aware of these skills and develop them so they are able to apply them at work when they graduate. Moreover, they argued educators cannot treat soft skills as similar to academic knowledge, where learning is often implicit. Themes similar to those identified in the previous section emerged. For example, co-curricular activities focus more on learning by doing than learning from books or instructions. If educators are to assess student soft skills, they need time to observe students and provide feedback. Thus, educator 21E claimed that educators cannot really assess their students because there's little time for interaction in a short semester term. This is also supported by one educator (identifier deleted) with reference to the student-advisor programs, who disclosed that some educators just fill in the form because it is required and in fact the assessment is not based on the students' actual performance.

... can't produce a valid assessment, even [if we] have been filling in many forms ... we can't assess an individual based on his or her scores, we can only train them but can't say that you have succeeded 100% having all the soft skills ... Lecturers complete the soft skills [forms] just for the sake they have to but it's not based on ... the performance of that particular student ... (identifier deleted)

Likewise, educator 18A indicated that grade points do not reflect the real quality of the student.

The second argument against assessment of soft skills is contextual. According to educator 19A, assessment should be done in the context of the discipline. For example, only a doctor should evaluate a doctor, and the assessors should be aware of both expert skills (technical skills) and soft skills. Thus, the educators should only assess the

students in the context of their discipline, otherwise the assessment is not valid and confusion may occur.

The third argument against assessment is the need for it at all. Educators 1D and 18A emphasised that students have been examined on their academic knowledge, and have therefore had enough assessment. Educator 1D suggested that whatever system is put in place, it should be able to motivate students to enjoy learning soft skills.

... [there's] enough of what they [students] are facing now ... with the given exams. [It's already so] exam oriented so now we want them to be free, they enjoy so there is no element of exam and so forth [for soft skills]

This argument is also supported by educator 19A who said soft skills learning should not be tied to any credit in the way that academic knowledge was.

To me, it's so silly to learn martial arts then make it two credits, go for hiking two credits, go for swimming two credits. It's a life need so you don't have to, you don't have to be credited in learning ... Credit is for the subject that we teach, academic [academic knowledge] so this means, other than that is not credited in academic.

Students should perceive learning soft skills as a useful experience. Furthermore, some educators are of the view that if students learn soft skills purely to achieve credit it defeats the purpose. Educator 7C claimed that assessment of soft skills is not important, suggesting they be delivered without assessment. This participant said what really mattered is student acceptance of learning soft skills. However, the existing assessment has been put in place to engage students with the learning.

4.3.4.3.2. Problems encountered in assessing soft skills

In response to an open question on the problems concerning soft skills assessment and reporting, educators provided responses that have been grouped into three themes: the

instrument, the role of perceptions in assessment, and the competency of educators. Further views on the three themes are outlined in Appendix D5.

4.3.4.3.3 Suggested assessment options

Participant opinions on the best way to assess student soft skills have been divided into three perspectives: assessment instruments, assessment strategies, and support and resources. Several educators (5) indicated that there is no best way to assess student soft skills.

Assessment instruments

More than a quarter of educators (10) indicated a preference for standard assessment instruments, which are reliable (consistent) and valid. According to educator 18A, educators need to consider the frequency and severity of non-compliance cases in assessment and that merely observing student performance in one presentation will not provide an accurate reflection of their soft skills.

Yeah to me it should be a continuous process, it's not just observing your student in delivering a talk uh-oh! It's so fake, yeah that's not their own ... their true self.

In addition, as mentioned earlier, one educator (identifier deleted) supported the existing system used in one university (identifier deleted – participant's university), based on joint assessment for the issuance of a complementary diploma.

Assessment strategies

Assessment strategies were identified by some educators (7) as central to assess student soft skills. The educators supported the view that freedom should be given to students learning from various activities in or outside contact hours. Class activities should have

a small number of students. To some extent, students should have exposure to real life problems. In this way assessment can take place in its context. One educator (identifier deleted) said multi-level evaluation is more effective and reflects overall student soft skills. Students would be assessed at different levels including at the faculty, residential college and centre. This participant also suggested an event should be conducted for the student-advisor programs to give educators more flexibility to evaluate their students. Educator 18A stated that educators should welcome student feedback on the assessment of soft skills and have positive attitudes towards improvement.

Support and resources

Several educators (3) identified support and resources as important elements to assess soft skills. However, educators have different views regarding the adequate number of educators to assess student soft skills. Educator 17A added that the assessment should involve multiple assessors in order to provide a consensual assessment. In addition, educator 2D commented that existing training programs, such as workshops, focus on the soft skills development guidelines rather than soft skills assessment, which has been left to educators' creativity.

MOHE's workshop no [didn't explain about] instrument, it only briefed on ... introduced what are soft skills, how to deliver [briefly through three approaches] but didn't explain about assessment. Assessment depends on lecturer creativity, university creativity.

Two educators suggested ways to reward and recognise student achievement in order to motivate them to learn soft skills. One educator (identifier deleted) who teaches in design technology (textile and fashion) proposed that grants should be awarded to students designing outstanding products, so they can attend seminars, exhibitions and competitions overseas. International exposure would allow them to develop their soft

skills. Educator 9C indicated that rewards are given to students directly (extrinsic such as good results) and indirectly (intrinsic such as a sense of meaningfulness).

Some [students] are getting direct rewards [impacts], some indirect. In terms of indirect, for example, sometimes the payback are earned towards the end, the benefits can't be seen now, for instance lifelong learning, have to conduct research. Later then only they [students] appreciate ...once they are about to [can] apply the skills, then only they feel that they are rewarded because they have obtained them [and] can apply.

No best way to assess

Educators who claimed there is no best way to assess soft skills found it difficult to develop a specific assessment measure for soft skills. However, they acknowledged the importance of assessment in motivating student learning. According to educator 21E, the primary concern is to put soft skills assessment in place, and make the question of reliability and validity secondary. Educators 16A and 24E also expressed concern at their own lack of underpinning knowledge about soft skills and identified that they would need to learn to assess these skills.

There are evidences here showing that educator opinions on the best way to assess soft skills vary by perspective.

The evidence from the interviews suggests that educator personal beliefs have a major influence on assessing soft skills.

4.4 Conclusion

This chapter has presented the data gathered from the in-depth interviews in which the findings can be classified into a few categories, subcategories and sub-subcategories. It has addressed one minor and two major research questions:

Question 1: What are the individual and institutional factors that influence educator perceptions on teaching and assessing soft skills? (minor)

Question 2: What are the perceptions of educators about their role in developing soft skills? (major)

Question 3: What are the experiences of educators when they are teaching and assessing soft skills? (major)

The research findings suggest that the main categories related to the concept of soft skills development within the Malaysian public higher education sector were the establishing context, the role of educators, and teaching and assessing soft skills. The findings indicate that the three subcategories connected to the establishing context were defining soft skills, the value of soft skills, and their importance for getting jobs. The findings also indicate that the two subcategories connected to the role of educators were educator views on “my role and your role” and “industry collaboration”. Three subcategories emerged in the findings related to teaching soft skills: delivery context, delivery approaches, and implementation of delivery approaches. Similarly three subcategories also emerged in findings related to assessing soft skills: assessment context, assessment methods, and implementation of assessment methods. All findings will be synthesised and interpreted in Chapter VI.

CHAPTER V

QUANTITATIVE RESEARCH RESULTS

5.1 Introduction

The previous chapter described educator experiences in teaching and assessing soft skills by examining their understanding of soft skill definitions and values, and exploring their experiences as providers for soft skills training in the higher education institution (HEI) context. The qualitative data did not influence the development of the survey instrument and the quantitative data were sequentially collected. Although the qualitative data collected via in-depth interviews were rich, this study also collected quantitative data to serve as triangulation, complementarity, development, initiation and expansion to existing data by providing a better understanding of the research problem in a broader sample and contributing further evidence to the study (Greene, Caracelli, & Graham, 1989). Thus, the aim of this chapter is to provide further evidence by specifically exploring educator perceptions with regard to the emphasis, confidence and willingness to teach and assess soft skills, which addresses the first research question:

Question 1: What are the individual and institutional factors that influence educator perceptions on teaching and assessing soft skills? (major)

5.2 Data screening results

Data screening was conducted to check for out-of-range values, missing values, outliers and normality. No outliers of concern were present as the majority of scores were within range (Tabachnick & Fidell, 2012). The skewness and kurtosis values and

scatter plot diagrams were examined to assess the assumptions of normality, linearity and homoscedasticity. The sample was considered to be normal in distribution.

5.3 Participant profile

The data were collected from the same five public HEIs located in West and East Malaysia, referred to as A–E in the study. Responses were received from 613 educators via a web survey. According to the data provided by the Ministry of Higher Education (MOHE), in 2009 there was a total of 8305 educators teaching at these five public HEIs (MOHE, 2009). However, the exact response rates could not be calculated as the dissemination of the group email inviting educators to participate in the study was prearranged by the deputy vice chancellor (DVC) of Student Affairs of each public HEI or their representative. The public HEIs were grouped into four categories: broad-based university (36.5%), research-intensive university (30.8%), specialised university in management education (18.1%) and engineering and technology (14.6%). The four categories provide different settings for studying soft skills. The surveys were returned by 57% females and 43% males.

The educators represented various disciplines including: society and culture (24.7%), sciences (18.8%), management (17.5%), engineering (13.5%), education (10.6%), information technology (10.4%) and health (4.4%). In terms of appointment levels, 8.4% of participants were tutors, 43% were lecturers, 28.5% were senior lecturers, 15.2% were associate professors and 4.9% were professors.

Over half of the participants were permanently appointed (80.4%), with 12% on contract basis and 7.6% on temporary appointments. Most of the educators were

employed full-time (98.1%). The data revealed 42.4% of participants had more than 10 years of university teaching experience, while 22.7% had 6–10 years, 30.7% 1–5 years and 4.2% had less than one year of teaching experience. Over a quarter (31.3%) of educators who responded to the survey had a formal teaching qualification. Additionally, 62.5% had industry experience, with 20.4% having less than one year of industry experience, 51.5% having 1–5 years of industry experience, 11% having 6–10 years; and 17.1% having more than 10 years’ experience. These demographic characteristics are considered to be representative of the educator population in the five HEIs, as suggested by Krejcie and Morgan (1970) and Roscoe (1975).

This study identified that over a quarter of the participants were teaching critical thinking and problem solving skills (30.2%) and communication skills (30%) as standalone courses and a lower percentage of educators were teaching entrepreneurship skills (9.1%) (see Table 5.1).

Table 5.1: Teaching as standalone course

Soft skills	Percentage
Critical thinking and problem solving skills	30.2%
Communication skills	30.0%
Teamwork skills	20.9%
Moral and professional ethics	17.8%
Leadership skills	12.2%
Lifelong learning and information management	11.6%
Entrepreneurship skills	9.1%

5.4 Soft skills and the curriculum

The majority of educators reported that they believed soft skills should be included in the curriculum (91.2%) and should also be an important focus for their universities (81.4%). These perceptions were no different to any of the earlier reported demographic characteristics (e.g., university category, discipline, employment status, type and level, industry experience, teaching experience and teaching qualification/s and gender).

The data also revealed the educators considered themselves as moderately familiar with their university's official list of soft skills ($M = 3.28/5$, where a score of 5 represented participants being *very familiar*); with none of the educators reporting they were very familiar with the list. Only a small number of educators (3.7%) were unaware of their university soft skills.

A one-way analysis of variance (ANOVA) was conducted to investigate whether demographic characteristics were related to the educator perceptions of their familiarity with official university lists of soft skills. The ANOVA revealed a statistically significant difference in perceptions of familiarity at the $p < .05$ level based on a number of factors including university category, employment factors and teaching experience (see Table 5.2).

Table 5.2: ANOVA results for beliefs about familiarity with university official list of soft skills and obstacles in teaching soft skills

Item	University category		Discipline		Employment type		Employment level		Teaching experience (years)	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
FA	7.20	0.00*	-	-	5.77	0.00*	5.42	0.00*	8.70	0.00*
OT	-	-	2.88	0.01*	-	-	-	-	-	-

Note: * significant at the $p < 0.05$

FA – familiarity with university official list of soft skills

OT – obstacles in teaching soft skills

There was a significant effect of *university category* on perceptions of familiarity [$F(3,442) = 7.2, p = 0.00$]. Given the statistically significant difference, a Tukey post-hoc test was performed. Educators from the specialised university in engineering and technology for instance were more familiar with their university’s official list of soft skills ($M = 3.66, SD = 0.54$) than educators from the research-intensive university ($M = 3.32, SD = 0.79$), the broad-based university ($M = 3.21, SD = 0.72$) and the specialised university in management education ($M = 3.16, SD = 0.75$). Some universities have taken a keen interest in soft skills development by specifically identifying a set of soft skills even before the MOHE Bachelor degree program framework, and this may account for this result.

Employment type also affected educator perceptions of familiarity [$F(2,460) = 5.77, p = 0.00$]. A Tukey post-hoc analysis showed that permanent educators ($M = 3.35, SD = 0.72$) were more familiar with the list than contract educators ($M = 3.00, SD = 0.88$).

There was also a significant effect of *employment level* on perceptions of familiarity [$F(4,458) = 5.42, p = 0.00$]. A Tukey post-hoc test revealed that educator familiarity

was significantly higher for senior lecturers ($M = 3.46$, $SD = 0.64$) and lecturers ($M = 3.22$, $SD = 0.76$) compared to tutors ($M = 2.92$, $SD = 0.85$). Familiarity was also higher for associate professors ($M = 3.42$, $SD = 0.77$) compared to tutors ($M = 2.92$, $SD = 0.85$).

The *years of teaching experience* was also related to educator perceptions of their familiarity [$F(3,461) = 8.70$, $p = 0.00$]. A Tukey post-hoc test showed that educators with 6–10 years' experience ($M = 3.29$, $SD = 0.72$) and 1–5 years' experience ($M = 3.19$, $SD = 0.77$) were more familiar with the list than educators with less than one year's experience ($M = 2.63$, $SD = 0.90$). Educators with more than 10 years' experience ($M = 3.44$, $SD = 0.69$) were more familiar with the list than those with 1–5 years' experience ($M = 3.19$, $SD = 0.77$) and less than one year's experience ($M = 2.63$, $SD = 0.90$). These results were somewhat expected and provide evidence of external validity.

More than half of the participants perceived that there were obstacles to teaching (54.1%) and assessing soft skills (57.6%). A one-way ANOVA was performed to determine if demographic characteristics affected educator perceptions of obstacles (see Table 5.2). The ANOVA showed a statistically significant difference in perceptions based on *discipline* at the $p < .05$ level [$F(6,464) = 2.88$, $p = 0.01$]. A Tukey post-hoc test indicated that educators in the engineering discipline ($M = 1.73/2$, $SD = 0.45$, where a score of 2 represented participants perceived that there were obstacles) perceived greater obstacles in teaching soft skills than educators in the disciplines of society and culture ($M = 1.46$, $SD = 0.50$) and the sciences ($M = 1.49$, $SD = 1.49$).

This study also examined the factors that influenced teaching and assessing soft skills. The nine factors selected for the survey (professional body, industry, community,

university, department/school/faculty, discipline, peer/colleague, personal expectations and student expectations) were based on the factors outlined by the *bfactor* project (see de la Harpe et al., 2009).

Table 5.3 shows that personal expectations or views were perceived as the most influential factor in teaching and assessing soft skills when compared to university and industry expectations.

Table 5.3: Mean scores showing educator perceptions about the factors that influence teaching and assessing soft skills

Factor	Teaching (mean/5)	Standard deviation	Assessing (mean/5)	Standard deviation
Professional body/accreditation requirements	3.98	0.96	3.93	1.03
Industry body expectations or views	4.11	0.88	3.98	0.93
Community expectations or views	3.88	0.88	3.74	0.93
Your university expectations	4.09	0.78	4.01	0.89
Your department/school/faculty expectations	4.05	0.83	3.97	0.88
Your discipline expectations (within the university)	4.04	0.85	3.93	0.90
Your peer/colleague expectations or views	3.64	0.94	3.58	0.94
Your personal expectations or views	4.18	0.84	4.06	0.90
Students' expectations or views (e.g. student course feedback)	3.81	0.92	3.70	0.96

5.5 Educator perceptions about the importance of delivery approach

Participants were asked to indicate the importance of different delivery approaches to the teaching of soft skills on a Likert scale, where 1 was a *low preference* and 5 was a *high preference*. The approaches participants were asked to consider were the

embedded model, the standalone model, the academic-focused programs and the work-integrated learning (WIL) programs, all of which take place in what is considered the formal environment; and those occurring in the more informal environment, which consist of non-academic focused programs and campus life activities. The final approach is the independent learning by students irrespective of the abovementioned approaches. Mean responses are presented in Table 5.4. Overall, it appears that equal preference is given to these approaches of teaching, but there is differentiation in preferences when it comes to the models used within these different modes. Based on the mean scores alone, educators perceived WIL experiences (e.g. industrial/practical training) as the most effective method for developing soft skills ($M = 4.62$), followed by student life living in residential colleges ($M = 4.27$) and other models in which soft skills were developed by students, independent of formal activities of teaching and learning, support programs, campus life and WIL ($M = 4.19$).

Table 5.4: Mean scores showing educator perceptions about the importance of delivery approach

Embedded model	Mean/5	Standard deviation
Embedded into <i>a compulsory foundation course</i> typically at the beginning of a program of study	3.95	1.07
Embedded into <i>a course</i> typically at the end of a program of study	3.30	1.24
Embedded into <i>the curriculum across the program of study</i> and taught by <i>discipline lecturers</i>	3.92	0.99
Embedded into <i>the curriculum across the program of study</i> and taught by <i>specialist staff</i>	3.90	1.02
Embedded into <i>the curriculum across the program of study</i> and taught by both <i>discipline lecturers and specialist staff</i>	4.10	0.93
Standalone model		
Standalone course(s) taught by <i>discipline lecturers</i>	3.54	1.15
Standalone course(s) taught by <i>specialist staff</i> (e.g. entrepreneur skills taught by lecturers from Faculty of Business)	3.96	1.06
Standalone course(s) taught by both <i>discipline lecturers and specialist staff</i>	3.84	1.06
Support programs		
Soft skills taught by <i>discipline lecturers</i> in the academic-focused model	3.92	0.98
Soft skills taught by <i>specialist staff</i> (e.g. information literacy skills taught by library staff) in the academic-focused model	4.08	0.86
Soft skills taught by both <i>discipline lecturers and specialist staff</i> in the academic-focused model	4.06	0.90
Soft skills taught in the non-academic focused model (e.g. Palapes, Suksis etc.)	3.74	1.10
Campus life		
Student life living in residential colleges	4.27	0.81
Student life living in campus surroundings	4.10	0.87
WIL and other models		
Through WIL experiences (e.g. industrial/practical training)	4.62	0.59
Developed by students independent of formal activities of teaching and learning, support program, campus life and WIL	4.19	0.81

5.6 Soft skills and student employability

A 5-point Likert scale was used to determine educator perceptions about the importance of soft skills for student employability; with 5 denoting that the skills were *essential* and 1 denoting that the skills were *not at all* important.

Educators considered that all seven skills were important for student employability with mean scores towards the high end of the scale except for entrepreneurship skills ($M = 3.66$) as shown in Table 5.5.

Table 5.5: Mean scores showing educator perceptions about student employability

Soft skills	Mean/5
Communication skills	4.84
Critical thinking and problem solving skills	4.70
Teamwork skills	4.54
Lifelong learning and information management	4.38
Entrepreneurship skills	3.66
Moral and professional ethics	4.65
Leadership skills	4.27

Educators perceived communication skills as the most important for student employability followed by critical thinking and problem solving skills, and moral and professional ethics. Leadership was the second least important skill perceived by educators, right after entrepreneurship skills, although this mean score was relatively high.

ANOVA tests revealed that demographic variables can help explain educator perceptions about the importance of some soft skills for student employability as shown

in Table 5.6. This study reported the results of the Tukey post-hoc test when there was a significant effect for the ANOVA test.

Table 5.6: ANOVA results for beliefs about the important of soft skills for student employability across demographic categories

Item	University category		Discipline		Employment status (FT/PT)		Employment type		Teaching qualification/s		Gender	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
E2	-	-	-	-	4.58	0.01*	-	-	-	-	-	-
E3	-	-	-	-	-	-	-	-	4.66	0.03*	-	-
E4	-	-	-	-	-	-	-	-	-	-	14.41	0.00*
E5	4.23	0.01*	2.78	0.01*	-	-	6.02	0.00*	16.56	0.00*	-	-
E6	-	-	-	-	5.83	0.00*	-	-	-	-	10.42	0.00*
E7	-	-	4.41	0.00*	-	-	3.52	0.03*	-	-	-	-

Note: * significant at the $p < 0.05$

FT – Full-time, PT – Part-time

E2 – critical thinking and problem solving skills

E3 – teamwork skills for student employability

E4 – lifelong learning and information management

E5 – entrepreneurship skills

E6 – moral and professional ethics

E7 – leadership skills

The *employment status* affected educator perceptions of importance of critical thinking and problem solving skills for student employability [$F(2,479) = 4.58, p = 0.01$]. Full-time educators were more likely to believe critical thinking and problem solving skills as more important for student employability ($M = 4.71, SD = 0.53$) than part-time educators (less than 50% of full-time equivalency) ($M = 4.00, SD = 1.0$).

A statistically significant difference was found in perceptions of importance of teamwork skills for student employability between those who reported having *teaching qualifications* and those who did not have teaching qualifications at the $p < .05$ level [$F(1,477) = 4.66, p = 0.03$]. Those who reported having teaching qualifications were more likely to perceive teamwork skills as important for employability ($M = 4.63, SD = 0.62$) compared to those who did not have teaching qualifications ($M = 4.50, SD = 0.62$).

A statistically significant difference was also found in perceptions of importance of lifelong learning and information management for student employability between males and females at the $p < .05$ level [$F(1,479) = 14.14, p = 0.00$]. Females perceived lifelong learning and information management as more important for student employability ($M = 4.49, SD = 0.64$) compared to males ($M = 4.25, SD = 0.77$).

There was a statistically significant difference in perceptions about the importance of entrepreneurship skills for employability dependent on which *university* participants came from [$F(3,446) = 4.23, p = 0.01$], the *discipline* in which they taught [$F(6,464) = 2.78, p = 0.01$], their *employment type* [$F(2,469) = 6.02, p = 0.00$] and whether or not they had *teaching qualification/s* [$F(1,475) = 16.56, p = 0.00$] at the $p < .05$ level.

Specifically, educators from the specialised university in management education believed that entrepreneurship skills were more important for student employability ($M = 3.90, SD = 0.83$) than participants from the research-intensive university ($M = 3.52, SD = 0.80$) and the specialised university in engineering and technology ($M = 3.47, SD = 0.88$). In regard to discipline, educators in the management discipline reported stronger beliefs that entrepreneurship skills are important for employability ($M = 3.87, SD = 0.81$) than those educators who were working in the engineering discipline ($M =$

3.36, $SD = 0.65$). This is a somewhat expected result, given that business management courses focus on preparing students to be business leaders.

Those on temporary appointments were more likely to believe that entrepreneurship skills were important to employability ($M = 4.14$, $SD = 0.76$) than those who were employed on a contract basis ($M = 3.63$, $SD = 0.87$) or permanently appointed ($M = 3.61$, $SD = 0.90$). There was also evidence from the results that those participants with teaching qualifications were more likely to believe entrepreneurship skills are important to employability ($M = 3.89$, $SD = 0.90$) compared to those with no formal teaching qualifications ($M = 3.54$, $SD = 0.86$).

There was a statistically significant difference in perceptions of importance of moral and professional ethics for employability dependent on *employment status* [$F(2,478) = 5.83$, $p = 0.00$] and *gender* [$F(1,478) = 10.42$, $p = 0.00$] at the $p < .05$ level. Specifically full-time educators were more likely to believe that moral and professional ethics were important to employability ($M = 4.67$, $SD = 0.61$) than those who were part-time educators (less than 50% of full-time equivalency) ($M = 3.80$, $SD = 0.45$). Females also perceived moral and professional ethics as more important for employability ($M = 4.73$, $SD = 0.57$) than males ($M = 4.55$, $SD = 0.66$).

There was a statistically significant difference in perceptions of importance of leadership skills for student employability based on *discipline* [$F(6,465) = 4.41$, $p = 0.00$] in which the educators' taught and their *employment type* [$F(2,470) = 3.52$, $p = 0.03$] at the $p < .05$ level. Participants in the education discipline reported leadership skills as more important for student employability ($M = 4.48$, $SD = 0.74$) than educators in sciences ($M = 4.07$, $SD = 0.78$) and engineering ($M = 4.03$, $SD = 0.78$). It appears from the ANOVA results that temporary educators ($M = 4.58$, $SD = 0.60$) also believed

leadership skills as more important for employability than permanent educators did ($M = 4.23$, $SD = 0.77$). This may be because junior staff with temporary status have had recent job hunting experience in which employers pay more attention to leadership skills versus perceptions of senior staff who have been in the academic system for longer and might not be very aware of the need for these skills.

5.7 Educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills

Educators were asked to rate the extent to which they agreed with the emphasis, confidence and willingness placed on teaching and assessing soft skills on a 5-point Likert scale ranging from 1 = *low levels of agreement* to 5 = *high levels of agreement*. The most emphasised soft skills reported by educators were critical thinking and problem solving skills ($M = 4.46$), communication skills ($M = 4.40$) and moral and professional ethics ($M = 4.28$) (see Table 5.7). The least emphasised by the educators were leadership skills ($M = 3.78$) and entrepreneurship skills ($M = 2.90$). The participants once again were more confident in teaching critical thinking and problem solving ($M = 4.26$), communication skills ($M = 4.24$) and moral and professional ethics ($M = 4.06$). Again the mean scores for leadership skills ($M = 3.67$) and entrepreneurship skills ($M = 2.72$) were amongst the lowest reported.

Table 5.7: Mean scores showing educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills

Soft skills	Teaching			Assessing		
	Emphasis	Confidence	Willingness	Emphasis	Confidence	Willingness
	(mean/5)	(mean/5)	(mean/5)	(mean/5)	(mean/5)	(mean/5)
Communication skills	4.40	4.24	4.25	4.12	4.27	4.31
Critical thinking and problem solving skills	4.46	4.26	4.33	4.30	4.19	4.25
Teamwork skills	4.19	4.06	4.06	3.81	3.96	4.07
Lifelong learning and information management	4.00	3.82	3.92	3.56	3.67	3.78
Entrepreneurship skills	2.90	2.72	2.81	2.57	2.76	2.90
Moral and professional ethics	4.28	4.06	4.06	3.83	3.86	3.91
Leadership skills	3.78	3.67	3.73	3.41	3.65	3.72

Overall the pattern of responses that emerged across emphasis, confidence and willingness in teaching soft skills was the same. Educators were more willing, more confident and more focused on emphasising critical thinking and problem solving skills, communication skills and moral and professional ethics, and were least focused on leadership skills and entrepreneurship skills. The same pattern emerged for assessing soft skills but educators were more willing and had more confidence to assess teamwork skills above moral and professional ethics. This may be because formalisation of entrepreneurship skills in teaching was relatively new when compared to conventional skills such as critical thinking and problem solving skills, and communication skills. Furthermore, both entrepreneurship and leadership, which involve personal attributes,

are part of the ongoing debate examining whether these skills are inherited or can be developed.

A one-way ANOVA was performed to determine if demographic characteristics affected educator perceptions of emphasis, confidence and willingness to teach and assess soft skills. The researcher also computed a Tukey post-hoc test when there was a significant result for the ANOVA test. Table 5.8 presents a summary of these results.

Table 5.8: Summary of educator perceptions about the emphasis, confidence and willingness placed on teaching and assessing soft skills

Communication skills

Perceptions about the *emphasis placed on teaching* communication skills were affected by discipline area. Perceptions about the *emphasis placed on assessing* communication skills were affected by discipline area, employment status, and years of teaching experience.

Perceptions about the *confidence to teach and assess* communication skills were affected by discipline area.

Perceptions about the *willingness to teach* communication skills were affected by discipline area. Perceptions about the *willingness to assess* communication skills, however, were not affected by any of the demographic variables.

Critical thinking and problem solving skills

Perceptions about the *emphasis placed on teaching* critical thinking and problem solving skills were affected by employment status.

Perceptions about the *emphasis placed on assessing* critical thinking and problem solving skills were affected by university category and employment status.

Perceptions about the *confidence and willingness to teach and assess* critical thinking and problem solving skills also were not affected by any of the demographic variables.

Teamwork skills

Perceptions about the *emphasis placed on teaching* teamwork skills were affected by discipline. Perceptions about the *emphasis placed on assessing* teamwork skills were affected only by employment level.

Perceptions about the *confidence to teach* teamwork skills were affected by discipline area. Perceptions about the *confidence to assess* teamwork skills were not affected by any of the demographic variables.

Perceptions about the *willingness to teach* teamwork skills were affected by discipline area. Perceptions about the *willingness to assess* teamwork skills, however, were not affected by any of the demographic variables.

Lifelong learning and information management

Perceptions about the *emphasis placed on teaching* lifelong learning and information management were affected by employment status and gender.

Perceptions about the *emphasis placed on assessing* lifelong learning and information management were not affected by any of the demographic variables.

Perceptions about the *confidence and willingness to teach and assess* lifelong learning and information management were not affected by any of the demographic variables.

Entrepreneurship skills

Perceptions about the *emphasis placed on teaching and assessing* entrepreneurship skills were affected by where educators taught and the discipline they belonged to.

Perceptions about the *emphasis placed on assessing* entrepreneurship skills were also affected by employment type.

Perceptions about the *confidence to teach and assess* entrepreneurship skills were affected by university category, discipline area and whether or not educators had industry experience. Gender also affected perception about way to teach.

Perceptions about the *willingness to teach and assess* entrepreneurship skills were affected by university category, discipline area and whether or not educators had industry experience.

Moral and professional ethics

Perceptions about the *emphasis placed on teaching* moral and professional ethics were not affected by any of the demographic variables.

Perceptions about the *emphasis placed on assessing* moral and professional ethics were affected by employment type.

Perceptions about the *confidence and willingness to teach and assess* moral and professional ethics were not affected by any of the demographic variables.

Leadership skills

Perceptions about the *emphasis placed on teaching and assessing* leadership skills were affected by where educators taught and the discipline they belonged to.

Perceptions about the *confidence to teach* leadership skills were affected by discipline area. Perceptions about the *confidence to assess* leadership skills were affected by university category and employment level.

Perceptions about the *willingness to teach* leadership skills were affected by discipline area. Perceptions about the *willingness to assess* leadership skills were affected only by university category.

Results presented in the table show that several demographic characteristics such as *university category; discipline area; employment status (FT/PT), type and level; industry experience(y/n); years of teaching experience; and gender* affected educator

perceptions of emphasis, confidence and willingness to teach and assess each soft skills.¹¹

In the section below, perceptions about each of the soft skills are looked at in turn and the results will be explored later in more detail.

5.7.1 Communication skills

Emphasis

Table 5.9 indicates that there was a significant effect of *discipline* on perceptions of the emphasis placed on teaching communication skills at the $p < .05$ level for the six discipline areas [$F(6,465) = 6.65, p = 0.00$]. A Tukey post-hoc test showed that educators in the health discipline placed more emphasis on teaching communication skills ($M = 4.81, SD = 0.40$) than educators in sciences ($M = 4.18, SD = 0.81$) and engineering ($M = 4.02, SD = 0.87$). Similarly, educators in education ($M = 4.58, SD = 0.67$), management ($M = 4.52, SD = 0.65$) and society and culture ($M = 4.52, SD = 0.71$) also placed more emphasis on teaching communication skills than educators in sciences ($M = 4.18, SD = 0.81$) and engineering ($M = 4.02, SD = 0.87$). There was a statistically significant difference in perceptions of emphasis placed on assessing communication skills dependent on *discipline* [$F(6,466) = 3.62, p = 0.00$], *employment status* [$F(2,479) = 5.07, p = 0.01$] and *years of teaching experience* [$F(3,472) = 3.77, p = 0.01$] of participants at the $p < .05$ level (see Table 5.9). Given the statistically significant results, a Tukey post-hoc test was performed. Participants in the education discipline placed more emphasis on assessing communication skills ($M = 4.40, SD = 0.88$) than educators in engineering ($M = 3.75, SD = 1.08$). Likewise, educators in society and culture placed

¹¹ Perceptions about the emphasis, confidence and willingness to teach and assess soft skills were not affected by *years of industry experience* and *teaching qualification/s*.

more emphasis on assessing communication skills ($M = 4.26$, $SD = 0.84$) than educators in engineering ($M = 3.75$, $SD = 1.08$).

Table 5.9: ANOVA results showing the influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess communication skills

Item	Discipline		Employment status (FT/PT)		Teaching experience (years)	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
ET	6.65	0.00*	-	-	-	-
EA	3.62	0.00*	5.07	0.01*	3.77	0.01*
CT	4.59	0.00*	-	-	-	-
CA	4.22	0.00*	-	-	-	-
WT	6.45	0.00*	-	-	-	-

Note: * significant at the $p < 0.05$

ET – Emphasis on teaching

EA – Emphasis on assessing

CT – Confidence to teach

CA – Confidence to assess

WT – Willingness to teach

Those on full-time appointments placed more emphasis on assessing communication skills ($M = 4.14$, $SD = 0.96$) than educators on part-time appointments (less than 50% of full-time equivalency) ($M = 3.00$, $SD = 1.41$). The years of teaching experience also had an impact on the emphasis placed on assessing communication skills. Those participants with less years of teaching experience (i.e. 1–5 years,) placed more emphasis on assessing communication skills ($M = 4.31$, $SD = 0.81$) than those educators with more than 10 years experience ($M = 4.00$, $SD = 1.07$).

Confidence

Table 5.9 indicates there was a significant effect of *discipline* on perceptions of confidence placed on teaching communication skills at the $p < .05$ level for the six areas [$F(6,459) = 4.59, p = 0.00$]. Participants in the education discipline for instance had more confidence to teach communication skills ($M = 4.54, SD = 0.65$) than educators in the sciences ($M = 4.03, SD = 0.91$) and information technology disciplines ($M = 3.94, SD = 1.07$). Likewise, educators in the management discipline ($M = 4.41, SD = 0.70$) had more confidence to teach communication skills than educators in sciences ($M = 4.03, SD = 0.91$) and information technology disciplines ($M = 3.94, SD = 1.07$). A Tukey post-hoc analysis also indicated that educators in the society and culture discipline were more confident to teach communication skills ($M = 4.37, SD = 0.80$) than educators in the information technology discipline ($M = 3.94, SD = 1.07$).

Table 5.9 indicates there was a significant effect of *discipline* on perceptions of confidence placed on assessing communication skills at the $p < .05$ level for the six areas [$F(6,464) = 4.22, p = 0.00$]. Participants in the education discipline ($M = 4.56, SD = 0.73$) were more confident to assess communication skills than those in the sciences ($M = 4.03, SD = 0.90$) and information technology ($M = 4.06, SD = 1.01$). A Tukey post-hoc analysis also showed educators in the society and culture discipline had more confidence to assess communication skills ($M = 4.47, SD = 0.75$) than those in the sciences ($M = 4.03, SD = 0.90$).

Willingness

Table 5.9 indicates there was again a significant effect of *discipline* on perceptions of willingness placed on teaching communication skills at the $p < .05$ level for the six discipline areas [$F(6,461) = 6.45, p = 0.00$]. Participants in the education discipline

were more willing to teach communication skills ($M = 4.60, SD = 0.73$) than educators in engineering ($M = 3.98, SD = 0.94$), sciences ($M = 3.95, SD = 0.97$) and information technology ($M = 3.92, SD = 1.22$). Similarly, educators in society and culture were more willing to teach communication skills ($M = 4.47, SD = 0.81$) than educators in engineering ($M = 3.98, SD = 0.94$), sciences ($M = 3.95, SD = 0.97$) and information technology ($M = 3.92, SD = 1.22$).

There were no statistically significant differences in perceptions about the willingness placed on assessing communication skills across disciplines.

5.7.2 Critical thinking and problem solving skills

There were no statistically significant differences in perceptions of confidence and willingness placed on teaching and assessing critical thinking and problem solving skills as determined by one-way ANOVA results.

Emphasis

Table 5.10 indicates there was a significant effect of *employment status* on perceptions of emphasis placed on teaching critical thinking and problem solving skills at the $p < .05$ level [$F(2,479) = 6.13, p = 0.00$]. Those on full-time appointments placed more emphasis on teaching critical thinking and problem solving skills ($M = 4.47, SD = 0.70$) than part-time educators (less than 50% of full-time equivalency) ($M = 3.40, SD = 0.55$).

Table 5.10: ANOVA results showing influence of demographic variables on perceptions relating to the emphasis to teach and assess critical thinking and problem solving skills

Item	University category		Employment status (FT/PT)	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
ET	-	-	6.13	0.00*
EA	3.29	0.02*	8.86	0.00*

Note: * significant at the $p < 0.05$

ET – Emphasis on teaching

EA – Emphasis on assessing

There was a statistically significant difference in perceptions of emphasis placed on assessing critical thinking and problem solving skills based on *university category* [$F(3,448) = 3.29, p = 0.02$] and *employment status* [$F(2,479) = 8.86, p = 0.00$] of participants at the $p < .05$ level (see Table 5.10). Educators from the broad-based university placed more emphasis on assessing critical thinking and problem solving skills ($M = 4.37, SD = 0.73$) than educators from the specialised university in engineering and technology ($M = 4.03, SD = 1.08$). Similarly, educators from the specialised university in management education placed more emphasis on assessing critical thinking and problem solving skills ($M = 4.37, SD = 0.73$) than educators from the specialised university in engineering and technology ($M = 4.03, SD = 1.08$).

In terms of employment status, part-time educators (more than 50% but less than 100% of full-time equivalency) ($M = 4.25, SD = 0.50$) placed more emphasis on assessing critical thinking and problem solving skills ($M = 4.37, SD = 0.73$) than part-time educators with less than 50% of full-time equivalency ($M = 2.80, SD = 1.10$). It also appeared those on full-time appointments placed more emphasis on assessing critical

thinking and problem solving skills ($M = 4.32$, $SD = 0.80$) than part-time educators with less than 50% of full-time equivalency ($M = 2.80$, $SD = 1.10$).

5.7.3 Teamwork skills

Emphasis

Table 5.11 shows there was a significant effect of *discipline* on perceptions of emphasis placed on teaching teamwork skills at the $p < .05$ level for the six areas [$F(6,466) = 5.24$, $p = 0.00$]. Participants in the education discipline placed more emphasis on teaching teamwork skills ($M = 4.28$, $SD = 0.73$) than those who were in the sciences ($M = 3.84$, $SD = 0.85$). Likewise, educators in management ($M = 4.37$, $SD = 0.73$), society and culture ($M = 4.33$, $SD = 0.70$) and information technology ($M = 4.24$, $SD = 0.75$) placed more emphasis on teaching teamwork skills than those who were in sciences ($M = 3.84$, $SD = 0.85$).

Table 5.11 shows there was a significant effect of *employment level* on perceptions of emphasis placed on assessing teamwork skills at the $p < .05$ level [$F(4,467) = 5.31$, $p = 0.00$]. Tutors placed more emphasis on assessing teamwork skills ($M = 4.21$, $SD = 0.73$) than associate professors ($M = 3.50$, $SD = 1.06$) and professors ($M = 3.50$, $SD = 1.14$). Lecturers ($M = 3.95$, $SD = 0.92$) placed more emphasis on assessing teamwork skills than associate professors ($M = 3.50$, $SD = 1.06$).

Table 5.11: ANOVA results showing influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess teamwork skills

Item	Discipline		Employment level	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
ET	5.24	0.00*	-	-
EA	-	-	5.31	0.00*
CT	3.34	0.00*	-	-
WT	4.38	0.00*	-	-

Note: * significant at the $p < 0.05$

ET – Emphasis on teaching

EA – Emphasis on assessing

CT – Confidence to teach

WT – Willingness to teach

Confidence

Table 5.11 shows there was also a significant effect of *discipline* on perceptions of confidence placed on teaching teamwork skills at the $p < .05$ level for the six areas [$F(6,457) = 3.34, p = 0.00$]. Educators in the management discipline ($M = 4.28, SD = 0.76$) were more confident about teaching teamwork skills than educators in the sciences ($M = 3.84, SD = 0.98$).

There were no statistically significant differences in perceptions of confidence placed on assessing teamwork skills across any of the demographic characteristics.

Willingness

Table 5.11 indicates there was a significant effect of *discipline* on perceptions of willingness placed on teaching teamwork skills at the $p < .05$ level for the six areas [$F(6,458) = 4.38, p = 0.00$]. Participants from the education ($M = 4.27, SD = 0.95$),

management ($M = 4.31$, $SD = 0.79$) and society and culture ($M = 4.18$, $SD = 0.79$) disciplines were more willing to teach teamwork skills than educators in the sciences ($M = 3.75$, $SD = 0.98$).

There were no statistically significant differences in perceptions of willingness placed on assessing teamwork skills.

5.7.4 Lifelong learning and information management

There were no statistically significant differences in perceptions of confidence and willingness placed on teaching and assessing lifelong learning and information.

Emphasis

There was a statistically significant difference in perceptions of emphasis placed on teaching lifelong learning and information management dependent on *employment status* [$F(2,477) = 4.21$, $p = 0.02$] and *gender* [$F(1,477) = 4.38$, $p = 0.04$] at the $p < .05$ level. Full-time educators placed more emphasis on teaching lifelong learning and information management ($M = 4.00$, $SD = 0.91$) than their part-time counterparts (more than 50% but less than 100% of full-time equivalency) ($M = 2.75$, $SD = 0.96$). The results also showed that female educators placed more emphasis on teaching lifelong learning and information management ($M = 4.06$, $SD = 0.92$) than male educators ($M = 3.88$, $SD = 0.89$).

There were no statistically significant differences in perceptions of emphasis placed on assessing lifelong learning and information management.

5.7.5 Entrepreneurship skills

Emphasis

The ANOVA results showed that *university category* [$F(3,442) = 5.57, p = 0.00$] and *discipline* [$F(6,460) = 4.57, p = 0.00$] impacted the emphasis to teach entrepreneurship skills (see Table 5.12). It appeared that educators from the specialised university in management education ($M = 3.21, SD = 1.09$) placed more emphasis on teaching entrepreneurship skills than educators from the research-intensive university ($M = 2.70, SD = 1.10$) and the specialised university in engineering and technology ($M = 2.58, SD = 1.14$).

Those in the management discipline ($M = 3.40, SD = 0.99$) placed more emphasis on teaching entrepreneurship skills than those in the sciences ($M = 2.71, SD = 1.12$), engineering ($M = 2.66, SD = 1.17$) and health ($M = 2.30, SD = 1.08$) disciplines.

University category [$F(3,438) = 3.13, p = 0.03$], *discipline* [$F(6,456) = 5.72, p = 0.00$] and *employment type* [$F(2,460) = 3.60, p = 0.03$] had an impact on the emphasis placed on assessing entrepreneurship skills (see Table 5.12).

Educators from the specialised university in management education placed more emphasis on assessing entrepreneurship skills ($M = 2.82, SD = 1.25$) than educators from the research-intensive university ($M = 2.35, SD = 1.16$).

Educators in the management discipline also placed more emphasis on assessing entrepreneurship skills ($M = 3.17, SD = 1.14$) than educators in society and culture ($M = 2.56, SD = 1.23$), sciences ($M = 2.51, SD = 1.12$), information technology ($M = 2.51, SD = 1.16$), engineering ($M = 2.30, SD = 1.28$) and health ($M = 1.76, SD = 1.09$).

Table 5.12: ANOVA results showing the influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess entrepreneurship skills

Item	University category		Discipline		Employment type		Industry experience (y/n)		Gender	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
ET	5.57	0.00*	4.57	0.00*	-	-	-	-	-	-
EA	3.13	0.03*	5.72	0.00*	3.60	0.03*	-	-	-	-
CT	5.63	0.00*	8.29	0.00*	-	-	23.10	0.00*	9.20	0.00*
CA	5.82	0.00*	6.90	0.00*	-	-	16.43	0.00*	-	-
WT	4.43	0.00*	8.94	0.00*	-	-	10.06	0.00*	-	-
WA	6.27	0.00*	6.59	0.00*	-	-	15.24	0.00*	-	-

Note: * significant at the $p < 0.05$

y/n – yes/no

ET – Emphasis on teaching

EA – Emphasis on assessing

CT – Confidence to teach

CA – Confidence to assess

WT – Willingness to teach

WA – Willingness to assess

Those on a temporary appointment also placed more emphasis on assessing entrepreneurship skills ($M = 3.06$, $SD = 1.31$) than those on a permanent appointment ($M = 2.52$, $SD = 1.23$).

Confidence

There was a statistically significant difference in perceptions of confidence in teaching entrepreneurship skills dependent on *university category* [$F(3,437) = 5.63$, $p = 0.00$], *discipline* [$F(6,455) = 8.29$, $p = 0.00$], whether or not educators had *industry experience* [$F(1,461) = 23.10$, $p = 0.00$] and *gender* [$F(1,468) = 9.20$, $p = 0.00$] (see Table 5.12).

The results showed that educators from the specialised university in management education had more confidence to teach entrepreneurship skills ($M = 3.11$, $SD = 1.17$) than educators from the research-intensive university ($M = 2.46$, $SD = 1.12$).

The data indicated that educators in the management discipline were also more confident to teach entrepreneurship skills ($M = 3.43$, $SD = 1.10$) than participants in education ($M = 2.78$, $SD = 1.23$), information technology ($M = 2.76$, $SD = 1.18$), society and culture ($M = 2.69$, $SD = 1.22$), sciences ($M = 2.56$, $SD = 1.07$), engineering ($M = 2.33$, $SD = 1.11$) and health ($M = 2.00$, $SD = 1.00$).

Educators who had industry experience were more confident to teach entrepreneurship skills ($M = 2.95$, $SD = 1.19$) than those without industry experience ($M = 2.41$, $SD = 1.12$).

In terms of confidence to teach entrepreneurship, males educators had more confidence ($M = 2.94$, $SD = 1.17$) than female ($M = 2.61$, $SD = 1.20$).

University category [$F(3,443) = 5.82$, $p = 0.00$], *discipline* [$F(6,460) = 6.90$, $p = 0.00$], and whether or not educators had *industry experience* [$F(1,467) = 16.43$, $p = 0.00$] also impacted the confidence to assess entrepreneurship skills (see Table 5.12). Educators from the specialised university in management education ($M = 3.05$, $SD = 1.24$) and the broad-based university ($M = 2.92$, $SD = 1.14$) were more confident to assess entrepreneurship skills than educators from the research-intensive university ($M = 2.48$, $SD = 1.20$).

Educators in the management discipline also had more confidence to assess entrepreneurship skills ($M = 3.46$, $SD = 1.12$) than educators in the sciences ($M = 2.73$, $SD = 1.14$), information technology ($M = 2.71$, $SD = 1.19$), society and culture ($M =$

2.68, $SD = 1.25$), education ($M = 2.56$, $SD = 1.26$), engineering ($M = 2.56$, $SD = 1.26$) and health disciplines ($M = 1.95$, $SD = 0.95$).

Educators who had industry experience were also more confident to assess entrepreneurship skills ($M = 2.95$, $SD = 1.26$) than those who did not have industry experience ($M = 2.48$, $SD = 1.15$).

Willingness

There was a statistically significant difference in perceptions of willingness in teaching entrepreneurship skills dependent on *university category* [$F(3,439) = 4.43$, $p = 0.00$], *discipline* [$F(6,456) = 8.94$, $p = 0.00$] and whether or not educators had *industry experience* [$F(1,462) = 10.06$, $p = 0.00$] (see Table 5.12). It appeared that educators from the specialised university in management education ($M=3.22$, $SD = 1.32$) were more willing to teach entrepreneurship skills than those from the broad-based university ($M = 2.77$, $SD = 1.23$) and research-intensive university ($M = 2.57$, $SD = 1.32$).

A Tukey post-hoc analysis indicated that educators in the management discipline ($M = 3.66$, $SD = 1.17$) were more willing to teach entrepreneurship skills than those in society and culture ($M = 2.77$, $SD = 1.32$), education ($M = 2.72$, $SD = 1.28$), information technology ($M = 2.69$, $SD = 1.37$), sciences ($M = 2.66$, $SD = 1.16$), engineering ($M = 2.44$, $SD = 1.30$) and health ($M = 2.00$, $SD = 1.10$).

The results also revealed that educators who had industry experience ($M = 2.97$, $SD = 1.35$) were more willing to teach entrepreneurship skills compared to those who did not have industry experience ($M = 2.57$, $SD = 1.21$).

University category [$F(3,440) = 6.27$, $p = 0.00$], *discipline* [$F(6,459) = 6.59$, $p = 0.00$] and whether or not educators had *industry experience* [$F(1,465) = 15.24$, $p = 0.00$]

affected willingness to assess entrepreneurship skills (see Table 5.12). Educators from the specialised university in management education were more willing to assess entrepreneurship skills ($M = 3.29, SD = 1.24$) than educators from the research-intensive university ($M = 2.62, SD = 1.26$).

Specifically those in the management discipline were more willing to assess entrepreneurship skills ($M = 3.61, SD = 1.03$) than educators in information technology ($M = 2.84, SD = 1.39$), society and culture ($M = 2.83, SD = 1.32$), sciences ($M = 2.82, SD = 1.21$), engineering ($M = 2.75, SD = 1.24$), education ($M = 2.60, SD = 1.25$) and health ($M = 2.19, SD = 1.12$).

Educators who had industry experience were also more willing to assess entrepreneurship skills ($M = 3.08, SD = 1.28$) than educators without industry experience ($M = 2.61, SD = 1.22$).

5.7.6 Moral and professional ethics

There were no statistically significant differences in perceptions of confidence and willingness placed on teaching and assessing moral and professional ethics as determined by the one-way ANOVA results.

Emphasis

There were no statistically significant differences in perceptions of emphasis placed on teaching moral and professional ethics.

However, the results showed perceptions of emphasis placed on assessing moral and professional ethics were affected by *employment type* [$F(2,463) = 4.70, p = 0.01$].

Specifically, temporary educators placed more emphasis on assessing moral and professional ethics ($M = 4.31$, $SD = 0.75$) than permanent educators ($M = 3.77$, $SD = 1.19$).

5.7.7 Leadership skills

Emphasis

University category [$F(3,445) = 7.20$, $p = 0.00$] and *discipline* [$F(6,463) = 5.00$, $p = 0.00$] affected educator perceptions of emphasis placed on teaching leadership skills (see Table 5.13).

Table 5.13: ANOVA results showing the influence of demographic variables on perceptions relating to the emphasis, confidence and willingness to teach and assess leadership skills

Item	University category		Discipline		Employment level	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
ET	7.20	0.00*	5.00	0.00*	-	-
EA	5.56	0.00*	3.64	0.00*	-	-
CT	-	-	4.30	0.00*	-	-
CA	6.73	0.00*	-	-	2.82	0.03*
WT	-	-	6.82	0.00*	-	-
WA	5.36	0.00*	-	-	-	-

Note: * significant at the $p < 0.05$

ET – Emphasis on teaching

EA – Emphasis on assessing

CT – Confidence to teach

CA – Confidence to assess

WT – Willingness to teach

WA – Willingness to assess

Educators from the broad-based university placed more emphasis on teaching leadership skills ($M = 3.92$, $SD = 0.90$) than educators from the research-intensive ($M = 3.62$, $SD = 1.03$) and the specialised university in engineering and technology ($M = 3.45$, $SD = 1.06$). Similarly, educators from the specialised university in management education placed more emphasis on teaching leadership skills than educators from the research-intensive ($M = 3.62$, $SD = 1.03$) and the specialised university in engineering and technology ($M = 3.45$, $SD = 1.06$).

A Tukey post-hoc test revealed that participants in the education discipline placed more emphasis on teaching leadership skills ($M = 4.12$, $SD = 0.87$) than those in the sciences ($M = 3.56$, $SD = 1.01$), information technology ($M = 3.53$, $SD = 1.04$) and engineering ($M = 3.48$, $SD = 0.99$). Educators in management ($M = 4.00$, $SD = 0.86$) and society and culture ($M = 3.97$, $SD = 0.92$) placed more emphasis on teaching leadership skills than those in the sciences ($M = 3.56$, $SD = 1.01$) and engineering ($M = 3.48$, $SD = 0.99$).

The results from the ANOVA revealed that *university category* [$F(3,442) = 5.56$, $p = 0.00$] and *discipline* [$F(6, 459) = 3.64$, $p = 0.00$] also affected educator perceptions of emphasis placed on assessing leadership skills (see Table 5.13). Educators from the broad-based university placed more emphasis on assessing leadership skills ($M = 3.54$, $SD = 1.12$) than educators from the specialised university in engineering and technology ($M = 3.03$, $SD = 1.26$). It also appeared that educators from the specialised university in management education placed more emphasis on assessing leadership skills ($M = 3.63$, $SD = 0.95$) than educators from the research-intensive university ($M = 3.20$, $SD = 1.20$) and the specialised university in engineering and technology ($M = 3.03$, $SD = 1.26$).

Educators in the management discipline ($M = 3.74$, $SD = 1.03$) also placed more emphasis on assessing leadership skills than educators in engineering ($M = 3.11$, $SD = 1.26$) and health ($M = 2.81$, $SD = 1.50$).

Confidence

Perceptions about the confidence in teaching leadership skills were affected by *discipline* [$F(6,455) = 4.30$, $p = 0.00$] (see Table 5.13). The data revealed that educators in the management discipline ($M = 4.01$, $SD = 0.85$) had more confidence to teach leadership skills than those in engineering ($M = 3.37$, $SD = 0.97$) and health ($M = 3.14$, $SD = 1.24$).

University category [$F(3,440) = 6.73$, $p = 0.00$] and *employment level* [$F(4,460) = 2.82$, $p = 0.03$] also affected educator perceptions of confidence to assess leadership skills (see Table 5.13). The ANOVA results revealed that educators from the broad-based university had more confidence to assess leadership skills ($M = 3.80$, $SD = 0.90$) than the research-intensive university ($M = 3.47$, $SD = 1.08$) and the specialised university in engineering and technology ($M = 3.29$, $SD = 1.23$). Similarly, educators from the specialised university in management education were more confident to assess leadership skills ($M = 3.87$, $SD = 0.87$) than those working in the research-intensive university ($M = 3.47$, $SD = 1.08$) and the specialised university in engineering and technology ($M = 3.29$, $SD = 1.23$).

Educators in lower employment levels (i.e. tutors – $M = 4.13$, $SD = 1.02$) were more confident to assess leadership skills than those at higher levels (i.e. senior lecturers: $M = 3.58$, $SD = 1.05$ and associate professors: $M = 3.50$, $SD = 1.09$).

Willingness

Perceptions about the willingness in teaching leadership skills were affected by *discipline* [$F(6,459) = 6.82, p = 0.00$] (see Table 5.13). For instance, educators in the management discipline were more willing to teach leadership skills ($M = 4.24, SD = 0.84$) than those in the sciences ($M = 3.49, SD = 1.10$), information technology ($M = 3.49, SD = 1.26$), engineering ($M = 3.35, SD = 1.19$) and health ($M = 3.29, SD = 1.10$).

Perceptions about the willingness in assessing leadership skills were affected by *university category* [$F(3,443) = 5.36, p = 0.00$] (see Table 5.13). Educators from the broad-based university were more willing to assess leadership skills ($M = 3.81, SD = 0.96$) than those from the specialised university in engineering and technology ($M = 3.38, SD = 1.26$). It also appeared that educators from the specialised university in business management, education, information technology and quality management were more willing to assess leadership skills ($M = 3.96, SD = 0.88$) than those from the research-intensive university ($M = 3.54, SD = 1.15$) and specialised university in engineering and technology ($M = 3.38, SD = 1.26$).

5.7.8 Variation in the levels of emphasis, confidence and willingness to teach and assess soft skills

In conclusion, the ANOVA results showed there was a variation in the levels of emphasis, confidence and willingness to teach across the demographic variables for all soft skills. However, the *university category*, *disciplines* and whether or not educators had *industry experience* consistently impacted educator perceptions about emphasis, confidence and willingness to teach and assess certain soft skills.

Discipline has differential effects on educator perceptions about teaching communication skills, teamwork skills, entrepreneurship skills and leadership skills.

The study also indicates that educator perceptions about teaching and assessing entrepreneurship skills were consistently affected by *university category*, *discipline* and whether or not educators had *industry experience*.

In contrast, *discipline* impacted educator perceptions about teaching leadership skills whereas *university category* impacted educator perceptions about assessing leadership skills. Tables 5.14, 5.15 and 5.16 present a summation of these outcomes.

Table 5.14: Emphasis, confidence and willingness to teach and assess soft skills across university category

Soft skill	Teaching			Assessing		
	Emphasis	Confidence	Willingness	Emphasis	Confidence	Willingness
Critical thinking and problem solving skills				x		
				Broad-based university		
				Management university		
Entrepreneurship skills	x	x	x	x	x	x
	Management university	Management university	Management university	Management university	Management university	Management university
Leadership skills	x			x	x	x
	Broad-based university			Broad-based university	Broad-based university	Broad-based university
	Management university			Management university	Management university	Management university

Note: x denotes statistically significant differences

Table 5.15: Emphasis, confidence and willingness to teach and assess soft skills across discipline

Soft skill	Teaching			Assessing		
	Emphasis	Confidence	Willingness	Emphasis	Confidence	Willingness
Communication skills	x	x	x	x	x	
	Health	Education	Education	Education	Education	
	Education	Management	Society & Culture	Society & Culture	Society & Culture	
	Management	Society & Culture				
	Society & Culture					
Teamwork skills	x	x	x			
	Education	Management	Education			
	Management		Management			
	Society & Culture		Society & Culture			
	Information Management					
Entrepreneurship skills	x	x	x	x	x	x
	Management	Management	Management	Management	Management	Management
Leadership skills	x	x	x	x		
	Education	Management	Management	Management		
	Management					
	Society & Culture					

Note: x denotes statistically significant differences

Table 5.16: Emphasis, confidence and willingness to teach and assess entrepreneurship skills across whether or not educators had industry experience

Soft skill	Teaching			Assessing		
	Emphasis	Confidence	Willingness	Emphasis	Confidence	Willingness
Entrepreneurship skills		x	x		x	x
		Had experience	Had experience		Had experience	Had experience

Note: x denotes statistically significant differences

5.8 Conclusion

This chapter has presented further evidence supporting the qualitative study in a broader sample.

This cross-sectional data created a profile that adds important elements to the understanding of the phenomenon under investigation such as the role of educator beliefs in adding and focusing soft skills in the curriculum, their familiarity with their university's official list of soft skills, educator perceptions about whether there are obstacles in teaching and assessing soft skills, the factors that affect teaching and assessing soft skills, and the importance of delivery approach.

There is agreement about the inclusion and importance of soft skills in the curriculum with high familiarity of university soft skills among educators from this study.

The study has provided empirical support for the fact that the personal expectations or views of the educators are the most influential factor in teaching and assessing soft skills. The educators believed that WIL experience is the most effective method for developing soft skills. This was followed by student life living in residential colleges and other models in which soft skills were developed by students independent of formal activities of teaching and learning, support programs, campus life and WIL. The data also reported that more than half of educators identified obstacles in teaching and assessing soft skills.

The results from a quantitative cross-sectional study indicates that the *university category, discipline area, employment status (FT/PT) and type, teaching qualifications,* and *gender* have differential effects on educator perceptions about the importance of soft skills for student employability. Specifically, there was a statistically significant

difference in perceptions about the importance of entrepreneurship skills for employability dependent on *university category*, *discipline*, *employment type* and whether or not they had *teaching qualification/s*.

The data also indicates that the *university category*, *discipline area*, *employment status (FT/PT)*, *type and level*, *industry experience (y/n)*, *years of teaching*, and *gender* affected educator perceptions about the emphasis, confidence and willingness to teach and assess soft skills.

In particular, the study highlights that educator perceptions about teaching and assessing entrepreneurship skills were consistently affected by *university category*, *disciplines* and whether or not educators had *industry experience*. *Disciplines* affected educator perceptions about teaching leadership skills whereas *university category* affected educator perceptions about assessing leadership skills.

Overall this chapter has provided greater empirical support to show that demographic characteristics can help explain educator perceptions about the emphasis, confidence and willingness to teach and assess entrepreneurship skills and leadership skills.

However, the most important contribution of this part of the research is the contribution it has provided in searching for convergence, divergence, contradictions and relationships across the two data sets to develop a more complete understanding (Creswell & Plano Clark, 2011).

CHAPTER VI

FINDINGS – SYNTHESIS AND INTREPRETATION OF RESULTS

6.1 Educator experiences: personal beliefs

6.1.1 Introduction

This chapter presents a synthesis and interpretation of qualitative and quantitative results gathered from in-depth interviews and an online survey. Figure 6.1 illustrates the steps taken by the researcher in the convergent mixed methods design to synthesise and interpret research results. The design of data collection instruments for qualitative and quantitative strands was influenced by the literature review.

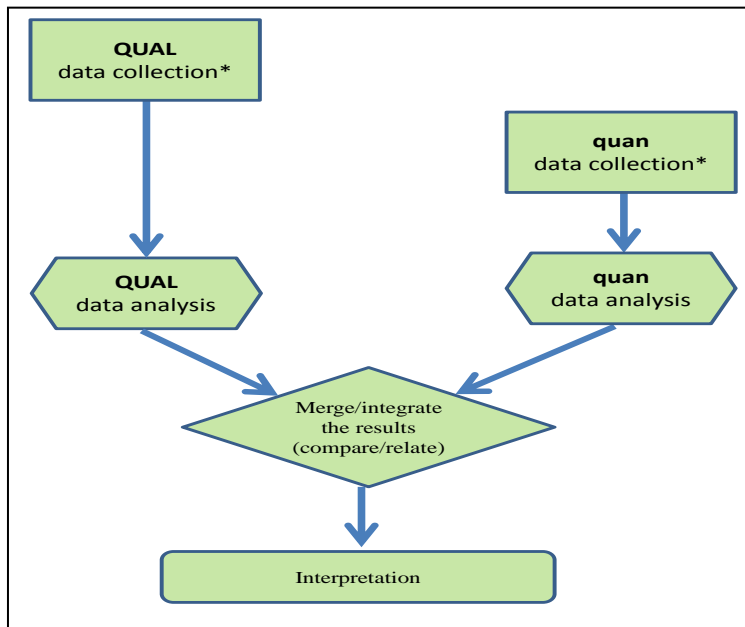


Figure 6.1: Convergent mixed methods design

Note: *The two types of data were collected consecutively. Adapted from *Designing and Conducting Mixed Methods Research* (p. 118), by J.W. Creswell and V. L. Plano Clark, 2011, Thousand Oaks, CA: Sage.

The features of the mixed methods study of soft skills in Malaysian higher education institutions (HEIs) is outlined in Table 3.7 (see Section 3.6.2.2) and the link between the

qualitative and quantitative data is shown in Figure 3.2 (see Section 3.6.2.2). Within the mixed methods framework of this research, qualitative descriptions of educator experiences regarding teaching and assessing soft skills were merged with quantitative measures of educator perceptions to develop a more complete picture. The integration of data led to the generation of themes that emerged over both strands and that have been synthesised in this discussion. Table 6.1 below provides an overview of the themes presented in this chapter. The main findings that addressed the research questions include personal beliefs as key influences on educator approaches to role conflict in soft skills development, educator approaches to teaching soft skills, and educator approaches to assessing soft skills.

Table 6.1: Educator beliefs and soft skills development: synthesis and interpretation of results

General	Specific
Personal beliefs and role conflict in soft skills development	A framework to understand educator perceptions about their role
	Soft skills development: the “individual’s responsibility”
	University-industry partnerships in soft skills development
Personal beliefs and teaching soft skills	Learning soft skills in formal, non-formal and informal modes
	Agile hybrid approach in teaching and learning soft skills
	“Intervention”, “empowerment” and “assessment system”
	Teaching soft skills: individual and institutional factors
	Lacking “explicit” teaching and learning soft skills, and “reflection”
	Student-centred learning (SCL) and role of educators as “facilitators”
	Integrating soft skills in teaching and learning: “polishing” soft skills
	Obstacles to teaching and learning soft skills

General	Specific
Personal beliefs and assessing soft skills	Assessment as a medium to monitor and motivate soft skills learning
	Self-assessment and soft skills learning
	Assessing soft skills: individual and institutional factors
	Lacking “explicit” assessment and “feedback”
	Assessing soft skills: educator satisfaction and support
	Obstacles to assessing soft skills

The discussion of educator experiences in soft skills development begins with an examination of the context of the study, followed by an exploration of educator personal beliefs (see Figure 6.2).

6.1.2 Educator experiences in soft skills development

6.1.2.1 Context of the study

This section highlights the broad spectrum of educator beliefs about soft skills teaching and assessment in higher education.

6.1.2.1.1 Soft skills: a part of university curriculum

Most educators who participated in this study supported the concept of soft skills development, as suggested by the Ministry of Higher Education (MOHE). This perspective was reflected in their positive responses and beliefs that their university should include soft skills in the curriculum. The majority of educators, including most junior staff and all senior staff, were aware of their university policy on soft skills and of the seven skills stipulated by MOHE. This awareness, particularly among those in the senior leadership group, was to be expected as communication from MOHE was channelled through them to lower level staff.

Educator familiarity was influenced by university category, employment type and level, and teaching experience. For example, the keen interest of the specialised university in engineering and technology in soft skills development may account for the familiarity of those educators, as this initiative may have started earlier than MOHE's initiative. In addition, senior educators who were permanently appointed and had more years of teaching experience were more familiar with the official list of soft skills at their university.

All educators expressed familiarity with the term 'soft skills'. 'Generic skills' was a common alternative term, but few educators were aware of the existence of other terms. In some universities, the term generic skills was used prior to the MOHE framework. The educators preferred the English term soft skills to the newly adopted Malay term *kemahiran insaniah*. They argued that *kemahiran insaniah* needs to be more clearly defined and broadly accepted at the emotional level of understanding. This term, which is infused with Islamic values, may lead to misconceptions and confusion among those with different religious beliefs. The term soft skills is internationally well accepted and its meaning is more easily grasped. The educators demonstrated an understanding of the term beyond simple or direct translation.

In general, soft skills are seen as complementary to academic knowledge. There is evidence in the literature (e.g. Hager, 2006; Hager & Holland, 2006; Tymon, 2011) that suggests skills and personal attributes have significant differences. However, the educators in this study were not aware of this and tended to group them under the blanket term 'skills' when they defined soft skills. The educators highlighted that soft skills are associated with marketing skills and related to practical aspects, including interacting with clients or customers. Education and training literature supports the idea that it is possible to develop these practical skills through training, although some are

hard to develop (Tymon, 2011). The educators in this study also defined soft skills as personal skills or personal attributes that form individual personality. They highlighted that teaching and learning these attributes may require a different approach from teaching and learning academic knowledge. This result was expected as attributes associated with success, performance and career choices are likely to develop gradually over long periods of time (Woods & West, 2010). Many develop at a young age and some are inherited. Rutter et al. (1997) assert that the development of attributes can be seen as the interplay between nature and nurture. The evidence from this study is that educators charged with responsibility for developing soft skills hold a variety of disparate understandings of either the nature of soft skills or teaching and learning processes. Similarly, a study conducted by Barrie (2007) found that there was a different conceptualisation of soft skills among educators within the same institution and across different higher education institutions. How soft skills are conceptualised by educators is of great concern because it can inform university policy and practice.

Educators in the senior leadership group demonstrated higher levels of understanding of the term soft skills compared to their more junior counterparts. The educators listed and described a range of soft skills, and these can be categorised into skills and personal attributes. Communication skills was the most commonly cited. Educators acknowledged the existence of other skills and personal attributes, but agreed that the focus should be on the seven skills in the MOHE framework, as these skills were most required by employers. This affirmed the skills selected by MOHE.

The interview data revealed that while educators had various definitions and levels of understanding of soft skills, they acknowledged the importance of these skills for work and life. The encouraging evidence from this study suggests that educators are willing to support universities towards soft skills development. Thus, the major challenges that

universities might face involve determining the system and the approaches to be utilised to produce work-ready graduates; that is, educators' willingness does not appear to be a challenge per se. In addition, it is proposed that universities provide training to improve the understanding of educators (particularly junior staff) about soft skills, including exposure to the university policy on soft skills, the official list of soft skills, and the definition of soft skills.

6.1.2.1.2 Soft skills: from university to the work environment

The qualitative data revealed that the educators believed that soft skills are important for employment, and are required to succeed in the workplace. The educators perceived that, in order for graduates to stand out from others, it was equally important for them to possess a high level of soft skills as to possess in-depth disciplinary knowledge. The educators stressed that graduates are able to change careers with these "portable skills". In certain circumstances, soft skills can help graduates gain jobs that are not directly related to their field, or change their career ("Soft Skills," 2015) and support the mobility of employees. These views support several researchers' assertions (see Andersen, Haahr, Hansen, & Holm-Pedersen, 2008; Atkinson & Hargreaves, 2014; Julian, 2004) that employee mobility between occupations, employers and businesses is expected in response to changing work demands and environment. The mobility of employees demonstrates the shift from *job for life* to *employability for life* (see Arthur & Rousseau, 1996; Brewer, 2013; Department for Education and Skills [DfES], Department for Trade and Industry [DTI], HM Treasury & Department for Work and Pensions [DWP], 2003). However, to assume that soft skills can be directly transferred may lead to misconceptions about soft skills (Hager, 2006).

The educators acknowledged that employers are not satisfied with the quality of graduate soft skills. A study conducted by management consultancy firm Hay Group reveals that most employers perceive less than half of graduate applicants have sufficient soft skills (Robert-Edomi, 2015). According to educators, communication skills, critical thinking and problem solving, and teamwork skills are most in demand from employers. There is a match between educator perceptions in this study and employer perceptions in other studies (see Archer & Davison, 2008; Shannon, 2012) in which communication and teamwork were regarded as the most important skills sought among new graduates. Students are perceived to lack soft skills, particularly communication, critical thinking and problem solving, and lifelong learning and information management. The results are consistent with those reported by the World Bank (2012, 2014). These skills are important for employment and retention in employment. A willingness and awareness of the need to continue learning has been recognised as a key factor to remaining employed in a demanding and changing work environment (Clayton, Blom, Meyers, & Bateman, 2004). Findings on both most important and most lacking skills support that educators and others (employers and employees) were in agreement. Thus, it is important for universities to focus their efforts on developing the above mentioned skills over other skills.

In terms of employment, entrepreneurship and leadership skills were perceived by educators to be the least important skills. This might be because entrepreneurship and leadership were only recently formalised at the tertiary education level when compared to other conventional skills such as communication, and critical thinking and problem solving. The educators also appear to hold misconceptions about entrepreneurship skills, seeing entrepreneurship education as merely for self-employment, rather than employee-ship. However, employers view *entrepreneurship attributes* such as

creativity, innovation and personality building as equally important for student employability (Fuchs, Werner, & Wallau, 2008). Both entrepreneurship and leadership skills have been identified as very important in the new global economy (Greenberg, McKone-Sweet, & Wilson, 2011). Therefore, the importance of these skills needs to be further reinforced through a revision of educator roles and responsibilities.

The quantitative data revealed that educator perceptions about the importance of entrepreneurship skills for employability were differentiated by university category, discipline, employment type and teaching qualifications. Educators from the specialised university in management education and in management disciplines were more likely to believe that entrepreneurship skills are important for employability. This is probably because business management courses educate students to be business leaders. Educators on temporary appointments were more likely to believe that entrepreneurship skills are important for employability. Junior staff, who are often employed on a temporary basis, may have had the opportunity to be trained themselves in entrepreneurship skills through the MOHE approach, which may account for these educator beliefs. Having a teaching qualification may be an indicator that those educators who undertake teaching training are more enlightened about these increasingly in-demand skills. It is likely that with the appropriate training support entrepreneurship skills will be seen as essential to student employability, thus closing the gap in expectations between what employers and educators value as work-ready skills.

According to educators, students were interested in learning entrepreneurship and leadership skills alongside communication and teamwork skills. This indicates that students are aware of the importance of these skills for employment and student interest

in learning teamwork skills was expected, as Malaysian students are from a collectivist culture that highly values cooperation in daily life (Abdullah, 1992; 1994; 1996).

The interview data revealed that while educators had a moderate view that students were managing their employability in the context of recent requirements for soft skills, the educators were also aware of the tight job market. An education system that gives more emphasis to academic knowledge and lacks exposure to employers was seen as the main reason for students not being responsive to the demands of the labour market. There is evidence to suggest that the examination-based system adopted by Malaysian schools (Ahmad, 1998), which entails a rote learning style that stresses academic excellence, has influenced student learning styles at the tertiary level (see Chan & Mousley, 2005; Kasim, 2014; Mukherjee & Wong, 2011; Thang, 2003). These study patterns are believed to contribute, in part, to the lack of soft skills amongst local undergraduate students (Quah, Nasurdin, Guok, & Ignatius, 2009; Shakir, 2009). This result echoes the findings of Tomlinson (2007, p. 296) that showed that only a “careerist” group of students were intensively responsive to the need to acquire soft skills and prepare themselves for employment.

Industrial training or work integrated learning (WIL) is one means of creating awareness of the most current requirements for employability. WIL provides students with the opportunity to understand the changing demands of work and organisations, and the latest skill requirements of the workplace (Precision Consultancy for the Business, Industry and Higher Education Collaboration Council [BIHECC], 2007).

The views of educators on the ways students are managing their employability contribute to the important findings of this educational setting. Hesketh (2000, p. 250) identifies this area as being “woefully under-researched”, which is confirmed by

Tomlinson (2007) and Tymon (2011), and limited evidence of significant research has been located since that time. This leads to the conclusion that there are still opportunities to engage in this conversation, even though the MOHE approach has been around for some time. However, instead of merely focusing on academic excellence, it is suggested that universities pay more attention to soft skills development as a means to manage the employability of their students, and to expose their students to a range of employment opportunities, such as internship, training and volunteer work.

6.1.2.2 Overview of educator personal beliefs

Educators' perceptions of their role in soft skills delivery are predicated on their personal beliefs about that role and on the experiences that have moulded their thinking. Research (Åkerlind, 2004; Pajares, 1992; Radloff, de la Harpe, Dalton, Thomas, & Lawson, 2008) suggests that conducting study into educator beliefs can help universities target support and resources to address these beliefs. This is important because the beliefs the educators hold must change first, and only then “a change in teaching practices and techniques is possible” (Postareff, Lindblom-Ylänne, & Nevgi, 2007, p. 569). In addition, understanding educator beliefs can inform practice (Pajares, 1992) for delivery and assessment of soft skills in meaningful ways. Pratt and associates (1998, p. 16) argue that “beliefs and values are not minor, they are fundamental”, and Kasim (2014) points out that the role of educators can be considered as a change agent for educational shifts, which includes changing teaching approaches. A structural overview of educator personal belief is presented in Figure 6.2. The figure depicts the involvement of educators in the process of soft skills development. The intervention of educators in the process occurs through the university system – in this case the implementation of the MOHE's flexible framework. If the university establishes a system that does not support soft skills development, this may cause various problems

and the university will fail to deliver the desired results. Furthermore, the formalisation of soft skills development may lead to curriculum change. Educators may react to this positively or negatively depending on their expectations and views. These findings are consistent with earlier research by de la Harpe, Radloff, and Wyber (2000). The response of educators varies unpredictably with a few educators not accepting the change, some accepting the change as they realised it is needed for improvement, and some accepting but sceptical about the change or uncertain about how to go about it.

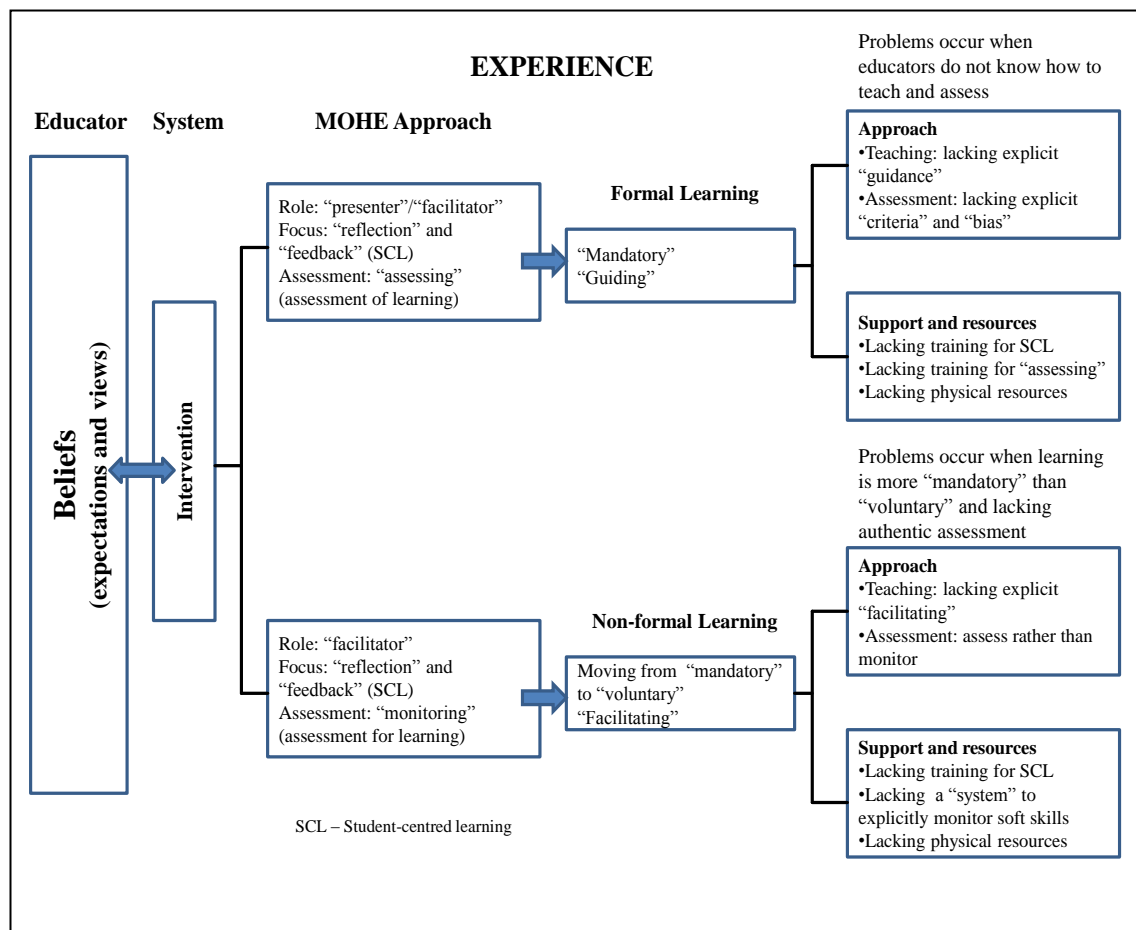


Figure 6.2: Structural overview of educator personal beliefs

The MOHE delivery approach to developing soft skills is strongly characterised by formal and non-formal learning. The approach pays less attention to informal learning

where educators have no control over learning. The results in this study support formal, non-formal and informal learning in soft skills development. However, in this study there is evidence that, under certain circumstances, problems occur relating to the approach, and to support and resources. The study has also led to an understanding of the key contextual elements that contribute to this.

One contextual element that has emerged is the cognitive dissonance experienced by educators as they strive to develop student soft skills. Festinger (1957) describes cognitive dissonance as a feeling of uncomfortable tension that results from holding two or more conflicting beliefs, thoughts or values in the mind at the same time. Educators reported facing dilemmas in the development of soft skills where their values and beliefs came into conflict with their responsibilities and actions. Example situations for educators include where there was a lack of clarity about the responsibility of educators versus the responsibility of students, and the issue of assessment versus no assessment. This is an area for further investigation.

The collectivist cultures within which these Malaysian educators work may also influence them. The traits of these cultures include a close long-term commitment and a responsibility to their group, where group interests are placed over individual interests (Hofstede Centre, 2015; Sumari & Jalal, 2008). The soft skills module (MOHE approach) may have been established because of the strong belief of educators that there is a responsibility to intervene and help the students to develop their soft skills. The key message here is that educators react to what they believe in. However, when the soft skills module was implemented educators experienced problems in teaching and assessing, possibly because they did not know how to teach and assess soft skills and the approach they used was not suited to the needs of soft skills learning, or because of a

perceived lack of support and resources (including human, financial, physical and infrastructural), or both.

In terms of approach, educators may draw on pedagogical, andragogical or heutagogical models in teaching and learning soft skills. The evidence suggests that educators adopt a model that suits the learning context, which closely ties to formal, non-formal and informal learning spaces. However, educators may overemphasise the teacher-centred approach or over-control student learning because of their personal beliefs about teaching and learning soft skills. Their beliefs also determine their roles as presenters or facilitators.

In formal learning, the evidence is that problems occur when educators lack confidence, do not know how to teach and assess soft skills, and when they are surrounded by impractical thinking about how soft skills develop. As a result, their teaching may lack explicit guidance, and the assessment may lack explicit criteria and have an inherent bias. In terms of support and resources, educators may lack training to support student-centred learning (SCL), which is seen as critical in the development of soft skills (Mansyurdin, 2015), and assessing (assessment of learning), and may lack the physical resources to deal with large numbers of students, due to low staff numbers.

In non-formal learning, problems occur when learning is mandatory, rather than voluntary, and when it lacks authentic assessment. In addition, the teaching approach may lack explicit facilitating, and assessment may focus on assessing (assessment of learning), rather than monitoring (assessment for learning). In terms of support and resources, educators may lack training for SCL, an explicit system to monitor soft skills, and sufficient physical resources, such as financial support for activities.

The self-report of study participants supports the major principles of formal, non-formal and informal learning as they developed students' soft skills through these different learning modes. These learning modes are available to any kind of approach as suggested by teaching and learning theories such as pedagogy, andragogy and heutagogy. In order to successfully develop soft skills among students, it is important for educators to adopt a mode that suits the learning context. The approach used by educators, however, is influenced by their expectations and views. Thus, the implementation of the approach is based on a sophisticated interplay between learning context and personal beliefs. In this vein, it is important for universities to address educators' beliefs through their professional development programs so that delivery and assessment of soft skills will be conducted in meaningful ways.

The proposed framework for teaching and assessing soft skills derived from the study is delineated and detailed in the following section (see Figure 6.3).

6.2 Proposed framework for teaching and assessing soft skills

This section describes the proposed framework established from the synthesis and interpretation of results, which relates to the context of the study and the main findings: personal beliefs as key influences on educator approaches to role conflict in soft skills development, educator approaches to teaching soft skills, and educator approaches to assessing soft skills (see Figure 6.3). This section also discusses the proposed model to understand educator perceptions about their role (see Figure 6.4).

6.2.1 Teaching and assessing: a proposed framework

This study presents a framework (Figure 6.3) for teaching and assessing soft skills. The figure identifies the system that affects educator beliefs about teaching and assessing soft skills (including the emphasis they place on it and their confidence and willingness). It also highlights four key aspects in the system: teaching and learning environment, learning, implementation of teaching and assessing, and employment. The teaching and learning environment is shaped by institutional culture and consists of controlled, semi-controlled and non-controlled learning. Soft skills learning is characterised by formal, non-formal and informal modes. This study proposes a learning strategy, such as SCL for formal and non-formal learning. The implementation of teaching and assessing is influenced by educator personal beliefs (individual factors), and support and resources (institutional factors). The evidence in this study leads to the recommendation of an electronic portfolio (e-portfolio) as a document supporting academic qualifications for employment.

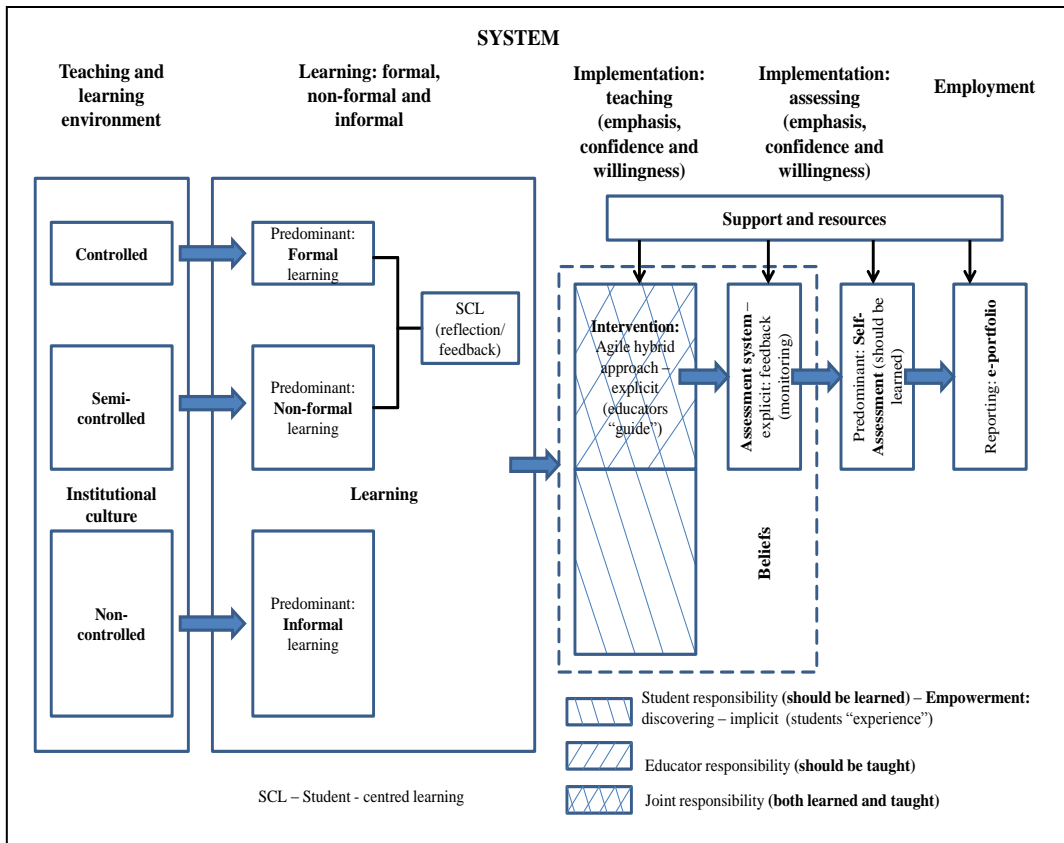


Figure 6.3: A framework for teaching and assessing soft skills

Teaching and learning soft skills in universities involves formal, non-formal and informal learning. Overall, learning is largely controlled by the students, as most lifelong skills are acquired from their informal learning and are developed throughout their life. However, intervention in teaching and learning soft skills is commonly seen as part of the educator role in collectivist cultures regardless of whether soft skills are formalised or not. Formal learning is a predominant learning mode in a controlled environment and non-formal learning is a predominant learning mode in a semi-controlled environment – this reflects the important role of educators in teaching and learning soft skills, in particular in the implementation of SCL.

In addition, teaching and learning soft skills needs to emphasise SCL by giving attention to reflection and feedback, which are important to learning from experience. The non-threatening environment and the experience of being trusted support students in learning soft skills, and are in line with andragogical and heutagogical principles. The educator role is seen as a facilitator and consultant. SCL that focuses on experiential learning, rather than on the assessment of student achievement, supports *transactional* (principle of andragogy) and *adaptation* (principle of heutagogy) process designs. In essence, it is important for the teaching and learning environment to be surrounded by a supportive institutional culture (Pritchard, 2013) to facilitate the student-centred approach where the “... individual seems to become more content to be a process rather than a product” (Roger, 1961, p. 122).

A key finding of this study was the emphasis given to teaching and assessing soft skills can be influenced by educators’ beliefs, as well as by their confidence and willingness. It is important for educators to implement an agile hybrid approach for soft skills development, and for their role to focus on guiding the learning. As Bergh et al. (2006) claim, guiding and growing broadly captures the development process of soft skills. This study shows the importance of educators as facilitators, and the importance of explicit rather than implicit learning. The facilitating role is a key element in the andragogical model (Knowles, Holton, & Swanson, 2011). This highlights the need for support and resources, so that educators have the necessary tools and relevant resources to implement soft skills. For example, educator training and financial support for activities will assist.

However, as mentioned earlier, educators believed that students should also be responsible for their overall learning. By empowering students to learn, they are able to

discover learning skills from their experience. This largely involves incidental and informal learning, which is implicit.

Without a monitoring element, students may not see learning as important. As such, there is an impetus to implement an assessment system. Evidence from this study indicates that the assessment of soft skills cannot be conducted in a similar manner to that of academic knowledge. It is important for the system to be explicit and provide students with feedback. This study proposes self-assessment as a predominant assessment for soft skills. It allows students to have more control over their learning, especially in recognising and acknowledging weaknesses, and is the first step towards self-improvement (Giovannini, 2015; Schulz, 2008). This study also found that a student portfolio can promote student engagement as partners in the assessment process. According to Hughes and Barrie (2010) student engagement is important to successfully achieve the assessment plans. Thus, it is important for the university to provide support and resources in the form of training and funding to develop a student portfolio to facilitate this learning. In accordance with the current use of technology in education, an e-portfolio is suggested. An e-portfolio comprises a record of student learning and achievement, which can be used as a representational e-portfolio for employment (Lorenzo & Ittleson, 2005). In addition, the evidence in this study also suggests that assessment can be seen as a medium to expose students to experiences, not to evaluate their achievements, which corresponds with heutagogical principles. The educator role is to verify students' learning, rather than assess, focusing on supporting what should be learned, and certification of skills can serve many purposes, including facilitating employability (Ferragina, 2015).

The development of an e-portfolio, which is arguably aligned with heutagogical thinking, supports lifelong self-directed learning. It is important for this to be built on

the basis of a constructivist paradigm, rather than a positivist paradigm. According to F. L. Paulson and Paulson (1996), the constructivist paradigm encompasses the following elements, which attend to learning from the student's perspective:

The portfolio is a learning environment in which the learner constructs meaning. It assumes that meaning varies across individuals, over time, and with purpose. The portfolio presents process, a record of the processes associated with learning itself; summation of individual portfolios would to be too complex for normative description. (p. 36)

An e-portfolio involves deep learning, which is characterised as developmental, integrative, self-directive and lifelong, and highlights the importance of reflection (Cambridge, 2004). The constructivist approach highly values the student's learning experiences, and assessment is conducted *for* learning rather than being an assessment *of* learning. Thus, it is important to equip educators with knowledge and skills about assessment through a professional development program. This program can assist educators approach assessment in meaningful ways and do not adopt solely assessment of learning approach. In addition, Barrett and Wilkerson (2004, p. 11) suggest "Matching the philosophical orientation with e-portfolio tools should reduce the cognitive dissonance and conflicting goals between learners' needs and institutional requirements".

The role of universities in soft skills development is important. However, as Barnett (2006) asserts:

At stake here is a never-ending voyage of personal re-discovery and re-adjustment. The voyage will go on anyway, with or without higher education. But higher education has the potential to take on board this agenda of human becoming and re-becoming. (p. 64)

Again, the continuous development of these skills throughout life is emphasised. When universities have this agenda, their role consists of building the capabilities of individuals to withstand profound and incessant change, which then leads to the

development of relevant knowledge and essential skills. As Barnett (2006, p. 51) points out “... higher education needs to undergo a fundamental shift, not exactly to cast off concerns either with knowledge or with skills but to place at its centre a new concern with being as such”. Thus, the role of educators is expected to support student self-formation and change (Tennant, 2012). One way to facilitate this is to cultivate individual soft skills learning by using andragogical and heutagogical models.

Thinking about future possibilities leads to another concern, namely to what extent self-directed learning is permitted in the culture (Barnett, 2006; Knowles et al., 2011), which also influences the personal beliefs of educators about learning autonomy (Grow, 1991), and the need for direction and support (Pratt, 1988) in learning soft skills. These aspects might hinder the development of the abilities required to be self-directed. It is essential to address a growing gap between the need and the ability to be self-directed, especially in learning soft skills, so that feelings of tension and resentment do not rise for students in learning contexts. In this regard, universities are likely to target support and resources to address educator perceptions and orientations; however, changes, especially to educator beliefs, can be slow and take at least a year to manifest (see Postareff et al., 2007).

The proposed framework, in Figure 6.3, has been developed from the synthesis and interpretation of the results, relating to the context of the study and the following findings that addressed the research questions.

Question 1: What are the individual and institutional factors that influence educator perceptions on teaching and assessing soft skills?

Question 2: What are the perceptions of educators of their role in developing soft skills?

Question 3: What are the experiences of educators when they are teaching and assessing soft skills?

6.2.1.1 Personal beliefs and role conflict in soft skills development

Educator personal beliefs have been found by this study to be an influential factor in role clarity in soft skills development. While educators accepted, in part, their role in teaching and assessing soft skills at universities, they believed that others were also responsible, including family, students, schools, government, industry and the community. The involvement through partnership of these broader groups in the development of soft skills for employability is seen as important (Clarke, 1997; Edmondson, Valigra, Kenward, Hudson, & Belfield, 2012). This is especially the case in terms of partnerships between universities and industry, to enable learning in context. Educators were of the view that most of the responsibility lies with schools and then universities. As such, they believed in the ability of the educational system to equip individuals with both academic knowledge and soft skills. This view is supported by Shannon (2012). This study suggests that as organisationally structured entities, it is important for both schools and universities to set themselves up for the successful development of soft skills, with initiating efforts at the school level and higher level learning, including assessment, occurring at university.

Educators criticised the skills agenda associated with employability, particularly expressing concerns about the core functions of universities. This view is supported by Morley (2001) who asserts that the core functions of universities are teaching, research activities and publications, and developing good citizens. However, the changes that the education system is seeing require educators to look at their roles and responsibilities and to place much concern on the employability of their students (Star & Hammer, 2008). This is where the educators experienced conflicting role demands. They also believed that the government, as the highest authority making the most important decisions, plays a vital role in determining the direction of the educational

system by establishing relevant policy. Hayward and Fernandez (2004), in their discussion on generic skills policy in England, suggest that without an appropriate educational and training policy formulated by government, initiatives to stimulate the supply of these skills will not succeed. Some educators in this study expressed views that the school system should shift more towards this effort, rather than placing responsibility on universities. However, lack of connection between schools and universities in low and middle income countries causes “a lack of comprehensive vision of the education sector” (World Bank, 2012, p. 84). A variety of programs and activities could lead to closer partnerships.

6.2.1.1.1 Framework to understand educators’ perceptions about their role

Educator beliefs were demonstrated by the evidence to be key influences on teaching and assessing soft skills. This study proposes a framework to understand educator perceptions of their role (see Figure 6.4). Educators’ perceptions appeared from the evidence to be influenced by their demographic markers or characteristics, their understanding of soft skills, and how they perceive the role of others, which can be grouped into two factors: individual and institutional. Demographic markers such as university category, discipline, employment type, level and status (FT/PT), industry experience (y/n), teaching experience (years), teaching qualifications, gender and other factors such as institutional culture, membership of the senior leadership group and soft skills training may influence teaching and learning soft skills.

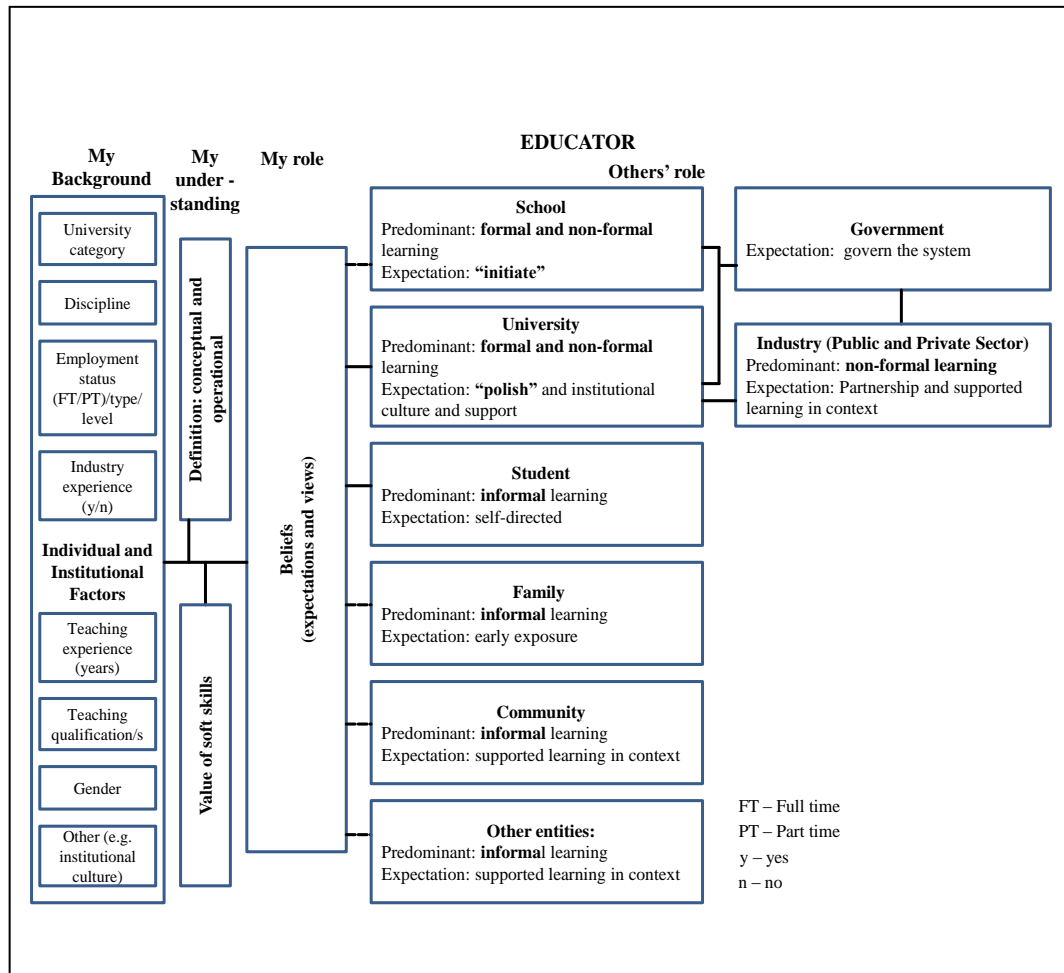


Figure 6.4: Framework to understand educators’ perceptions of their role

An understanding of soft skills development, which involves conceptual and operational definitions of soft skills, is essential. As indicated in the data, educators lumped together skills and personal attributes because of their lack of understanding about definitions, but the evidence indicated that educators do understand the value of these lifelong skills.

The educators believed that the formalisation of teaching and learning soft skills through the education system is capable of equipping students. Formal and non-formal learning at university, supported by non-formal learning in industry, should therefore be able to generate work-ready employees. This leads to the suggestion that schools

should “initiate” soft skills development, and universities should “polish” these with pertinent institutional culture and support. This view is in line with the government’s approach outlined in the Malaysia Education Blueprint (Ministry of Education [MOE], 2013). The new Primary School Standard Curriculum (Kurikulum Standard Sekolah Rendah; KSSR) and Secondary School Standard Curriculum (Kurikulum Standard Sekolah Menengah; KSSM), which focus on 21st century learning, were introduced to assist in preparing students for the skills required by today’s job market, which includes soft skills. In addition, a partnership with industry is seen as being able to support contextual learning. Accordingly, the evidence in this study leads to the recommendation that the formalisation of teaching and learning soft skills needs to be properly administered by the government, and to an extent the government might need to be involved in establishing relationships between universities and industry. New developments in public universities has seen some universities given autonomous status to manage academic, administrative and financial matters, which might change the education landscape in relation to soft skills development (Kulasagaran, 2012).

The educators also believed that informal learning is required for students to be self-directed learners. Informal learning in other contexts, including family, the community and other entities, was perceived as equally important. Industry, the community and other entities may offer contextual learning. This leads to the conclusion that soft skills learning at university is directly influenced by the student, university, government and industry (represented by straight lines in Figure 6.4), and indirectly influenced by school, family, community and other entities (represented by dotted lines in Figure 6.4).

The results of the current study support formal, non-formal and informal learning. It is suggested therefore that universities intensify their efforts towards soft skills

development, consistent with the predominant learning mode in each entity so that learning will be approached in deep and meaningful ways.

6.2.1.1.2 Soft skills development: the “individual’s responsibility”

A strongly held view was that of “individual responsibility” in learning soft skills. In terms of employability, possessing the relevant skills is seen as important at an individual level (Clarke, 1997; Hillage & Pollard, 1998; Pritchard, 2013; Virgona & Waterhouse, 2004; Yorke, 2004). Educators also recognised that students need educator support to facilitate their learning. The present findings support the “guiding” and “growing” as suggested by Bergh et al. (2006) to describe the development process of soft skills. It is important for educators to be able to tie in their role with their students’ role through the interaction in learning characterised by knowledge sharing. However, ultimately students are responsible for their own soft skills development, as Schulz (2008, p. 150) points out: a key aspect is “... one acknowledges one’s weakness and takes the decision to change it”. In terms of making that change, the role of educator is as facilitator – enabling student learning through formal and non-formal learning, where they have more control over student learning.

6.2.1.1.3 University-industry partnerships in soft skills development

While various means are available to promote collaboration between universities and industry, collaboration is mostly focused on academic knowledge. The educators claimed that industry engagement for soft skills training was not strong. This finding was expected and echoes the findings of Pritchard (2013) that employers play only a small role in soft skills development. According to the World Bank (2012) report, skills-related links between universities and industry in Malaysia are fairly well developed. Recruiting work-ready employees is of industry interest because they do not want to

have to invest in training, especially in soft skills. Industry is seen as having no interest in developing the soft skills of their employees (Clayton et al., 2004). This is due to the potential loss of their investment if employees choose to move on after training to work for another employer who requires similar skills (Pigou, 1912).

The educators generally reflected this view, agreeing that this skills agenda is pursued at universities and that the direction of universities is influenced by industry interests. According to Morley (2001), the connection between all key players (universities, government and industry) has been reformulated to be more open, which allows industry to influence the direction of universities. Although industry interest focuses on work-ready employees, educators strongly advised that industry should collaborate on soft skills training, especially by informing universities about their changing workplace needs. This evidence suggests that cultural and communication divides need to be overcome by both parties. These divides have the capacity to damage industry-university partnerships and their potential (Edmondson, Valigra, Kenward, Hudson, & Belfield, 2012).

6.2.1.2 Personal beliefs and teaching soft skills

Given that educator personal beliefs are a key influential factor in teaching soft skills, the results of the qualitative data were presented in terms of educator experiences. The results echo the findings of de la Harpe et al. (2009), which show that educator belief is a predictor of approach to teaching soft skills.

The educator profile was presented in terms of awareness, involvement, and views on support and resources, and the focus of students. While most educators were aware of the MOHE delivery approach, they believed that students lacked awareness of the approaches despite recognising that many activities were conducted for soft skills

development. The educators highlighted that although commencing some time ago, soft skills development at universities has only recently been formalised in the curriculum. Universities have experienced a transformation of soft skills development, which Curtis (2004a, p. 21) describes as “able to be learned” changing to “able to be taught”, with a focus on how soft skills can be delivered.

All educators reported being involved in at least one approach to soft skills development. They also recognised the importance of other soft skills development opportunities not necessarily tied to the university environment and developed by students independently. Over half of the participants were involved either directly or indirectly in structuring teaching and learning strategies for soft skills, and in soft skills training. The findings suggest that although the educators might not undertake formal training on soft skills development, at the least they were exposed to structuring teaching and learning strategies for soft skills in the form of meetings or briefings. Those who had attended soft skills training valued highly the idea of training, but commented that such training was often not directly focused on soft skills and was conducted in a “boring way”. These factors may have a deleterious effect on educator interest in learning. Educators also claimed that most of the methods used to develop soft skills were learned from their earlier formal education and experiences within universities with help from colleagues, rather than from structured educator development opportunities. This research highlights there is a need to improve teaching quality of educators through training with a focus on soft skills development and this is supported by previous research conducted by Thien and Ong (2016).

The educators agreed that sufficient training and infrastructure are provided by their university to develop soft skills. There is, however, room for improvement in the manner of training. Most training conducted in-house was optional, which may have a

negative impact on educator interest, particularly in a climate of competing demands for educator time, and where educators may not feel soft skills development is their responsibility. This leads to a proposal that universities have a responsibility to make training compulsory, and to establish the link between soft skills training and performance development goals.

The majority of educators believed that students were more focused on gaining academic knowledge than soft skills, because the education system places emphasis on student achievement in academic knowledge. The quizzes, tests, assignments and examinations that are continuously carried out by educators pay attention to academic knowledge. Kasim (2014) argues that the approaches used by Malaysian schools, such as rote learning and being examination-oriented, are contributing to university students having the same attitudes towards learning at the tertiary level. These circumstances affect the teaching and learning of soft skills. As such, one aim of the *Malaysia Education Blueprint 2013–2025* (MOE, 2013) is to end the examination-based system, a change which would involve emphasising the learning process and soft skills development, rather than merely passing exams.

6.2.1.2.1 Learning soft skills in formal, non-formal and informal modes

This study has identified that teaching soft skills at universities involves formal, non-formal and informal learning, as well as intentional and incidental learning, and that these occur simultaneously. The study also expands the overall picture of soft skills development. Figure 6.5 and tables 6.2 and 6.3 illustrate how modes in learning are related to teaching soft skills. Figure 6.5 presents the concepts of formal, non-formal and informal learning in teaching soft skills at universities. Table 6.2 then highlights

the MOHE delivery approach to soft skills development. Finally, Table 6.3 describes the definition, learning and teaching approaches, and outcomes of each learning mode.

Figure 6.5 has been adapted from Clark (n.d.1) and illustrates the concepts identified by Hanley (as cited in Mattox, 2012, p. 50), which are central to this discussion.

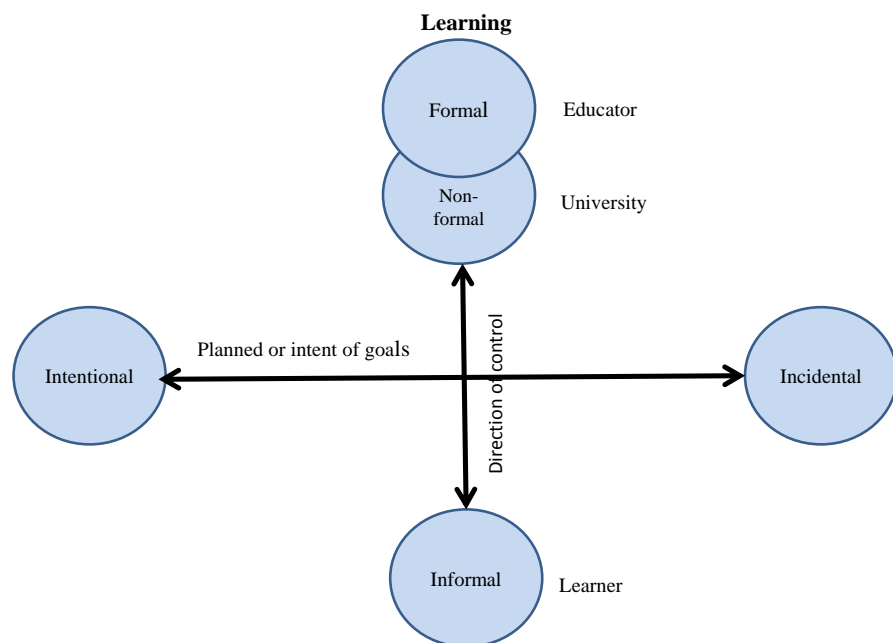


Figure 6.5: The learning modes

Note: Adapted from 'Formal & Informal Learning', by D. Clark, n.d.1. Retrieved 2012 from <http://www.knowledgejump.com/learning/informal.html>

Soft skills are developed in three learning modes, or learning processes, where emphasis is given to the locus of control of the learning objectives. As shown in the figure, formal learning occurs when the learning objectives and activities are controlled by the educator. Non-formal learning occurs when the learning objectives and activities are determined by the university. This includes industrial training, where the learner chooses when to engage. Informal learning occurs when the learner determines their own learning objectives and activities (self-directed learning). Notably, the three

learning modes occur simultaneously and can be viewed as predominant rather than as discrete modes.

Table 6.2 illustrates the MOHE delivery approach to the development of soft skills in students (including industrial training).

Table 6.2: Soft skills development and the learning modes

Delivery approach	Model	Predominant mode	Learning environment
Formal activities of teaching & learning	Embedded model	Formal learning	Controlled (educator-directed)
	Standalone model	Formal learning	
Support programs	Academic focused	Non-formal learning	
	Non-academic focused	Non-formal learning	
Campus life activities	Student life in the residential colleges	Non-formal learning	Semi-controlled (university-directed)
	Student life in campus surroundings	Non-formal learning	
Industrial training/work-integrated learning	Through work-integrated learning experiences	Non-formal learning	
*Other opportunities learned by students independently	Daily experiences and exposure to the environment	Informal learning	Non-controlled (student-directed)

Note: * This approach is not included in the MOHE delivery approach

This approach is dominated by formal and non-formal learning, with less focus on informal learning, where the educator has no control. Although informal learning is not a dominant mode, students often implicitly develop lifelong skills via this mode.

Table 6.3: Learning soft skills in formal, non-formal and informal modes

	Formal learning	Non-formal learning	Informal learning
Definition	<p>Learning that:</p> <ul style="list-style-type: none"> is a part of formal discipline based curriculum and explicit refers to any organised activity that is highly structured the educators set the learning objectives, duration, content, method and assessment (highly structured). 	<p>Learning that:</p> <ul style="list-style-type: none"> is usually not part of a formal discipline based curriculum; however, when it is, it contributes to a small part of the whole curriculum and at a lower level refers to any organised activity that is less structured and can suit the specific needs of particular groups can be highly contextualised (such as, industrial training) the organisation may set the learning objectives, duration, content, method and assessment (less structured). 	<p>Learning that:</p> <ul style="list-style-type: none"> is gained from daily experiences and exposure refers to intentional and incidental learning activities the students set the learning objectives (no formal structure).

Note: Adapted from ‘Learning Music in Formal, Non-formal and Informal Learning’, by P. Mak. 2007. In P. Mak, N. Kors and P. Renshaw (Eds.), “Formal, Non-formal and Informal Learning in Music.” Retrieved from <http://www.jointmusicmasters.org/uploadmedia/files/Book%20Case%20Studies%20of%20Informal%20Learning.pdf>

Table 6.3: Learning soft skills in formal, non-formal and informal modes (continued)

	Formal learning	Non-formal learning	Informal learning
Learning and teaching	<p>Learning is primarily intentional.</p> <p>Learning is focused on explicit knowledge and reflection is important.</p> <p>Learning is educator directed.</p> <p>Guiding is the dominant teaching tactic in this mode.</p> <p>Assessment is a part of formal discipline-based curriculum.</p> <p>Assessment is related to intentional learning and explicit knowledge.</p>	<p>Learning is primarily by doing and through interaction with others: reflection is important to make implicit learning become explicit.</p> <p>Learning can be intentional, as well as incidental.</p> <p>Learning is organisation directed.</p> <p>Coaching, mentoring, facilitating and advising are the dominant teaching tactics in this mode.</p> <p>Assessment is related to monitoring and can receive credential.</p>	<p>Learning is primarily about “discovering”.</p> <p>Learning can be intentional, as well as incidental.</p> <p>Learning is student directed.</p> <p>No assessment.</p>
Outcomes	The learning outcomes are explicit and unintended learning outcomes are not formally acknowledged.	The learning outcomes can be implicit, as well as explicit, and unintended learning outcomes are acknowledged.	The learning outcomes can be implicit, as well as explicit, and unintended learning outcomes are acknowledged.

Table 6.3 distinguishes between formal, non-formal and informal learning, offering definitions, learning and teaching approaches, and outcomes, which are further discussed below. In Table 6.3, the four dimensions of formality and informality – namely process, location and setting, purposes, and content – are used to define the formal, non-formal and informal modes (Colley, Hodkinson, & Malcolm, 2003). Mak's (2007) research was adapted to describe each learning mode that occurs in this study, including the definition, learning and teaching approaches, and outcomes. Formal learning is defined as part of a discipline-based curriculum with highly structured activities. The role of the educator is central in guiding students' learning. Assessment is an important part of the formal discipline-based curriculum. The educator does not formally recognise incidental learning and implicit knowledge. Although non-formal learning is usually not part of a formal discipline-based curriculum, when it is, it contributes to a small part of the whole curriculum and at a lower level. The activities are less structured. The role of the educator – as coach, mentor, facilitator or advisor – is to assist learning that has been outlined by the university. The emphasis is on learning by doing and through interaction with others. The purpose of assessment is to monitor student involvement. This mode values incidental learning and implicit knowledge. Informal learning is not necessarily evident within a university environment. It involves self-directed learning, and refers to intentional and incidental learning activities. Each delivery approach has its own predominant mode, learning environment, and advantages and disadvantages.

6.2.1.2.2 Agile hybrid approach to teaching and learning soft skills

The quantitative data revealed that the educators had no preference regarding the most effective mode for teaching soft skills. However, according to the interview data, preferences do exist and fall into three contexts (see Table 6.2): the controlled

environment (formal activities of teaching and learning), the semi-controlled environment (support programs, campus life activities and industrial training), and the non-controlled environment (other opportunities for independent learning by students). These learning environments draw their own predominant modes, and the definition, learning and teaching approaches, and outcomes of each, are illustrated in Table 6.3. There was a difference in results because in the quantitative data reference was made only to the delivery approaches, then these approaches were divided into models. However, it is expected the same results would be discovered if the quantitative data were to be divided in similar ways to the qualitative data that considered the learning environments (controlled, semi-controlled and non-controlled) and the learning modes (formal, non-formal and informal learning).

The controlled environment is characterised by the simultaneous teaching of academic knowledge and soft skills, assessment of academic knowledge and soft skills, and convenient approaches. In the semi-controlled environment, two important elements were highlighted by educators: the student sense of ownership and the freedom to develop soft skills. The educators identified that cooperation and coordination (on the approaches and year of study) are important factors for soft skills development in both environments (controlled and semi-controlled), with some educators perceiving their role as more central. This is in keeping with the idea that approaches are “paths” and, in undertaking a role as trainers, educators are the key players. Given the educators are the key players, it is important for the universities firstly to address educator beliefs, so that teaching and learning will be conceptualised in meaningful ways, and secondly to equip them with practices and techniques to develop soft skills through their professional development programs.

The results of this study support an agile hybrid approach to soft skills development, which is based on pedagogical, andragogical and heutagogical models of learning and a flexible role for educators to guide students. It is important for educators to adopt a model that suits a learning context as there is no single model for soft skills development. Brewer (2013, p.15) supports this approach by proposing “a dynamic process for developing curricular that is not predetermined but, rather, evolves through continuous dialogue with employers ...” which requires innovative ways of delivering these skills.

This study found that most soft skills learning occurs in semi-controlled and non-controlled environments in which learning takes place outside formal teaching and learning activities. The evidence suggests that non-formal and informal learning are the predominant modes for the development of soft skills in students at universities.

The quantitative data highlighted that when it comes to the models utilised within these different modes, educators perceived the most effective method for each model as follows:

- embedded into the curriculum across program of study, and taught by both discipline lecturers and specialist staff
- standalone courses taught by specialist staff
- academically focused programs taught by specialist staff
- student life living in residential colleges
- industrial training
- other opportunities learned by students independently.

Based on the mean scores in the quantitative data alone, educators perceived industrial training, students living in residential colleges, and other opportunities learned by

students independently as the three most effective methods for soft skills development. These results were expected because students are able to better develop their soft skills through learning by doing, which gives them more room to practise and gain experience in an appropriate context. Virgona and Waterhouse (2004) have identified work as “the primary context” and experiential learning is “the primary mode” of learning soft skills (p. 113). Moreau and Leathwood (2006), Jackson (2013) and Jackson (2015) have argued that skill development through work experience is an important strategy for employability, and Crebert, Bates, Bell, Patrick, and Cragnolini (2004) found that industrial training supports students in the transition from university to employment.

While educators perceived industrial training as the most effective method for the development of soft skills and the creation of awareness about the recent requirements for employability, they only slightly agreed that their university fully utilises this approach. The educators gave three reasons for their views: industrial training is not a requirement for certain disciplines, training is of short duration with limited experience and less emphasis on soft skills, and that a lack of cooperation between universities and industry (public and private sectors) reduces opportunities.

The educators perceived activities at residential colleges to be a means to encourage students to learn soft skills, especially through interaction. Educators were of the view that the most student time was spent at residential colleges and thus that students gained much experience from both non-formal and informal learning in this setting.

Other opportunities for independent learning by students not necessarily tied to the university environment give students more freedom to take responsibility for their own soft skills development. This may involve informal and incidental learning. Freedom to choose their own ways of learning might enhance their emphasis, willingness and

confidence to learn soft skills. According to Earl (2006), when this freedom is given to them, the more time and energy will a student be willing to invest in their learning.

In terms of delivery approaches, three themes emerged from the data: teaching and learning, assessment, and application. Given that all approaches were perceived as equally important, this study proposes a series of questions for the full utilisation of each approach within the identified themes, as shown in Table 6.4, which summarises teaching and learning, assessment, and application.

Table 6.4: Questions for full utilisation of delivery approaches

a. Teaching and learning	b. Assessment	c. Application
Are soft skills implicitly or explicitly learned by students?	Is assessment applicable?	Is there a connection between soft skills and the disciplinary context?
Is engagement of students a problem?	Is assessment practicable?	Can soft skills be applied inside/outside class environment or both?
Is teaching and learning in full control of educators?		

a. Teaching and learning

If soft skills are implicitly learned by students via direct or indirect methods there is a need to highlight soft skills to students or, in other words, to make explicit what is acquired implicitly. Students may be directly trained by educators and implicitly learn soft skills, as shown in Table 6.5.

Table 6.5: Learning soft skills: implicit versus explicit

Soft skills development	Learning
Directly trained	Explicit learning
	Implicit learning
Indirectly trained	Explicit learning
	Implicit learning

For example, students are directly trained by educators when they are asked to conduct a presentation, but learning cannot be explicit if no reflection is included in the assessment process. Mak (2007, p. 16) asserts that “Reflection is a powerful means to learn from experience, to make explicit what is acquired implicit[ly], to transform experiences into knowledge, skills, attitudes, emotions, beliefs and the senses.” If engagement of students is a problem, they need to be motivated. Also, if teaching and learning are not in the full control of educators, there is a need to ensure that students are learning. Approaches that offer a flexible, active and collaborative learning environment, as suggested by Crebert et al. (2004), de Corte (1996), Knight and Yorke (2000) and Moy (1999), could be considered by educators because implementation calls for soft skills to be developed explicitly with support for reflection.

b. Assessment

If assessment is perceived as non-applicable, there is a need to motivate students to learn soft skills and monitor their progress. In this case assessment for learning is more appropriate than assessment of learning. Also, if assessment is perceived as impracticable for educators, there is a need to ensure that students are able to assess their own soft skills. Various methods, modes and feedback that emphasise explicit assessment, as suggested by Hanover Research (2014b); Knight and Yorke (2000) and Pritchard, (2013) could be implemented by educators. For example, universities can utilise an e-portfolio or a digital badge to motivate students to learn through reflection, and educators can then verify their learning (see Hanover Research, 2014b; Hart Research Associates, 2015; Kruger, 2015).

c. Application

If students perceive that there is no connection between soft skills and the disciplinary context, this connection needs to be established and demonstrated. Also, if soft skills cannot be applied inside a class environment, they should be applied outside this environment, although using both environments is encouraged. For example, universities can collaborate with industry by giving students more opportunities to practise their soft skills. As asserted by Virgona and Waterhouse (2004, p. 113), work is “the primary context” for soft skills development. This will also enhance the link between universities and industry. Over time, these questions can aid the development of soft skills in the supportive institutional culture, whereby students are provided with opportunities to practise their soft skills.

In general, educators were reasonably confident about attaining the goals of the MOHE delivery approach. The process of goal attainment was possibly influenced by factors such as institutional culture, role of educators and students, opportunities to practise soft skills, and how long soft skills development has been formalised at universities. The educators believed that institutional cultures, which include modelling by educators and an informal approach, can support soft skills development. Previous research supports this approach by proposing the use of examples, modelling and practice in integrating soft skills through curricula (Hanover Research, 2014a). Real world interaction also supports soft skills development, as it offers learning in context. This approach is among the best practices suggested by Pritchard (2013). University alumni may also appoint an independent body, such as a training consultant, to develop graduate soft skills.

6.2.1.2.3 “Intervention”, “empowerment” and “assessment system”

The interview data identified four categories of educator beliefs about responsibility for soft skills development: joint responsibility, student responsibility, educator responsibility, and assessment driven. These beliefs influence educators to support formal, non-formal or informal learning.

Educators who believed in joint responsibility demonstrated high confidence in educators and students for soft skills development. Responsibility was viewed as transitioning from educator to student (see Figure 6.6). The more capable students are in learning soft skills, the less responsible educators need to be. As they reach their senior year, students become more capable in learning soft skills – a reduction in dependency consistent with natural maturation, as presented by Knowles et al. (2011). A key aspect is that students should be able to identify a deficit then work on its elimination (Schulz, 2008). These educators supported formal, non-formal and informal learning in teaching and learning soft skills.

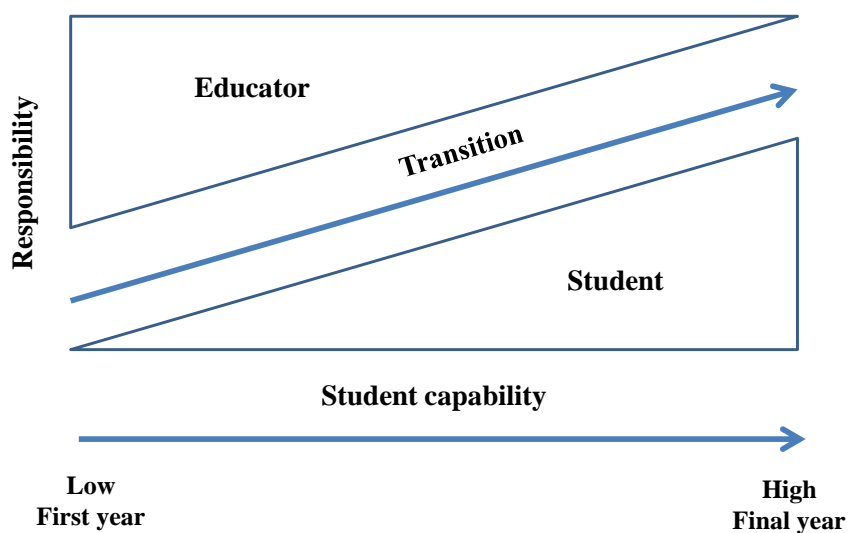


Figure 6.6: Transfer of responsibility for soft skills development

The educators who believed in student responsibility demonstrated high confidence in students for soft skills development. Soft skills are developed through experience and practice, and opportunities were perceived as continuous throughout student life. The exposure to various experiences and the implementation of diverse learning strategies are considered appropriate methods to deliver soft skills (Dawe, 2004). Soft skills are often learned by “discovering” and most involve implicit knowledge. Educators empower students by passing to them the responsibility for learning, which must be supported by a learning culture that actively encourages learning. Previous research supports the ideas of maintaining a learning organisation culture to develop soft skills (Pritchard, 2013). These educators supported non-formal and informal learning in teaching and learning soft skills.

However, the educators who believed in educator responsibility demonstrated low confidence in students for soft skills development, in part because the school system does not succeed in developing self-directed learners. They strongly believed that educators play an important role in developing student soft skills through activities, and that learning should not be approached in a similar manner to academic knowledge, where students learn theories and concepts directly from their teacher. This concurs with Roger’s student-centred approach that requires a shift in focus from teacher-centred to student-centred learning: “we cannot teach another person directly, we can only facilitate his learning” (as cited in Knowles et al., 2011, p. 44). The direction and support provided by educators is seen as central to the process. These educators supported formal learning in teaching and learning soft skills.

The educators who believed in assessment-driven learning and teaching demonstrated high confidence in the system, rather than in educators or students. They strongly believed that assessment can motivate students to learn and educators to teach. Earl

(2006) points out that learning can be enhanced by the collaboration of educators and students in the use of an assessment. In addition, assessment can motivate students to learn through stimulation of their intrinsic interests. These educators supported the assessment of formal and non-formal learning.

The study supports the notion that teaching and learning soft skills at universities involves the intervention of educators in formal and non-formal learning, empowering students to learn soft skills in formal, non-formal and informal learning, and the use of an assessment system to motivate students to learn in formal and non-formal learning. The above findings showed the emergence of various beliefs, with the educators preferring joint responsibility.

6.2.1.2.4 Teaching soft skills: individual and institutional factors

The interview data revealed that the emphasis on soft skills varies by discipline, as well as by educator beliefs. Only one participant believed that educators have to allocate more time to academic knowledge, and less time to soft skills, which may lead to less support for teaching and learning soft skills. The data indicated that some educators in certain disciplines, such as education, may have received training in soft skills development, which may support their teaching and learning of soft skills. The qualitative findings support that other factors such as institutional culture may influence teaching and learning soft skills.

The quantitative phase further explored educator perceptions about the emphasis they place on soft skills, confidence and willingness in teaching them. In general, perceptions about teaching soft skills were influenced by differences in the *discipline* they belonged to. For example, educators in education are prepared with teaching pedagogies that may assist them to teach communication, teamwork and leadership

skills. Conversely, educators in management possess business skills that may support them to teach communication, teamwork, entrepreneurship and leadership skills. In addition, having the basic knowledge associated with skills may help educators in society and culture to teach communication, teamwork and leadership skills.

In particular, university category and discipline affected the emphasis placed on teaching entrepreneurship skills. Educators from the specialised university in management education and in management disciplines placed more emphasis on teaching entrepreneurship skills. Given that most of these educators have extensive business knowledge, this emphasis was expected.

University category, discipline and level of educator industry experience also influenced confidence and willingness to teach entrepreneurship skills. Educators from the specialised university in management education, management disciplines and those who had industry experience were more confident and willing to teach entrepreneurship skills. Educators from the specialised university in management education and in management disciplines were also expected to be more confident and willing given that both capture the essence of entrepreneurship, whether by teaching how to manage and run a business, or through encouraging students to think creatively and innovatively about how to deal with organisational problems. Educators who were exposed to industry experience were aware of the demands of the labour market, and had the confidence and willingness to teach entrepreneurship skills. This practical business knowledge supports educators in using work-related learning (Dwerryhouse, 2001), experiential learning (Kolb, 1984), action learning (Smith, 2001) and entrepreneurial learning (Gibb, 1999) to better develop the entrepreneurship skills of students.

On the other hand, educator perceptions about teaching leadership skills were influenced by discipline. Educators in management disciplines placed more emphasis on teaching leadership skills, and were more confident and willing to teach these skills. This could be due to those educators having a strong foundation of leadership knowledge relating to the field of management.

6.2.1.2.5 Lacking “explicit” teaching and learning soft skills, and “reflection”

Educators reported implementing soft skills into their teaching in either planned or unplanned activities. While having planned activities for soft skills development is important, not outlining soft skills in the learning objectives provides less assistance. This is because educators either only provide students with guidelines or informally explain soft skills development. While the evidence is that having both planned activities and explicit learning objectives aids students in learning soft skills (Hager & Holland, 2006; Knight & Yorke, 2000), very few educators reported implementing this approach. In unplanned activities, students incidentally learn soft skills when educators informally explain soft skills development in their teaching. The interview data also highlighted that the current practice of educators, where teaching and learning is implicit and reflection and feedback are lacking, may not support soft skills development.

6.2.1.2.6 Student-centred learning (SCL) and role of educators as “facilitators”

Educators promote the importance of developing soft skills by facilitating, assessing and pushing students. Most educators in the interviews preferred facilitating. While communicating assessment feedback is an important element in assessing, pushing was applied when educators believed students were passive. This study adds more evidence to the importance of various and interdependent roles played by educators, which points

to their role as facilitator, and SCL as a tool in teaching and learning soft skills. SCL and other learning strategies such as self-directed and flexible learning are important for soft skills development (Denton, 2004).

6.2.1.2.7 Integrating soft skills in teaching and learning: “polishing” soft skills

The quantitative data revealed that entrepreneurship and leadership skills were least emphasised when compared to other skills such as communication, critical thinking and problem solving, and moral and professional ethics. This result was expected, as communication and critical thinking and problem solving are conventional skills with long traditions in the education system. Moral and professional ethics might be seen as important as these guide life and employment. These findings demonstrate a possible connection between workplace and HEIs goals, with employers viewing these soft skills as priorities for employment (see Hart Research Associates, 2015; Pritchard, 2013). In contrast, skills such as entrepreneurship and leadership involve attributes such as personality, professionalism and confidence, which are difficult to develop (Tymon, 2011). In addition, training students for careers, especially entrepreneurial careers, is relatively new compared to traditional university educator roles that have focused on teaching and research (Martin & Etzkowitz, 2000).

Three skills were identified as being well integrated into teaching and learning – communication, teamwork, and critical thinking and problem solving. This was expected because the educators paid more attention to these conventional skills. Furthermore, the collectivist cultures within which this study occurred value teamwork. Employers also rank these skills as priorities for entry-level employment (Pritchard, 2013).

Moral and professional ethics, entrepreneurship skills, and lifelong learning and information management were identified as not well integrated into teaching and learning, with this possibly due to personal attributes associated with these skills, which are hard to develop (Tymon, 2011). For example, personal attributes associated with moral and professional ethics are integrity and reliability, whereas entrepreneurship skills are associated with creativity, innovation and adaptability, and lifelong learning and information management are aligned with interest and willingness to learn.

The qualitative data revealed that to better deliver soft skills through an embedded approach, educators suggested four options: teaching and learning strategies, supports and resources, reward and recognition, and promotion and marketing. Universities have the capacity to address these four suggestions. In teaching and learning strategies, the role of the educator as facilitator is centred on “polishing” students’ soft skills, as schools should have initiated these skills before students entered university. The educators supported the expansion of teaching pedagogies from traditional approaches, where students directly learn theories and concepts from their teachers, to indirect, interactive and attractive approaches that focus on students. These learning strategies, which focus on SCL, are seen as important in the MOHE delivery approach. SCL assists students to take responsibility for their own learning (Gibb, 1999) and increases their confidence levels (Lea, Stephenson & Troy 2003). Highlighted in the literature is the fact that some educators may not pay much attention to soft skills mapping and may not understand how to conduct SCL (Callan, 2004). The most important part of SCL is reflection, which is very significant in learning from experience (Mak, n.d.). The educators recognised that, in order to learn, opportunities should be created for students to apply soft skills. Monitoring was seen as equally important to teaching and learning soft skills to ensure students are learning. Support and resources for educators such as

training, financial support and infrastructure are important for the effective delivery of soft skills. Reward and recognition may motivate educators to better deliver soft skills and students to learn. However, universities need to find a balance between teaching and learning soft skills, and reward and recognition.

As mentioned earlier, educators also believed that students recognise that many activities are conducted for soft skills development, but lack awareness of the approaches. Thus, suggestions for promotion and marketing were expected. Awareness is important in the teaching and learning of soft skills because it will keep educators and students in a constant state of readiness for teaching and learning.

6.2.1.2.8 Obstacles to teaching and learning soft skills

The quantitative data revealed that over half of the educators indicated that there were obstacles to teaching soft skills. Educators in the engineering discipline perceived greater obstacles when compared to educators in other disciplines. This was expected, as the core characteristics of technical skills are different from soft skills. The obstacles encompassed six categories: engagement; coordination; class size; time constraints; institutional culture and university system; and other forms of institutional support including budget, workload and training. These findings are in line with earlier studies (see Abu et al., 2008; de la Harpe et al., 2009; Jones, 2009).

The most challenging obstacle identified in the data was engagement. Concerted effort is needed to deal with people's mindsets, institutional culture and the university system when compared to physical obstacles such as coordination, class size, time constraints and other forms of institutional support. This involves the attitudinal change of all people involved across time. According to Ehlers and Schneckenberg (2010) the concept of openness, which is featured by open innovation and open leadership

approaches, is important in changing organisational culture. Pritchard (2013) highlights the importance of engagement, especially among students, as a means for soft skills development. As such, it is essential for universities to surmount the obstacles by reassessing their current practices to enhance teaching and learning soft skills.

The findings of the present study have shown the importance of an agile hybrid approach and a flexible role for educators in developing soft skills. There is no single “one size fits all” model, and soft skills development calls for the varied and interdependent role of educator as a teacher, facilitator and consultant.

6.2.1.3 Personal beliefs and assessing soft skills

As they do teaching, educator personal beliefs influence assessing soft skills. Again, educator views in the qualitative data were presented in the form of their experiences. In general, educators believed it was still early in the adoption of the MOHE modules for universities to implement assessment. The universities involved in this study are in the process of identifying ways to assess soft skills and provide recognition to students who have developed a level of competency. Some universities have initiated formal mediums such as a STG, multi-level evaluation, and student merit books or portfolios, but have not yet comprehensively evaluated their effectiveness.

The educators revealed that perception-based assessment is subjective, and often lacks explicit instruction, criteria and reflection. The educators agreed that training and experience are needed to enhance their competency to assess soft skills. The qualitative data identified that only a few educators attended soft skills assessment training. Those who attended highly valued the idea of training and commented that training was often not directly focused on the assessment of soft skills. The educators also revealed that the methods used to assess soft skills were learned from their formal education and

experiences, including from colleagues, rather than from structured educator development opportunities. This experience is similar to teaching soft skills, discussed above. The educators indicated that they were less skilled to assess soft skills. However, motivation to attend training in soft skill assessment decreased when the training was optional, when it was less promoted by top management and when educators received mixed signals regarding university priorities. This latter situation was thought to occur more particularly when universities are competing to achieve research university status. It is recommended that assessment training be made mandatory to all educators.

6.2.1.3.1 Assessment as a medium to monitor and motivate soft skills learning

In general, the assessment of soft skills in the MOHE delivery (including industrial training) involves students being assigned grade points, performance levels, pass/fail, satisfactory/unsatisfactory or certificates of attendance. Assessment is seen as a medium to monitor and motivate learning. This is similar to the approach to academic knowledge where assessment is seen as important and as driving what students learn (Hautamäki, 2015; Wood, Thomas, & Rigbi, 2011). Curtis (2004b) suggests that without assessment soft skills are seen as less important by students. Students with less motivation to develop soft skills can be encouraged by assessment (Callan, 2004).

As mentioned earlier, the predominant learning in formal teaching and learning activities is formal learning, and non-formal learning is predominant in support programs, campus life activities and industrial training. The appropriateness of assessment of formal learning and non-formal learning of soft skills at universities is debatable, as these lifelong skills are often learned informally. Furthermore, some attributes, such as personal and interpersonal skills, which are inherited (Rutter et al.,

1997) or gradually developed across time (Woods & West, 2010), are not easy to measure (Curtis, 2004b) and understand (Julian, 2004). Assessment for learning that features formative judgements has an important role to play in developing soft skills as these skills are developed throughout life. This study suggests using assessment of learning only for situations when summative judgements are required.

The emphasis given to the assessment of soft skills was expected, as it is not a new approach in learning environments and is deeply rooted in the exam-oriented culture of the Malaysian education system. Educator arguments coalesced around grades and around the issue of whether soft skills should be assessed at all. The educators claimed that assigning students a pass/fail or satisfactory/unsatisfactory mark would not have much effect on student learning compared to assigning grades. The reporting of soft skills remains problematic despite the research undertaken on the authentic assessment of soft skills (Precision Consultancy for the BIHECC, 2007).

On the other hand, over one third of the educators believed that soft skills should not be assessed at all because the assessment is often subjective and the learning often implicit. They think that assessment is not valid unless conducted in a highly contextualised environment, and that assessment is unnecessary as learning is acquired from experience. Furthermore, the assessment of soft skills cannot be conducted in a similar manner to the assessment of academic knowledge. Julian (2004) indicates that the complexity in the development and assessment of soft skills is based on the identification and description of these skills and attributes. In terms of authentic assessments, one important characteristic is that it should be conducted within a work-based or simulation environment (Curtis, 2004b), or within a context-specific environment, such as teamwork skills being assessed in a team environment (Julian, 2004).

The educators highlighted a preference for standard assessment instruments (which are reliable and valid), assessment strategies that involve various activities in context, assessor collaboration and student feedback for assessment improvement, sufficient support and resources, and suitable rewards and recognitions. The educators referred to the standard assessment instruments as any kind of measurement that accurately evaluates the intended purpose and provides enough consistent and stable information for them to be confident about the process. Clayton et al. (2004) suggest the collaboration of assessors to reach consistency in conducting assessment of soft skills and in the outcomes. In addition, Sarchielli (2015) argues that the use of multisourcing information can accurately assess soft skills.

6.2.1.3.2 Self-assessment and soft skills learning

The educators placed greater emphasis on the assessment of formal learning in the embedded model and the standalone model, despite the fact that non-formal and informal learning may exist simultaneously. The educators also placed greater emphasis on the assessment of non-formal learning academic and non-academic focused programs, campus life activities and industrial training.

Given that these lifelong skills are often learned informally, student merit books or portfolios, which include student self-assessment, seem to be the preferred approaches in assessing soft skills. Self-assessment can promote student learning (Lawson et al., 2012) and this may lead to authentic assessment. Student portfolios are the most common approach in assessing soft skills (Curtis, 2004b), and are seen by universities and industries as a practical method (Precision Consultancy for the BIHECC, 2007). In addition, the e-portfolio is an innovative tool (Cimatti, 2016) that supports learning and serves as a showcase for presenting individual competencies (Giovanni, 2015). This

approach is supported by students (Callan, 2004). The empowered approach was applied at Torrens Valley TAFE, in the electronics and information technology program (Electrotechnology Training Package), whereby students were required to improve their performance through self-assessment and facilitators were required to prove student performance through validation (Denton, 2004). The inclusion of learner-centred, self-directed and flexible learning strategies in this approach supports the contention that soft skills are not taught, but rather learned and developed. Other studies (Crebert et al., 2004; de Corte, 1996; Knight & Yorke, 2000; Moy, 1999) also support this view.

6.2.1.3.3 Assessing soft skills: individual and institutional factors

The quantitative phase explored educator perceptions about the emphasis they place on soft skills, and their confidence and willingness in assessing them. In particular, university category and discipline impacted on the emphasis placed on assessing entrepreneurship skills. Educators from the specialised university in management education and in management disciplines placed greater emphasis on assessing entrepreneurship skills. This could be due to the extensive business knowledge that these educators possessed, which underpinned assessment.

In addition, similar to teaching entrepreneurship skills, university category, discipline and whether educators had industry experience influenced confidence and willingness to assess entrepreneurship skills. Educators from the specialised university in management education, in management disciplines and those who had industry experience were more confident and willing to assess entrepreneurship skills. This was expected, given they probably had training in the entrepreneurship field and were competent in assessing entrepreneurship skills.

Notably, university category influenced educators' perceptions about the emphasis they place on leadership skills, and their confidence and willingness in assessing them, while the discipline area influenced educators' perceptions about their emphasis to assess leadership skills. Educators from the broad-based university and the specialised university in management education placed greater emphasis on, and were more confident and willing to assess, leadership skills. This may be because these educators had some foundation in the field of leadership. Educators in management disciplines were expected to place more emphasis on assessing leadership skills, as leadership is a core area of management.

6.2.1.3.4 Lacking “explicit” assessment and “feedback”

Although delivery approaches are clearly outlined in the university soft skills module, this study corroborates the findings in training packages regarding soft skills, which indicate that “there can be no consistent approach to assessment of them” (Clayton et al., 2004, p. 162). Possible reasons for this are that learning objectives are often implicit, and there are a lack of assessment guidelines, performance benchmarks and matrices. Furthermore, educators often overlooked feedback, which is important in teaching and assessing soft skills. Yet, according to the literature, the clarification of key elements of soft skills and an analysis of their use are supposed to be important focuses in teaching soft skills (Curtis, 2004a).

The educators perceived that students have a moderate understanding of soft skills assessment, and that students were aware of the assessment. However, they perceived that not all assessments were explicit and that assessments lacked a feedback process, which led to students being less motivated in learning because they were not able to relate activities to personal or professional gain.

6.2.1.3.5 Assessing soft skills: educator satisfaction and support

In terms of satisfaction, educators were moderately satisfied with assessment and reporting. Educator satisfaction levels decreased when they lacked confidence and an understanding of the medium, process and skills. This study highlights the importance of top management support in areas of training, in order to increase educator confidence and understanding of the medium used, process involved and skills needed. According to Clayton et al. (2004), a clear standard set of guidelines, performances and matrices leads to increased confidence amongst assessors.

Educators were moderately supportive of assessment as a medium to achieve soft skills development. This was expected because support and resources from the university were seen as lacking and the competency of educators was seen as an aspect that may hinder goal achievement. The educators also perceived the universities as not serious about incorporating soft skills in qualifications, which is similar to many universities internationally, such as in Australia (Precision Consultancy for the BIHECC, 2007). This study highlights that access to sufficient support and resources were the main aspects hindering goal achievement, rather than the willingness of educators to assess. Thus, the competency of educators could be managed by universities using various means, and educators could be attracted to attend the available workshops and seminars. If the concern is willingness, this is not easy to manage. As suggested by Clayton et al. (2004), a national policy and strategies that support resourcing and the certifying of soft skills assessment are needed. The attention given to support and resources, and the concerns about obstacles, may cultivate an understanding of the issues surrounding soft skills assessment and thus increase the motivation and willingness of educators to participate in training.

6.2.1.3.6 Obstacles to assessing soft skills

The quantitative data revealed that over half of the educators perceived that there were obstacles to assessing soft skills, while the interview data revealed that these problems were centred on the medium (that is, the instrument) used to assess student soft skills, the process (which refers to perceptions of educators – that is, judgements and decisions about students' soft skills achievement), and the skills (which refers to the competency of educators in evaluating student soft skills).

The educators claimed that no specific assessment instruments had been identified as valid and reliable. The educators maintained the need for a standard assessment format, with assessor collaboration to gain consistency, and again they emphasised the need for feedback or reflection in learning soft skills. The process of assessment, which involves perceptions, was seen as difficult, as it may not reflect the overall performance of students. For example, there can be invalid judgements of soft skills in the embedded model because they are not specifically assessed (Clayton et al., 2004 & Curtis, 2004b). Sarchielli (2015) suggests multi-sourcing information is needed, including self-assessment, because educator assessment may not accurately assess soft skills. Finally, educators doubted their own competency in assessing soft skills, and expressed their need for training and experience. Thus, clear guidance on the medium, process and skills of assessment is needed. This could be achieved through support for training.

6.3 Conclusion

This chapter has presented a synthesis and interpretation of qualitative and quantitative results gathered from in-depth interviews and an online survey, both of which generated

themes. Major principles of formal, non-formal and informal learning were used to interpret the results. Teaching and learning theories such as pedagogy, andragogy and heutagogy were employed to further explain the approach to teaching and learning soft skills. Other concepts such as personal beliefs and cognitive dissonance were also used to interpret the results.

This study shows that educator personal beliefs are key influences on educator approaches to role conflict in soft skills development, and in teaching and assessing soft skills. Educator personal beliefs and perceptions emerged from the data as an important part in understanding the role of educators who teach and assess soft skills at Malaysian universities.

The methodological gains from this study are presented as a stance. The shift from a pragmatic stance (a design that incorporates the research questions and a framework for integration of the various data sources) to a dialectic stance (a use of data from both the inductive framework of the qualitative and the deductive framework of the quantitative to inform each other in the interpretation) is featured in exploring educator perceptions and experiences about soft skills development, including both positive and negative aspects. These findings have important contributions to academic knowledge, methodology and practices. The implications for policy makers at government and institutional levels, and for professional development and practice, including strategies and approaches, will be discussed in the following chapter.

CHAPTER VII

CONCLUSIONS, IMPLICATIONS AND FUTURE RESEARCH

7.1 Introduction

This study investigated educator experiences of soft skills development in higher education institutions (HEIs) in Malaysia against the backdrop of the application of the Ministry of Higher Education's (MOHE's) soft skills module. The key findings are that the personal beliefs of educators are fundamental to understanding how teaching and learning soft skills occurs; that there are elements of formal, non-formal and informal learning in developing soft skills that lead to the importance and use of a hybrid model; and that students taking individual responsibility is central in their becoming capable people. This chapter summarises the key findings outlined in Chapter VII. It then goes on to discuss implications, outline possibilities for future research, and present the researcher's reflections in relation to those findings based on her experience as an educator, prior to the chapter's conclusion.

7.2 Key findings

Three key outcomes are derived from the research: firstly, an educator's personal beliefs play a critical role in understanding the teaching and learning of soft skills; secondly, that in teaching and assessing soft skills a hybrid model, which draws on pedagogical, andragogical and heutagogical principles and fits the learning situation, may help educators; and thirdly, that educators as facilitators cannot replace the contribution of students as individuals in developing their own soft skills.

7.2.1 Personal beliefs are key to understanding teaching and learning soft skills

Soft skills development is immensely influenced by the personal beliefs of educators. Educators' beliefs translate to their teaching and assessing practice in complex ways. Thus, it is important for universities to continuously target support and development addressing these beliefs; professional development programs cannot be reduced simply to the educator position of willingness. Educators have their own philosophy of teaching and assessing soft skills that determines how they perceive their role. Developing an understanding of educator personal beliefs helps close the gap between ideal notions of strategies and their enactment in teaching practice.

7.2.2 Agile hybrid approach: formal, non-formal and informal learning in developing soft skills

In one learning episode, formal, non-formal and informal learning may occur simultaneously and any one may dominate the learning process. As this study indicates that soft skills are often learned informally, empowering students may lead them to become self-directed learners and thus more able to develop soft skills. The use of a hybrid of pedagogical, andragogical and heutagogical principles that suits the learning situation helps educators in developing students' soft skills. Based on current conceptions of educators, it is not helpful to have a 'one size fits all' model for soft skills development and so an agile hybrid approach and a flexible role for educators are suggested. Student-centred learning (SCL) is seen as important regardless of the learning mode. This research suggests that it is important for HEIs to find a balance between what is required by the standard assessment (which offers less room for flexibility and often has to follow the requirements of the professional body) and what is supported by the principles of SCL, which offer more room for flexibility and self-directed learning.

7.2.3 Building capable people: the role of students

Educators as facilitators cannot replace the central role of individual students in developing their own soft skills to enhance their employability; however, the educators including the employers should be cognisant with other aspects of employability. Thus, the broader development of graduate employability should be shared by students, educators and employers. Barnett (2006) argues that with or without HEIs, individuals will continue to re-discover and re-adjust themselves and that soft skills are often learned in informal environments. Therefore, given rapid changes that require people to use relevant academic knowledge and soft skills to cope, the most significant role of HEIs is to build capability in students for *ongoing learning*. Moreover, in terms of employability, a more realistic approach is to recognise that “graduates cannot possibly have all knowledge, skills and abilities”, therefore prioritising the ability to share knowledge and understanding (Hinchliffe, 2006, p. 100). Hinchliffe (2006, p. 100) suggests that the approach to employability is to ensure that graduates are aware of “the shared nature of the attributes and a certain ... modesty about just what any individual can contribute”. The *bfactor* project report (de la Harpe et al., 2009, p. 60) asserts “It is impossible for universities to produce graduates who are work-ready if they continue to rely solely on the curriculum and those who teach it as being responsible for the task of developing graduate attributes”. As educators, reinforcing the concept of selfhood as part of the pedagogical approach to learning can make possible a propensity for lifelong learning in students’ soft skills development (Hinchliffe, 2006).

7.3 Significance and implications

These findings are significant for a number of reasons. They build on current thinking about the development of soft skills in higher education at a time when work readiness and graduate employability are at the forefront of curriculum design and implementation (see Hart Research Associates, 2015; Kruger, 2015; Pritchard, 2013; University of Wisconsin-Madison, 2015). By drawing on the perceptions of educators, the study highlights the importance of their role, and provides a focus that has implications for theory and that can contribute to policy and professional development for educators.

7.3.1 Implications for theory

Two frameworks have been proposed based on the findings of this research. The first (Figure 6.4) relates to educators' perceptions about their role (see Section 6.5.1.1) and the second (Figure 6.3) to guide teaching and assessing soft skills (see Section 6.5). Across these frameworks, the important role of educators in soft skills development is determined by their beliefs; by the teaching approaches adopted; and by the learning environments that include controlled (educator directed), semi-controlled (university directed) and non-controlled (student directed). Theories of teaching and learning such as pedagogy, andragogy and heutagogy play a role in the choices educators make concerning their approaches to soft skills development. This pattern is consistent with that presented by Barrie (2004, 2006, 2007), de la Harpe and David (2012), Dunne, Bennet, and Carre (2000), and Radloff, de la Harpe, Dalton, Thomas, and Lawson (2008), and it supports that consideration of educator beliefs is needed to encourage the use of various strategies towards the implementation of an agile hybrid approach. Specifically, the evidence in the present study suggests that no single 'one size fits all'

model for soft skills development can be applied, and supports calls for the educator to be agile in facilitating this hybrid approach that takes into account personal beliefs, the learning environment, and the various and interdependent roles of educator as teacher, facilitator and consultant.

Figure 7.1 represents clearly the interaction of beliefs, teaching approaches and learning environments and the central role of the *agile educator* in the teaching and assessing of soft skills. The region of overlap in the centre of the figure represents *educator agility* – a role which harnesses educator beliefs, teaching approaches and learning environments. In this model the agility of the educator is central to meeting the demands of each of the interdependent spheres. It is evident that *educator beliefs* are one of the most important contributors to agility. For example, educators have their own expectations and views on the formalisation of soft skills development in the educational system. When educators accept the change in curriculum, they are more likely to accept responsibility for development of soft skills in students relative to *learning environments* using various *teaching approaches*. Erkmen (2006) supports such connection between acceptance of change and responsibility. The research suggests that it is important for educators to be prepared and permitted to intervene at any time and in any way to make sure soft skills learning occurs. This challenges educators to develop agility in teaching and assessing soft skills so they can adopt a flexible role in guiding students to learn. Capitalising on educator agility has implications for policy development.

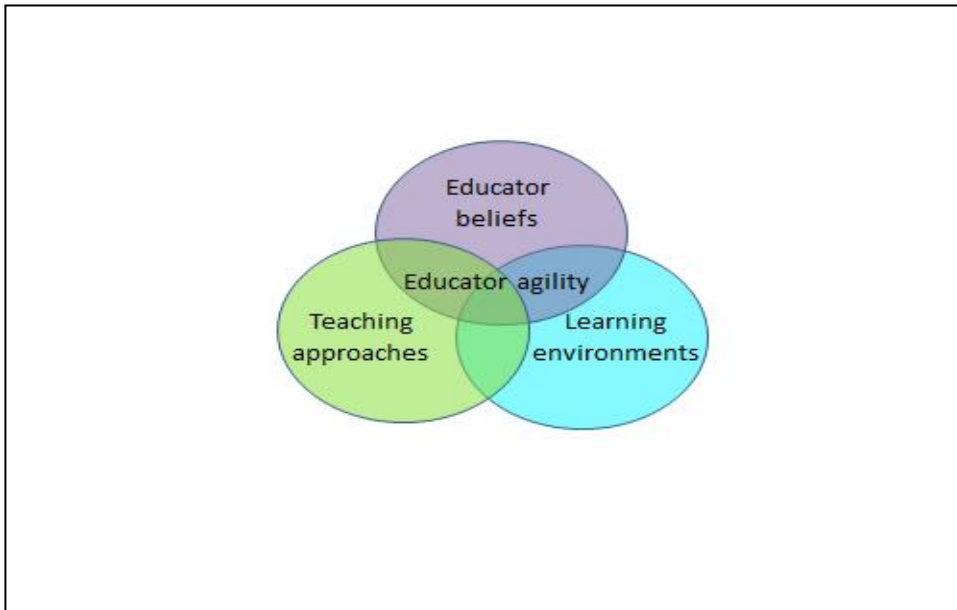


Figure 7.1: Central role of agile educator in teaching and assessing soft skills

7.3.2 Implications for policy development

The evidence is that policies, at all levels, have the capacity to support soft skills development. Formulating policies, establishing information networks (both human and technological) and supporting innovation are some of the conditions that can enable the development of soft skills. The MOHE can support HEIs through clear definitions, guidance and communication; the provision of information and resources; and the dissemination of existing and promising practices in the field of soft skills development. However, the implementation of any new soft skills development policy, tool or practice, whether at national or university level, needs to take into account the complex structure of educator beliefs on soft skills development.

The study has shown that there are variations in views of teaching and assessing soft skills. Generally educators support government efforts in developing these skills. The evidence also suggests a need for HEIs to ensure that their strategic plans clearly

emphasise their role in soft skills development and provide a culture that supports educators to effectively undertake their role, a view that is supported by Yorks (2005).

A national policy and strategies that support resourcing and certifying the assessment of soft skills are needed to successfully develop soft skills at HEIs. The Malaysian education system, which currently emphasises student achievement, is likely to be more effective if supplemented by efforts to find the right balance between academic knowledge and soft skills. Simply introducing an assessment innovation, even if accompanied by appropriate educator professional development, is less likely to achieve policy objectives if the differing beliefs of educators are not addressed. Otherwise, it is likely that few educators will adopt the innovation in a manner consistent with the intentions of the innovation's developers.

7.3.3 Implications for educator professional development

The implications for professional development are that programs for educators will be more effective if built within a framework that recognises their individual beliefs about teaching and assessing soft skills and how this influences their self-efficacy, as suggested by Postareff, Lindblom-Ylänne, and Nevgi (2007). This study suggests that professional development would need to occur at a number of levels: capability to undertake tasks (which would align with some type of educator training); competence to undertake tasks (which, for example, could take the form of continual mentoring or organisation support); and a commitment from educators towards emphasising teaching and assessing soft skills via cultural change of institutions.

7.3.3.1 Capability to undertake tasks

Modifications to teaching qualifications or inclusion of additional content on soft skills development may prove to be an important part of training. Understanding about how

to teach and assess these lifelong skills can be improved with sound knowledge of specific pedagogical, andragogical and heutagogical principles. The use of these principles, which depends on the learning situations, will lead to more effective ways of learning soft skills. It is also important for HEIs to ensure the availability and accessibility of training programs, especially to junior staff, and decide whether to make training optional or compulsory, depending on the program content. Discipline educators can also be trained to become specialists in soft skills at a certain degree as this is perceived as important in delivering teaching and learning soft skills.

Specifically, there appears to be a need for educators to be more familiar with their university's official list of soft skills in order to close the gaps in understanding soft skills across all educator groups. In particular, this can be achieved by increasing educators' understanding through exposing them to issues related to the existing terms and concepts of soft skills. This goes beyond simple and direct translation to include the interpretation of these skills as a combination of skills and personal attributes. Greater understanding and appropriate conceptions support the development of soft skills (Radloff et al., 2008), especially with respect to their importance; for example, in the development of entrepreneurship and leadership skills for transfer into employment settings.

Regarding soft skills training for educators, this study specifically suggests that it is important for HEIs to consider educator discipline areas, and the extent to which educators are able to assess soft skills, and have confidence in understanding of the medium, process and skills. This study has identified that demographic variables can explain the differences in perceptions of educators. In particular, university category and discipline has been found to influence beliefs about teaching and assessing entrepreneurship skills. Training seems to be of importance to research and technical

competence-based universities rather than business-based universities, which are more closely aligned to the teaching and assessing of entrepreneurship skills. For example, the *bfactor* project suggested that the ability to assess soft skills was a function of educator self-efficacy, a matter which emerged in this study but is not canvassed in this thesis (de la Harpe et al., 2009). Thus, educator self-efficacy could also be promoted through training and this suggests that additional research is needed into how to promote educator self-efficacy and how to measure its impact.

7.3.3.2 Competence to undertake tasks

Professional development in the competence to undertake tasks scenario would focus on ‘how to’ develop soft skills, and specifically on the creation of a supportive learning environment that employs a combination of the three approaches in the MOHE soft skills curriculum. The educator professional development framework is more likely to achieve successful outcomes if it is built on increased awareness amongst policymakers, decision-makers and educators about the various views on the delivery of soft skills. Effective leadership that provides continual mentoring opportunities for learning and development, together with strategically placed resources, is likely to assist educators in realising the aim of developing soft skills in students.

The results of this study support an agile hybrid approach to soft skills development. This approach proposes a sort of continuum of practice. In undertaking the tasks, the emphasis of educators on experiential learning and the continual development of students are critical for soft skills development. Efforts to incorporate all three teaching approaches and avenues for informal and incidental learning will go some way towards addressing educators’ beliefs and adjusting their role, and facilitating a more agile approach to soft skills development. Such a focus will create an opportunity to share

innovative approaches to teaching and learning soft skills in a culture of collegiate sharing within and between HEIs.

Given that most soft skills learning occurs in semi or non-controlled situations in which students have a sense of ownership and freedom, this research suggests that it is important for educators to have appropriate conceptions of teaching and to be mindful of adjusting their role according to the learning situations. The right balance between teaching academic knowledge and soft skills can ensure that students gain both. Soft skills need to be associated with discipline areas (Bath, Smith, Stein, & Swann, 2004) and applied either inside or outside the class environment to ensure an effective learning process.

Soft skills are learned and developed rather than taught. An agile hybrid approach and a flexible role for educators as teacher, facilitator and consultant in teaching and learning is likely to offer more opportunities for soft skills development, provided that cooperation and coordination are well managed by HEIs. While difficult, the element of skills can be developed; however, developing the element of personal attributes takes longer. In undertaking the tasks required to develop soft skills in students, it is important for educators to balance the use of teaching and assessing strategies; support and resources; reward and recognition; and promotion and marketing.

Industrial training, or work integrated learning (WIL) has an important role in developing soft skills and if educators perceive this they can help create awareness among students, through WIL, of the importance of knowledge and skills, as well as the current needs of the labour market. It is also important for educators to give attention to learning and development opportunities for students living in residential colleges and to provide other opportunities for independent learning.

The evidence in the present study suggests that educators need to make explicit what is acquired implicitly in teaching and learning soft skills. Reflection is a powerful means to learn from experience, and can be adopted by educators. It is important for educators to encourage students to learn and to ensure they are learning. Although teaching and learning situations may not be under educators' full control, increasing students' engagement is essential. Empowering students to learn soft skills will lead them to become self-directed learners. In this, SCL and the educator's role as facilitator are important for soft skills development.

The evidence suggests assessment of soft skills acquisition cannot be conducted in a manner similar to academic knowledge assessment. This study suggests that assessment should be conducted as a form of monitoring, where attention is given to assessment for learning rather than assessment of learning. This includes self-assessment, especially when it is not practicable for educators to conduct assessment. For example, in some cases a level of perception is central to the assessment, thus authentic assessment is impeded. Student portfolios are practicable for both HEIs and industry placements. This study suggests that it is important to give attention to authentic assessment by placing such assessment within contextual environments and by making learning explicit via feedback.

As a result of the data, this study suggests that it is important for educators to perceive obstacles to teaching and assessing soft skills as challenges that will enable them to better develop and teach soft skills. This can occur by educators focusing on their competency and the resources that are available to overcome the challenges, and by promoting efforts that offer a sound strategy for soft skills development.

7.3.3.3 Commitment from educators and their institutions

Soft skills are developed throughout life and thus tertiary education is just one part of the overall effort to develop soft skills in students. This study suggests that a factor likely to enhance success is an institutional commitment to soft skills development, with responsibility across all divisions, faculties, programs and courses through well-coordinated collaborative initiatives. In order to achieve this, HEIs need to develop policies and guidelines and adopt best practices that become part of the institutional culture to support soft skills development, and that are further supported through the professional development of educators. While individual responsibility is important to soft skills development, the evidence suggests a need for educator commitment to building students' capabilities. These capabilities include the ability to deal with uncertainties caused by the rapid changes that are created by complex and super complex situations. In this vein, university-industry partnerships are also important as these can create opportunities for resources and learning in context.

7.4 Recognition of limitations

As is always the case, a number of limitations with this study must be acknowledged.

7.4.1 Data

A mix of well-established and young public HEIs in Malaysia (five HEIs), across four university categories, with participants from two job groups (senior leadership group and non-senior leadership group) were used to elicit the data. Although soft skills development may not be as widely accepted among other HEIs with different characteristics, this study provides a sound basis for analysis because of the variability

in the participating institutions. It is recognised, for example, that newly established HEIs may not be ready to intensify their full effort towards soft skills development as they are still developing infrastructure and working on strengthening their courses and programs. However, recognition of this work may offer them the opportunity to embed a soft skills culture as courses and programs are developed. Similarly, well-established HEIs may be well progressed in their efforts to develop soft skills in their students but may be able to identify areas for review and reconsideration. Private HEIs may differ in their soft skills development approach but may find benefit in understanding key elements of this research. A strength of this research is that data was gathered from both well-established and young public HEIs but did not seek to explore the differences in effort of each towards soft skills development. Future studies that consider these differences may provide additional insights.

Data in the qualitative phase was generated from a single ethnic group; as a consequence, the influence of ethnicity on soft skills development was not explored in this study. Perceptions of participants from different ethnic backgrounds and cultures may shed light on the understandings of cultural norms and practices that participants bring to the learning environment that supports soft skills development. Institutional culture associated with soft skills development was not explored nor controlled for in this study.

Key elements of the quantitative data were extracted and analysed as part of the mixed methods approach adopted for this study, as described in Chapter III. The data collected in the quantitative phase has not yet been utilised to its full potential; however, this is not seen as reducing the legitimacy of this approach. The data collected in this latter phase continues to be analysed as work on the project continues.

Another potential limitation of the quantitative phase of this study is that perceptions of educators were examined irrespective of what type of teaching approach they were engaged in (e.g., standalone etc.). It would be worthwhile in the future to examine perceptions according to different delivery modes. Data about job position (senior leadership group verses non-senior leadership group) was also not collected in the quantitative phase, which could account for some of the results.

Finally, the scope of any future study should be widened to include types of knowledge that educators possess and a shift from the skills approach to a broader conceptualisation of graduate employability. The limitations outlined above need to be considered in light of the current study and as a source of improving the proposed frameworks.

7.4.2 Methods

Perceptions of teaching and learning may not equate to educator practice but a study of perceptions is important because they influence the way educators act and react to their surroundings (Kember & Kwan, 2000; Pratt, 1992; Prosser & Trigwell, 1997). Using mixed methods to identify these perceptions was a way of furthering understanding. Education is one of the discipline fields that are showing high levels of acceptance for mixed methods (Cameron, 2010). For example, in this study, the quantitative data indicated that more than half of educators perceived the obstacles in teaching and assessing, while the qualitative data illustrated and enhanced this quantitative data by identifying the obstacles to better understand the experiences of educators. Thus, the methodology triangulates the findings from quantitative and qualitative data. As a result, a more complete picture has emerged – in terms of educator objective experiences, their perceptions of those experiences, and the stories of their experiences.

Although online surveys offer an automated data collection process that decreases researcher time and cost, there are also some limitations in using these as a data collection strategy. The limitations include difficulties in generating a precise sampling frame and in determining the validity of the data (Wright, 2005). In this study, although the exact response rates could not be calculated (as the data collection arrangements were made by each university and therefore beyond the control of the researcher), data were considered representative of the educator population in the five HEIs. Thus, minimising these limitations could be the focus of future studies, such as through using a unique code number on the online questionnaire or response tracking to help reduce multiple responses (Wright, 2005).

7.4.3 Challenges of mixing

The challenge of mixing data includes the difficulties associated with enhancing the interpretation of significant findings. The different elements of the study were considered both separately and in an integrated form. The iterative process of comparing the findings from the dominant qualitative phase with the quantitative segment of the study involved identifying consistent and inconsistent patterns. At each stage inferences made were tested back against the data and the literature to identify what, if any, anomalies emerged. Inferential inconsistency was only apparent where the qualitative data had provided more depth and there was not sufficient depth in the quantitative data to develop a theoretical position or vice versa. Such anomalies and inconsistencies were set aside as areas for further investigation. One example of this is the role of cognitive dissonance for educators, flagged as a phenomenon warranting deeper investigation. Another example is that the quantitative study highlighted the differential discipline effects that educator perceptions have about teaching and assessing certain soft skills. This was not explored any further in the qualitative study.

The existence of contradictory findings across the two phases in mixed methods research requires careful handling, although there are likely to be outliers or dissonant voices in any data set. For example, the evidence suggests that the emphasis on soft skills may vary by discipline (quantitative data and qualitative data) as well as by educator beliefs (qualitative data). Findings from different methodologies were not always complementary but captured different perspectives of the phenomenon. The challenge was to synthesise information from both data sets in a meaningful way when the samples sizes were so different. However, in describing the issue fully in this study, both contradictory and complementary findings were needed to capture nuances and to inform education policy. For example, the qualitative interviews suggested that educator beliefs were complex and that the approach selected by educators is determined by a sophisticated interplay of learning context and their personal beliefs.

In terms of reporting style, the qualitative data focuses on inductive thinking, whereas the quantitative data focuses on deductive thinking. The differences in the discussion of the study were at times difficult to reconcile. However, it has been argued that this tension can produce more meaningful interactions and thus generate new results (Pinto, 2010). For example in this study, deductive analysis of the online survey data found that demographic characteristics can help explain educator perceptions about the emphasis, confidence and willingness to teach and assess soft skills. Further, through inductive analysis it was determined that personal beliefs are key influences on educator approaches to role conflict in soft skills development, and to teaching and assessing soft skills. Findings from both were transformed into new results that led to the development of the framework to better understand educator perceptions of their role and to guide teaching and assessing of soft skills. Bryman (2014, p. 128) asserts that the element of triangulation is not only “to treat one set of data as validity test for the

other but to use the contrasting findings as a springboard for understanding the different contexts in which the questioning was carried out”. Additionally, using deductive and inductive approaches to analyse creates the ability to generalise about implications for stakeholders (Guenther, et al., 2007).

Future research on soft skills development should seek to overcome the above limitations. To a certain degree, the findings of this study were consistent with other studies (Abu, Kamsah, & Razzaly, 2008; Precision Consultancy for the Business, Industry and Higher Education Collaboration Council [BIHECC], 2007; de la Harpe et al., 2009). However, as this is an exploratory study, the findings can be further tested and refined.

7.5 Future research

A study such as this also opens up avenues for future research. A priority area for future research is to empirically test the proposed frameworks: a framework to understand educator perceptions of their role and role of others (see Section 6.5.1.1, Figure 6.4) and a framework for teaching and assessing soft skills (see Section 6.5, Figure 6.3). More clarity about the theoretical building blocks of the above soft skills development frameworks, their antecedents and consequences, and the mechanism through which they work can be added. For example, these include the other characteristics of HEIs such as their year of establishment (which impacts factors including the higher education policy environment and educational thinking of the time) and the other environments in which they are operating.

Further, cultural influences on developing soft skills in graduates needs further work and this needs to include an investigation of the impact of the differences between collectivist and individualist cultures. The cultural context of Malaysia as a collectivist country needs to be explored, and findings may translate to other collectivist cultures.

This study also offers a direction for research into self-directed learning for soft skills development in HEIs. Future research may investigate the role of SCL in promoting student engagement in learning soft skills, which is beyond the scope of this thesis.

It is also important to investigate the experience of students in soft skills development in comparison to the experience of educators. Such a study would open up the discrepancy between “input” and “output” of the efforts in teaching soft skills.

Finally, through a thematic description of educator experiences, this study found that cognitive dissonance was a common element experienced by educators as they strove to develop soft skills in students. To certain degree, educators’ intervention in soft skills development created a dilemma about their role, with this possibly accounting for their practice in soft skills development. Deeper exploration of this was beyond the approach of the phenomenological study but further exploration would add to the growing body of knowledge in this field. As mentioned earlier, this study used mixed methods research, and thus in the future, researchers may pursue research on teaching and assessing soft skills including, but not limited to, a study of the role of cognitive dissonance using other research approaches such as grounded theory. Such an approach may lead to the establishment of theoretical foundations for deeper understandings.

7.6 Researcher reflections – Part 2

My experiences as an educator and my longstanding interest in human resource development (HRD) led me to conduct this research, in which I hoped to combine my background in education and my background in HRD to improve curriculum delivery, specifically in soft skills development. Learning, particularly adult learning, takes place in both HRD and adult education (AE) (Knowles, Holton, & Swanson, 2011). My long service with a public university has allowed me to experience changing roles – the result of an environment experiencing continual change in policies and strategies in response to the growing demand for contemporary educational practices. Further, my day-to-day job as an educator, in which I share my experience with my colleagues, has influenced my thinking as a participant and researcher. I use my background as an educator to highlight some of the thoughts and feelings related to such experiences. Coping with continual change is a challenge that educators have to face, and one which requires them to enhance their ability and capability. For example, new developments in public universities, such as the autonomous status of some universities (Kulasagaran, 2012) in general, and, more specially, the establishment of Malaysia Education Blueprint 2013–2025 (MOE, 2013), impacts the role of educators in soft skills development. In addition, graduates' employability requires both academic knowledge and soft skills, with these complementing each other, thus fulfilling an important role in shaping students, especially for employability – a big challenge for me.

I gained valuable research experience through the methodological approach taken in my PhD journey. Mixed methods research requires an openness to using multiple perspectives in understanding the research problem and answering the research questions. In other words, it is driven by what works. Had I limited the analysis to the

educator's perspective (that is, through completing a purely qualitative study), I would have missed the role that demographic variables have on educator perceptions, specifically about the emphasis placed on teaching and assessing soft skills and the confidence and willingness to teach and assess these skills. The outcomes were generated through a dialectic discovery by valuing both objective and subjective knowledge and this crystallises the pragmatic approach taken in this study.

7.7 Conclusion

In essence, this study offers directions for practice in terms of soft skills development and training for educators. Teaching and assessing soft skills is both a break from regular practices and a challenge to educators as it requires rubrics and the establishment of longitudinal assessment standards. Incorporating soft skills into curriculum requires suitable pedagogical approaches and resources. There is no 'one size fits all' model, and the evidence suggests an agile hybrid approach and a flexible role of educators. The frameworks that were developed based on the data and literature are able to assist researchers in understanding the experience of educators and suggesting avenues to develop soft skills. This study has therefore set a research agenda for the future in the development of these important lifelong skills.

APPENDICES

APPENDIX A: APPROVALS

Appendix A1

Approval from the Murdoch University Human Research Ethics Committee –

Phase 1: Interview



Research Ethics Office
Division of Research and Development

www.murdoch.edu.au

Chancellery Building
South Street
MURDOCH WA 6150
Telephone: 9360 6677
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human.ethics@murdoch.edu.au
www.research.murdoch.edu.au/ethics

Tuesday, 23 December 2008

Dr Antonia Girardi
Murdoch Business School
Murdoch University

Dear Antonia,

Project No.	2008/229
Project Title	Outcomes of soft skills training: A study evaluating student and educators' perceptions

Thank you for addressing the conditions placed on the above application to the Murdoch University Human Research Ethics Committee. On behalf of the Committee, I am pleased to advise the application now has:

OUTRIGHT APPROVAL

Approvals are granted for three years. You will need to submit an annual report to the Research Ethics Office. Please note you are required to report immediately any unforeseen or adverse events especially if they might affect the ethical standing of the project. Once the project has been completed, please submit a Project Closure Report. All forms are available on the Research Ethics web-site.

I wish you every success for your research.

Please quote your ethics project number in all correspondence.

Kind Regards,

A handwritten signature in black ink, appearing to read "E. von Dietze".

Dr. Erich von Dietze
Manager of Research Ethics

cc: Wan Sofiah Meor Osman

HREC Approval Letter 221107

CRICOS Provider Code: 001253
ABN 61 616 369 313

Appendix A2

Approval from the Murdoch University Human Research Ethics Committee –

Phase 2: Web Survey



Research Ethics Office
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Wednesday, 28 October 2009

Dr Antonia Girardi
Rm 4.057 ECL North
Murdoch University

Dear Antonia,

Project No. 2009/195
Project Title Understanding educators' beliefs about soft skills

Thank you for addressing the conditions placed on the above application by the Murdoch University Human Research Ethics Committee. On behalf of the Committee, I am pleased to advise the application now has:

OUTRIGHT APPROVAL

Please consider the following advice from the Committee:

- i. Inclusion of the international dialling code for the Ethics Committee telephone number should be given to participants;
- ii. Is there a reason why an Australian (DEST) list of fields is used for Malaysian institutions? Is there a Malaysian equivalent list which may be more readily available?

Approval is granted on the understanding that research will be conducted according to the standards of the *National Statement on Ethical Conduct in Human Research* (2007), the *Australian Code for the Responsible Conduct of Research* (2007) and Murdoch University policies at all times. You must also abide by the Human Research Ethics Committee's standard conditions of approval (see attached). All reporting forms are available on the Research Ethics web-site.

I wish you every success for your research.

Please quote your ethics project number in all correspondence.

Kind Regards,

Dr. Erich von Dietze
Manager of Research Ethics

cc: Wan Sofia Meor Osman

HREC Approval Letter 221107

CRICOS Provider Code: 00125J
ABN 61 616 369 313

Appendix A3

Approval from the Research Promotion and Coordination Committee, EPU, Prime Minister's Department Malaysia



UNIT PERANCANG EKONOMI
Economic Planning Unit
JABATAN PERDANA MENTERI
Prime Minister's Department
BLOK B5 & B6
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN
62502 PUTRAJAYA
MALAYSIA



EPU
ECONOMIC PLANNING UNIT
JABATAN PERDANA MENTERI

Telefon : 603-8888 3333
Telefax : 603-888

Ruj. Tuan:
Your Ref.: UPE: 40/200/19/2340

Ruj. Kami:
Our Ref.: 22 September 2008

Tarikh:
Date:

Wan Sofiah Meor Osman
1A Windelya Road
Kardinya, Western Australia
6163 Australia

APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application dated 27 August 2008, I am pleased to inform you that your application to conduct research in Malaysia has been approved by the **Research Promotion and Co-Ordination Committee, Economic Planning Unit, Prime Minister's Department**. The details of the approval are as follows:

Researcher's name : **WAN SOFIAH MEOR OSMAN**
Passport No. / I. C No: **701108-08-5256**
Nationality : **MALYSIAN**
Title of Research : **"SOFT SKILLS TRAINING: AN EVALUATION OF THE OUTCOMES FROM STUDENTS' AND EDUCATORS' PERCEPTIONS"**

Period of Research Approved: **THREE YEARS**

2. Please collect your Research Pass in person from the Economic Planning Unit, Prime Minister's Department, Parcel B, Level 4 Block B5, Federal Government Administrative Centre, 62502 Putrajaya and bring along two (2) passport size photographs. You are also required to comply with the rules and regulations stipulated from time to time by the agencies with which you have dealings in the conduct of your research.

3. I would like to draw your attention to the undertaking signed by you that you will submit without cost to the Economic Planning Unit the following documents:

- a) A brief summary of your research findings on completion of your research and before you leave Malaysia; and
- b) Three (3) copies of your final dissertation/publication.

4. Lastly, please submit a copy of your preliminary and final report directly to the State Government where you carried out your research. Thank you.

Yours sincerely,



(MUNIRAH ABD. MANAN)
For Director General,
Macro Economic Section,
Economic Planning Unit.
E-mail: munirah@epu.gov.my
Tel: 88882809/2818/2958
Fax: 88883798

ATTENTION

This letter is only to inform you the status of your application and **cannot be used as a research pass.**

C.c:

Ketua Setiausaha,
Kementerian Pengajian Tinggi,
Aras 7, Blok E3, Parcel E,
Pusat Pentadbiran Kerajaan Persekutuan,
62505 Putrajaya
(u.p: En. Chuah Bee Leng)

(Ruj. Tuan: KPT.R.620-1/1/1Jld.9 (36))

APPENDIX B: PHASE 1 – INTERVIEW

Appendix B1

Interview information sheet

Research topic: Outcomes of soft skills training: A study evaluating students' and educators' perceptions

Ethics Permit No: 2008/229

Hi, my name is Wan Sofiah Meor Osman. I'm doing PhD at Murdoch Business School, Murdoch University, Western Australia. I'm working with Dr. Antonia Girardi to evaluate the soft skills module from your perspective. The purpose of this project is to conduct a detailed evaluation of the module that is being run at your university. We hope to identify whether the module is meeting its aims successfully and whether there is anything we can identify that will be of value to other people involved with the development of similar modules.

In order to get your opinions about soft skills training, you are invited to participate in an interview. The interview will last about one and a half hours.

The aim of the interview is to discuss your perceptions of soft skills and the soft skills training module you have participated in as part of your University experience. We are asking your opinions which will be kept strictly confidential. Your participation in this research is entirely voluntary and you may withdraw your consent to participate in this research at any time. If you decide to withdraw, any material you have given us will be destroyed. Withdrawing from the research will have no consequences for your ongoing participation in the module, as this research is not affiliated with your University in any way.

If you are willing to participate, could you please provide your contact details by completing Sheet 1. My supervisor and I are happy to discuss with you any concerns you may have regarding how this study will be conducted. My email: wsofiah@hotmail.com. or contact my supervisor Dr. Antonia Girardi via email: a.girardi@murdoch.edu.au. If you wish to talk to an independent person about your concerns you can contact Murdoch University's Human Research Ethics Committee on 9360 6677 or email ethics@murdoch.edu.au.

I hope that you wish to take part.

Sheet 1

Sign-up sheet: Expression of interest to participate in study interviews.

Name	Telephone	Mobile

Appendix B2

Interview consent form



www.murdoch.edu.au

Consent Form Interview

Outcomes of soft skills training: A study evaluating students' and educators' perceptions

Participant

I have read the participant Information Sheet, which explains the nature of the research. The information has been explained to me and all my questions have been satisfactorily answered. I have been given a copy of the Information Sheet to keep.

I am happy to be interviewed and for the interview to be tape-recorded as part of this research. I understand that I do not have to answer particular questions if I do not want to and that I can withdraw at any time without consequences to myself.

I agree that research data gathered from the results of the study may be published provided my name or any identifying data is not used. I have also been informed that I may not receive any direct benefits from participating in this study.

I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.

Signature of Participant

Date

Chief Investigator

I have fully explained to _____ the nature and purpose of the research, and the procedures to be employed. I have provided the participant with a copy of the Information Sheet.

Signature of Investigator

Date

Print Name

Position

CRICOS Provider Code: 00125J
ABN 61 616 369 313

Appendix B3

Interview guide

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RESEARCH TOPIC

TAJUK KAJIAN

Outcomes of Soft Skills Training: A Study Evaluating Students' and Educators' Perceptions.

Hasil Latihan Kemahiran Insaniah: Satu Kajian Penilaian Persepsi Pelajar dan Pengajar.

EDUCATOR INTERVIEW

TEMU BUAL PENGAJAR

This interview is conducted to better understand the soft skills training provided by (your university). There is no right or wrong answers to the questions. Your response is very much appreciated.

Temu bual ini dilakukan untuk lebih memahami latihan kemahiran insaniah (KI) yang dilaksanakan oleh (universiti anda). Tiada jawapan yang betul atau salah bagi semua soalan. Maklum balas anda amat dihargai.

Section 1: Definition of soft skills

Bahagian 1: Definisi kemahiran insaniah

This section asks questions about the definition of 'soft skills' and is looking to determine the level of awareness of the soft skills module suggested by the Ministry of Higher Education.

Bahagian ini bertanya mengenai definisi 'kemahiran insaniah' dan bertujuan untuk menentukan tahap kesedaran terhadap modul kemahiran insaniah seperti yang disarankan oleh Kementerian Pengajian Tinggi.

1. Are you familiar with soft skills term?

Adakah anda biasa dengan istilah kemahiran insaniah?

Yes/Ya

From your understanding, how do you define soft skills? Proceed to question 2, 4, 5 & 6

Berdasarkan kefahaman anda, bagaimana anda mendefinisikan kemahiran insaniah? Terus ke soalan 2, 4, 5 & 6

* Shaded areas are for interviewers only/Bahagian yang digelapkan hanya untuk penemu bual

or/atau Not sure/Tidak pasti

What do you think soft skills mean? Proceed to question 2, 4, 5 & 6
Pada pandangan anda, apakah yang dimaksudkan dengan kemahiran insaniah? Terus ke soalan 2, 4, 5 & 6

or/atau No/Tidak

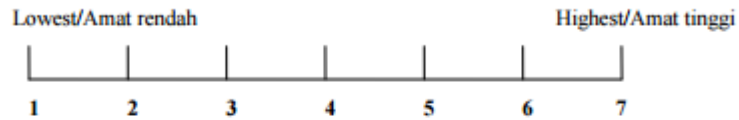
If 'No' end the interview session and thank the respondent.
Jika 'Tidak' tamatkan sesi temu bual dan ucapkan terima kasih kepada responden.

2. Are there any other terms for soft skills that you are aware of?
Adakah terdapat istilah-istilah lain bagi kemahiran insaniah yang anda ketahui?

3. Which term do you prefer to use? Please justify.
Istilah yang mana anda lebih suka menggunakannya? Sila berikan justifikasi anda.

4. The next question will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan seterusnya meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



How well do you think you understand the soft skills concept? **CARD 1**
 Sejauh manakah anda merasakan anda memahami konsep kemahiran insaniah? **KAD 1**

1 2 3 4 5 6 7

5. Can you provide a few examples of soft skills that you are aware of?
 Bolehkah anda berikan beberapa contoh kemahiran insaniah yang anda ketahui?

6. Does your university have policies associated with soft skills development?
 Adakah universiti anda mempunyai polisi yang berkaitan dengan pembangunan kemahiran insaniah?

Yes/Ya No/Tidak Not sure/Tidak pasti

Please explain.
 Sila jelaskan.

7. Are you aware of the components of soft skills as suggested by the Ministry of Higher Education? Please list the components.
 Adakah anda tahu akan komponen-komponen kemahiran insaniah yang disarankan oleh Kementerian Pengajian Tinggi? Senaraikan komponen-komponen tersebut.

- Communication skills/
 Kemahiran berkomunikasi
- Critical thinking and problem solving/
 Pemikiran kritis dan kemahiran menyelesaikan masalah

- Teamwork skills/
Kemahiran kerja berpasukan
- Lifelong learning and information management/
Pembelajaran berterusan dan pengurusan maklumat
- Entrepreneur skills/
Kemahiran keusahawanan
- Moral and professional ethics/
Etika dan moral profesional
- Leadership skills/
Kemahiran kepimpinan

Section 2: Value of soft skills

Bahagian 2: Nilai kemahiran insaniah

This section of the survey looks at the value of soft skills.

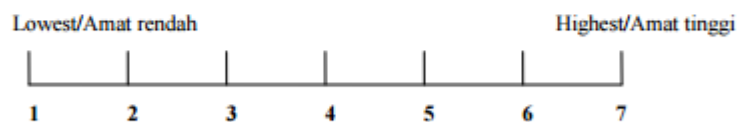
Bahagian temu bual ini melihat kepada nilai kemahiran insaniah.

1. Are soft skills important to
Adakah kemahiran insaniah penting kepada

- | | | |
|---------------------------------------|---|---|
| You/
Anda | <input type="checkbox"/> Yes proceed to Q2/
Ya terus ke S2 | <input type="checkbox"/> No proceed to Q3/
Tidak terus ke S3 |
| Students/
Pelajar | <input type="checkbox"/> Yes/
Ya | <input type="checkbox"/> No/
Tidak |
| Potential employers/
Bakal majikan | <input type="checkbox"/> Yes/
Ya | <input type="checkbox"/> No/
Tidak |

2. If 'Yes' for 'You' next question will ask you to rank on the scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Jika 'Ya' untuk 'Anda' soalan seterusnya meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what extent, do you think soft skills are important? **CARD 1**
Pada pandangan anda, sejauh mana kemahiran insaniah penting? **KAD 1**

1 2 3 4 5 6 7

Why?
Kenapa?

3. There are 7 skills outlined in the soft skills module: communication skills, critical thinking and problem solving skills, teamwork skills, lifelong learning and information management, entrepreneur skills, moral and professional ethics and leadership skills. Among the 7 skills, which 3 skills are your students interested in learning? **CARD 2**

Terdapat 7 kemahiran yang digariskan dalam modul kemahiran insaniah: kemahiran berkomunikasi, pemikiran kritis dan kemahiran menyelesaikan masalah, kemahiran kerja berpasukan, pembelajaran berterusan dan pengurusan maklumat, kemahiran keusahawanan, etika dan moral professional dan kemahiran kepimpinan. Antara ketujuh-tujuh kemahiran ini, apakah 3 kemahiran yang paling diminati oleh pelajar-pelajar anda untuk mempelajarinya? **KAD 2**

Why?
Kenapa?

4. Among the 7 skills, which 3 skills are your students lacking? **CARD 2**
Antara ketujuh-tujuh kemahiran ini, apakah 3 kemahiran yang paling kurang dalam diri pelajar? **KAD 2**

Section 3: Delivery effectiveness

Bahagian 3: Keberkesanan pelaksanaan

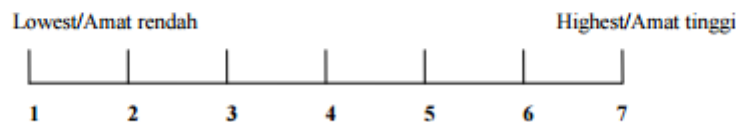
This section looks at the delivery of the soft skills modules. There are 3 approaches outlined in the soft skills module: **formal activities of teaching and learning** which consist of embedded model and stand-alone model, **support programmes** which comprise of academic focused and non-academic focused; and **campus life** which include students' life living in the university residences and campus surroundings. These will be referred to as '**delivery approaches**' from now on. **CARD 3**

Bahagian ini melihat kepada pelaksanaan modul kemahiran insaniah. Terdapat 3 pendekatan digariskan dalam modul kemahiran insaniah: **Aktiviti formal pengajaran dan pembelajaran** yang merangkumi model terapan dan model mata pelajaran mandiri, **program sokongan** yang mengandungi fokus akademik dan fokus bukan akademik dan **kehidupan di kampus** yang meliputi kehidupan pelajar di kolej kediaman dan dalam lingkungan persekitaran kampus. Semua ini akan dirujuk sebagai '**pendekatan penyampaian**' selepas ini. **KAD 3**

1. Do you think soft skills should be 'taught' rather than 'learned'? Please explain.
Pada pandangan anda, haruskah kemahiran insaniah 'diajar' berbanding 'dipelajari'?
Sila jelaskan.

2. The next question will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan seterusnya meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what extent, are you aware of how soft skills should be delivered through tertiary education as suggested by the soft skills module? **CARD 3 & 1**

Sejauh manakah anda tahu bagaimana kemahiran insaniah seharusnya dilaksanakan dalam pendidikan universiti/tertiari seperti yang disarankan oleh modul kemahiran insaniah? **KAD 3 & 1**

1 2 3 4 5 6 7

Please clarify.

Sila jelaskan.

3. What type of soft skills learning module (delivery approaches) have you taught/involved? **CARD 3**

Apakah jenis modul pembelajaran kemahiran insaniah (pendekatan penyampaian) yang telah anda ajar/terlibat? **KAD 3**

Formal activities of teaching & learning/ Aktiviti formal pengajaran & pembelajaran	
Embedded model/Model terapan	
Stand-alone model/Model mata pelajaran mandiri	
Support programme/Program sokongan	
Academic focused/Fokus akademik	
Non-academic focused/Fokus bukan akademik	
Campus life/ Kehidupan di kampus	
Students' life living in university residences/ Kehidupan pelajar di kolej kediaman	
Students' life living in campus surroundings/ Kehidupan pelajar dalam lingkungan persekitaran kampus	

4. What percentage would you assign to teaching 'subject specific knowledge and skills' versus 'soft skills' in your course? Please explain.

Berapa peratuskah akan anda agihkan antara 'pengetahuan dan kemahiran subjek spesifik' dan 'kemahiran insaniah' dalam pengajaran kursus anda? Sila jelaskan.

5. What are the advantages of having soft skills embedded in your courses? **CARD 3**
Apakah kelebihan membangunkan kemahiran insaniah secara model terapan? **KAD 3**

6. How about their disadvantages?
Bagaimana dengan kekurangannya?

7. What are the advantages of having soft skills as a stand-alone course? **CARD 3**
Apakah kelebihan membangunkan kemahiran insaniah secara model mata pelajaran
mandiri? **Kad 3**

8. How about the disadvantages?
Bagaimana dengan kekurangannya?

9. What are the advantages of having soft skills as an academic focused? **CARD 3**
Apakah kelebihan membangunkan kemahiran insaniah secara fokus akademik? **KAD 3**

10. How about the disadvantages?
Bagaimana dengan kekurangannya?

11. What are the advantages of having soft skills as a non-academic focused? **CARD 3**
Apakah kebaikan membangunkan kemahiran insaniah secara fokus bukan akademik? **KAD 3**

12. How about the disadvantages?
Bagaimana dengan kekurangannya?

13. What are the advantages of having soft skills developed in campus life? (e.g. compulsory or not compulsory etc) **CARD 3**

Apakah kebaikan membangunkan kemahiran insaniah dalam kehidupan di kampus? (cth wajib atau tidak wajib dll) **KAD 3**

14. How about the disadvantages?

Bagaimana dengan kekurangannya?

15. In your opinion what is the best approach? Please justify.

Pada pandangan anda, apakah pendekatan yang paling baik? Sila berikan justifikasi anda.

16. Have you encountered any problems in developing students' soft skills using any of these approaches? Please explain. **CARD 3**

Adakah anda menghadapi apa-apa masalah dalam membangunkan kemahiran insaniah pelajar-pelajar menggunakan mana-mana pendekatan ini? Sila jelaskan. **KAD 3**

17. Is there any other delivery approaches which you think can be used by the university to develop soft skills among students?

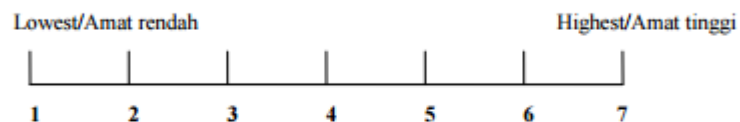
Adakah pendekatan lain yang anda rasakan boleh digunakan oleh universiti untuk membangunkan kemahiran insaniah dalam kalangan pelajar?

18. How about industrial/practical training? Is it required for students to undergo this training? Please clarify.

Bagaimana dengan latihan industri/praktikal? Adakah pelajar diwajibkan menjalani latihan ini? Sila jelaskan.

19. Question 19 & 20 will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan 19 & 20 meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what extent, your university has made full use of industrial/practical training to develop soft skills? **CARD 1**

Setakat manakah universiti anda telah memanfaatkan latihan industri/praktikal untuk membangunkan kemahiran insaniah? **KAD 1**

1 2 3 4 5 6 7

Please justify.
Sila berikan justifikasi anda.

20. The goals of the **delivery approaches** are to plan and implement programmes to equip students with soft skills when they graduate. How well do you believe the approaches are working in achieving its goals? **CARD 3 & 1**
Matlamat **pendekatan penyampaian** adalah untuk merancang dan melaksanakan program bagi melengkapkan pelajar dengan kemahiran insaniah apabila mereka bergraduat. Sejauh manakah anda yakin pendekatan tersebut berfungsi dalam mencapai matlamatnya? **KAD 3 & 1**

Why? 1 2 3 4 5 6 7
Kenapa?

21. How do you propose the type of soft skills which you will be implemented in your teaching?
Bagaimanakah anda menyatakan jenis kemahiran insaniah yang akan anda terapkan dalam pengajaran anda?

22. How do you promote the importance of learning soft skills in your teaching? E.g. initiatives

Bagaimanakah anda menggalakkan kepentingan mempelajari kemahiran insaniah dalam pengajaran anda? Cth inisiatif

23. In your opinion are students more focussed on 'subject specific knowledge and skills' or 'soft skills'? Please explain.

Pada pendapat anda, adakah pelajar lebih fokus kepada 'pengetahuan dan kemahiran subjek spesifik' atau 'kemahiran insaniah'? Sila jelaskan.

24. Have you been involved in structuring the teaching and learning strategies for soft skills development?

Adakah anda pernah terlibat dalam penstrukturan strategi pengajaran dan pembelajaran bagi pembangunan kemahiran insaniah?

Yes/Ya

No proceed to Q25/Tidak terus ke S25

What kind of involvement have you engaged with? Please describe (e.g. meetings, workshops, seminars etc)

Apakah jenis penglibatan anda? Sila jelaskan (cth mesyuarat, bengkel, seminar dll)

25. Have you attended any training provided by the university to improve the way you develop soft skills in students?

Adakah anda pernah mengikuti mana-mana latihan yang disediakan oleh universiti untuk meningkatkan cara membangunkan kemahiran insaniah dalam diri pelajar?

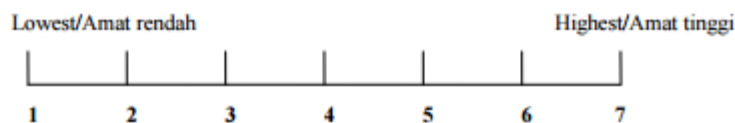
Yes/Ya No proceed to Q27/ Tidak terus ke S27

If so, please list the names and explain.

Jika ada, sila senaraikan nama-nama latihan tersebut dan jelaskan.

26. Question 26, 27 & 28 will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan 26, 27 & 28 meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



Was this training valuable? **CARD 1**

Adakah latihan ini bernilai? **KAD 1**

1 2 3 4 5 6 7

27. In your opinion, to what extent does the university provide sufficient training to educators to develop soft skills in students? **CARD 1**

Pada pandangan anda, setakat manakah universiti menyediakan latihan yang mencukupi kepada pengajar untuk membangunkan kemahiran insaniah dalam diri pelajar? **KAD 1**

1 2 3 4 5 6 7

28. In your opinion, to what extent does the university provide sufficient infrastructure (support and resources) such as language labs to develop soft skills in students? **CARD 1**

Pada pandangan anda, setakat manakah universiti menyediakan prasarana (sokongan dan sumber) yang mencukupi seperti makmal bahasa, untuk membangunkan kemahiran insaniah dalam diri pelajar? **KAD 1**

1 2 3 4 5 6 7

29. How can soft skills be better delivered? E.g. teaching and learning strategies (student-focused, adult learning models etc), support and resources, reward and recognition etc.

Bagaimana kemahiran insaniah dapat disampaikan dengan lebih baik? Cth strategi pengajaran dan pembelajaran (fokus kepada pelajar, model pembelajaran dewasa dll), sokongan dan sumber, ganjaran dan penghargaan dll.

30. There are 7 skills outlined in the soft skills module: communication skills, critical thinking and problem solving skills, teamwork skills, lifelong learning and information management, entrepreneur skills, moral and professional ethics and leadership skills. Among the 7 skills, which are the 3 skills that have been taught well? **CARD 2**

Terdapat 7 kemahiran yang digariskan dalam modul kemahiran insaniah: kemahiran berkomunikasi, pemikiran kritis dan kemahiran menyelesaikan masalah, kemahiran kerja berpasukan, pembelajaran berterusan dan pengurusan maklumat, kemahiran keusahawanan, etika dan moral professional dan kemahiran kepimpinan. Antara ketujuh-tujuh kemahiran ini, apakah 3 kemahiran yang telah diajar dengan bagus? **KAD 2**

31. Among the 7 skills which are the 3 soft skills that have been poorly taught? **CARD 2**

Antara ketujuh-tujuh kemahiran ini, apakah 3 kemahiran yang telah diajar dengan kurang bagus? **KAD 2**

Section 4: Assessment & reporting

Bahagian 4: Penilaian dan pelaporan

This section investigates the assessment and reporting process in which the focus is given to students' understanding.

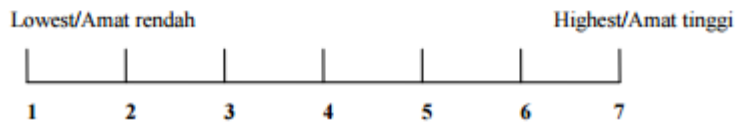
Bahagian ini mengkaji proses penilaian dan pelaporan yang menfokus kepada pemahaman pelajar.

1. How do you assess your students' soft skills? Please clarify (who involve, how, workplace assessment, use of instruments etc).

Bagaimanakah anda menilai kemahiran insaniah pelajar-pelajar anda? Sila jelaskan (siapa terlibat, bagaimana, penilaian di tempat kerja, penggunaan instrumen dll).

2. The next question will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan seterusnya meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what extent, do your students understand the assessment of soft skills?

Setakat manakah pelajar-pelajar anda memahami penilaian kemahiran insaniah?

1 2 3 4 5 6 7

Please justify.

Sila berikan justifikasi anda.

3. Do you have problems in assessing and reporting students' soft skills? Please explain.

Adakah anda menghadapi masalah dalam menilai dan melaporkan kemahiran insaniah pelajar? Sila jelaskan.

4. Question 4 & 5 will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan 4 & 5 meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what extent, are you satisfied with the ways students' soft skills have been assessed and reported? **CARD 1**

Sejauh manakah anda berpuas hati dengan cara kemahiran insaniah pelajar **dinilai** dan **dilaporkan**? **KAD 1**

1 2 3 4 5 6 7

Please justify.

Sila berikan justifikasi anda.

5. How well do you think assessment and reporting of students' soft skills are working in achieving its goals? **CARD 1**

Sejauh manakah anda merasakan penilaian dan pelaporan kemahiran insaniah berfungsi dalam pencapaian matlamatnya? **KAD 1**

1 2 3 4 5 6 7

Please justify.

Sila berikan justifikasi anda.

6. In your opinion, what is the best way to assess and report students' soft skills? Please explain.

Pada pandangan anda, apakah cara terbaik untuk **menilai** dan **melapor** kemahiran insaniah pelajar? Sila jelaskan.

7. Have you attended any training provided by the university to improve the way you assess and report students' soft skills?

Pernahkah anda mengikuti latihan yang disediakan oleh universiti untuk meningkatkan cara anda menilai dan melaporkan kemahiran insaniah pelajar?

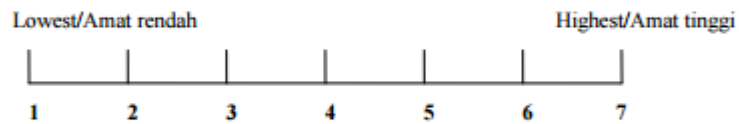
Yes/Ya No proceed to Section 5/Tidak terus ke Bahagian 5

If so, please list the names and explain.

Jika ada, sila senaraikan nama-nama latihan tersebut dan jelaskan.

8. Question 8 & 9 will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan 8 & 9 meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



Was this training valuable? **CARD 1**
Adakah latihan ini bernilai? **KAD 1**

1 2 3 4 5 6 7

9. To what extent, do you think educators are well trained in assessing and reporting students' soft skills?

Pada pandangan anda, sejauh manakah pengajar-pengajar telah dilatih dengan baik untuk menilai kemahiran insaniah pelajar? Sila jelaskan.

1 2 3 4 5 6 7

Please elaborate.
Sila jelaskan.

Section 5: Importance in getting jobs

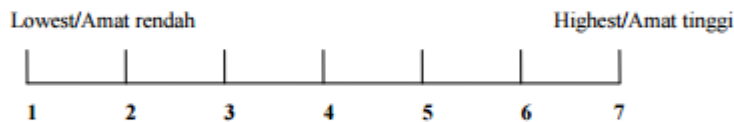
Bahagian 5: Kepentingan mendapatkan pekerjaan

This section explores the importance of soft skills in getting jobs and students' awareness.

Bahagian ini mengkaji kepentingan kemahiran insaniah dalam mendapatkan pekerjaan dan kesedaran pelajar.

1. This question will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan ini meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what extent, are you aware of soft skills roles in getting a job? **CARD 1**
Sejauh manakah anda sedar akan peranan kemahiran insaniah dalam mendapatkan pekerjaan? **KAD 1**

1 2 3 4 5 6 7

Please justify (e.g. job for life or employability for life).
Sila berikan justifikasi anda (cth pekerjaan untuk seumur hidup atau kebolehan mendapat pekerjaan untuk seumur hidup).

2. There are 7 skills outlined in the soft skills module: communication skills, critical thinking and problem solving skills, teamwork skills, lifelong learning and information management, entrepreneur skills, moral and professional ethics and leadership skills. Among the 7 skills, which 3 skills are most needed by graduate employers? **CARD 2**

Terdapat 7 kemahiran yang digariskan dalam modul kemahiran insaniah: kemahiran berkomunikasi, pemikiran kritis dan kemahiran menyelesaikan masalah, kemahiran kerja berpasukan, pembelajaran berterusan dan pengurusan maklumat, kemahiran keusahawanan, etika dan moral profesional dan kemahiran kepimpinan. Antara ketujuh-tujuh kemahiran ini, apakah 3 kemahiran yang paling diperlukan oleh majikan para graduan? **KAD 2**

3. Why? Please provide reasons as to why these are important?
Kenapa? Boleh anda berikan sebab kemahiran-kemahiran ini penting?

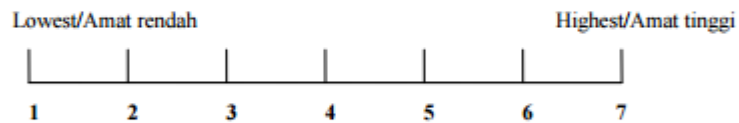
4. Are there any other skills which are not listed in the module that you think are important to employers? Please specify. **CARD 2**

Adakah terdapat kemahiran-kemahiran lain yang tidak disenaraikan dalam modul yang anda rasa penting kepada majikan? Sila nyatakan. **KAD 2**

5. Why? Please provide reasons as to why these are important?
Kenapa? Boleh anda berikan sebab kemahiran-kemahiran ini penting?

6. The next question will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan seterusnya meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.



To what level, do you think students are beginning to manage their employability in the context of recent higher education and labour market change/inline with recent requirements? E.g. in getting a job in their area of study. **CARD 1**

Pada pandangan anda, pada tahap manakah pelajar mula menguruskan kebolehan mendapatkan pekerjaan dalam konteks pendidikan tinggi terkini dan perubahan pasaran buruh/seiring dengan keperluan terkini? Cth untuk mendapatkan pekerjaan dalam bidang mereka. **KAD 1**

1 2 3 4 5 6 7

Please justify.

Sila berikan justifikasi anda.

Section 6: Who is responsible?

Bahagian 6: Siapakah yang bertanggungjawab?

This section asks about who is responsible for developing soft skills among future employees and how to go about facing this matter.

Bahagian ini bertanya mengenai siapakah bertanggungjawab membangunkan kemahiran insaniah dalam kalangan bakal pekerja dan bagaimana berhadapan dengan hal ini.

1. In your opinion, who is responsible for developing soft skills among students? (e.g. government/schools/tertiary education, employers, communities, individuals or **'shared responsibility'**)

Pada pandangan anda, siapakah yang bertanggungjawab membangunkan kemahiran insaniah dalam kalangan pelajar? (cth kerajaan/sekolah/pendidikan universiti/tertiari, majikan, komuniti, individu atau **'tanggungjawab bersama'**)

2. Who is playing the most important role?

Siapakah yang memainkan peranan paling penting?

Please justify.
Sila berikan justifikasi anda.

3. Have employers stressed upon the importance of soft skills training to university?
Adakah majikan menyatakan kepentingan latihan kemahiran insaniah kepada pihak universiti?

Yes No

How? Please justify.
Bagaimana? Sila berikan justifikasi anda.

4. To what extent, should **industries** and **universities** collaborate in developing soft skills? Please clarify.

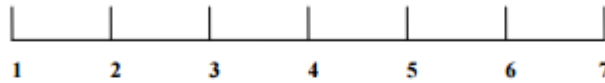
Sejauh manakah **pihak industri dan universiti** harus bekerjasama dalam membangunkan kemahiran insaniah? Sila jelaskan.

5. The next question will ask you to rank your opinion on a scale of 1 to 7. The highest score is 7, the second highest is 6, and so on, down to 1 for the lowest.

Soalan seterusnya meminta anda menggambarkan pandangan anda menggunakan skala 1 hingga 7. Skor tertinggi ialah 7, dan kedua tinggi ialah 6 dan seterusnya hingga 1 yang paling rendah.

Lowest/Amat rendah

Highest/Amat tinggi



To what extent, do you agree on the concept of **'individual responsibility'** in developing soft skills? This concept refers to individual initiative in learning soft skills. **CARD 1**

Sejauh manakah anda bersetuju dengan konsep **'tanggungjawab individu'** dalam membangunkan kemahiran insaniah? Konsep ini merujuk kepada inisiatif individu dalam mempelajari kemahiran insaniah? **KAD 1**

1 2 3 4 5 6 7

Please justify.
Sila berikan justifikasi anda.

Section 7: Respondent background

Bahagian 7: Latar belakang responden

This section intends to obtain demographic data of educators. None of the information will be used to identify you from any of the reports received for this study.

Bahagian ini bertujuan mendapatkan data demografi pengajar. Tiada satupun daripada maklumat ini akan digunakan untuk mengenal pasti anda dalam mana-mana laporan hasil daripada kajian ini.

1. Age/Umur:

Under 21/21 kebawah	<input type="checkbox"/>	36-40	<input type="checkbox"/>	56-60	<input type="checkbox"/>
21-25	<input type="checkbox"/>	41-45	<input type="checkbox"/>	61-65	<input type="checkbox"/>
26-30	<input type="checkbox"/>	46-50	<input type="checkbox"/>	Over 65/65 keatas	<input type="checkbox"/>
31-35	<input type="checkbox"/>	51-55	<input type="checkbox"/>		

2. Gender/Jantina:

Male/Lelaki Female/Perempuan

3. Faculty/School:

Fakulti/Sekolah:

4. Position/Jawatan: _____

5. What is the main subject area that you teach?
Apakah subjek bidang teras yang anda ajar?

6. How many years of experience do you have in teaching? (Note: teaching in 2006 to present)

Berapa lamakah pengalaman anda mengajar? (Nota: mengajar dalam tahun 2006 hingga sekarang)

**Thank you for your participation in this interview session/
Terima kasih atas penglibatan anda dalam sesi temu bual ini**

Appendix B4

Interview card

CARD 1

**SCALE 1 – 7/
SKALA 1 – 7**

**Lowest/
Amat rendah**

**Highest/
Amat tinggi**



1 2 3 4 5 6 7

CARD 2

SOFT SKILLS/KEMAHIRAN INSANIAH

Communication skills/
Kemahiran berkomunikasi

Critical thinking and problem solving skills/
Pemikiran kritis dan kemahiran menyelesaikan masalah

Teamwork skills/
Kemahiran kerja berpasukan

Lifelong learning and information management/
Pembelajaran berterusan dan Pengurusan Maklumat

Entrepreneurship skills/
Kemahiran keusahawanan

Moral and professional ethics/
Etika dan moral profesional

Leadership skills/
Kemahiran kepimpinan

CARD 3

DELIVERY APPROACHES

Formal activities of teaching & learning

- a. Embedded model (e.g integrated in curriculum of the core subjects such as chemistry, accounting, engineering etc)
- b. Stand-alone subject model (e.g general university courses such as English language, Islamic and Asian civilisation (TITAS), Entrepreneurship etc)

Support programmes

- a. Academic focused (e.g associated with academic matters such as learning skills programme, English Language Support Programme (ELSP) etc)
- b. Non-academic focused (e.g not associated with academic matters such as co-curriculum and extra co-curriculum)

Campus life

- a. Students' life living in the **university residences** (e.g programmes and activities on soft skills development)
- b. Students' life living in the **campus surroundings** (e.g programmes and activities on soft skills development)

PENDEKATAN PENYAMPAIAN

Aktiviti formal pengajaran dan pembelajaran

- a. **Model terapan** (cth merentas kurikulum mata pelajaran teras seperti kimia, perakaunan, kejuruteraan dll)
- b. **Model mata pelajaran mandiri** (cth kursus umum universiti seperti bahasa Inggeris, Tamadun Islam dan Asia (TITAS), keusahawanan, dll)

Program sokongan

- a. **Fokus akademik** (cth berkaitan dengan hal ehwal akademik seperti Program Kemahiran Belajar, Program Sokongan Bahasa Inggeris (ELSP) dll)
- b. **Fokus bukan akademik** (cth tidak berkaitan dengan hal ehwal akademik seperti kokurikulum dan kokurikulum tambahan)

Kehidupan di kampus

- a. Kehidupan pelajar di **kolej kediaman** universiti (cth program dan aktiviti pembangunan kemahiran insaniah).
- b. Kehidupan pelajar dalam lingkungan **persekitaran kampus** (cth program dan aktiviti pembangunan kemahiran insaniah)

APPENDIX C: PHASE 2 – WEB SURVEY

Appendix C

Web survey



Wan Sofiah Meor Osman



[batching](#)

[logout](#)

Understanding educators' *beliefs* about soft skills

Participant Information

Welcome and thank you for your assistance with this survey.

About the study

Ms Wan Sofiah Meor Osman (PhD student) from the Murdoch Business School, Murdoch University, Western Australia is working with Dr. Antonia Girardi to evaluate the soft skills module from the educators' perspective. Beliefs and attitudes about learning and teaching, particularly among educators who teach or assess students, play a major role in the success or otherwise of Institutional strategies to develop soft skills. Through a survey of educators in Malaysian Public Higher Education Institutions (HEIs), the study aims to better understand educators' beliefs and their impact on institutional efforts to embed soft skills across disciplines. Survey results will provide valuable insights to the higher education sector to review and, where needed, modify approaches to the embedding of soft skills within curricula.

Your participation

We value your input; however, participation is entirely voluntary. By completing and submitting the survey, your consent to participate will be assumed. Your decision to complete the survey will not be recorded nor reported, and so your responses are confidential. The survey will take approximately 20 minutes to complete.

How survey results are disseminated

Survey results will be disseminated in line with the doctoral degree requirements and procedures:

- PhD thesis
- Scholarly journal articles and conference papers

How survey information is managed

In accordance with ethics approval for the study, survey data will be analysed using computerised systems and will be stored electronically and securely. Access to data will be restricted to the researchers who are required to maintain confidentiality. Survey responses cannot be tracked to individuals and so anonymity is protected. Documents will be stored confidentially. Only aggregated survey data will be reported and reports will be in a form that protects individual anonymity. Survey information will not be used for commercial purposes.

Do you have a question?

If you have any questions about any aspect of the study, you can email me at: wsofiah@hotmail.com. If you wish to talk to an independent person about your concerns you can contact Murdoch University's Human Research Ethics Committee on +61 8 9360 6677 or email at: ethics@murdoch.edu.au.

[exit](#) [previous](#) [continue](#)



Wan Sofiah Meer Osman



[batching](#)

[logout](#)

Understanding educators' *beliefs* about soft skills

Participant consent

I have read the information letter about the nature and scope of this survey. Any questions I have about the research process have been answered to my satisfaction. I agree to take part in this research. By submitting the survey on-line I give my consent for the results to be used in the research. I am aware that this survey is anonymous and no personal details are being collected or used. I know that I may change my mind, withdraw my consent, and stop participating at any time; and I acknowledge that once my survey has been submitted it will not be possible to withdraw my data.

I understand that all information provided is treated as confidential by the researchers and will not be released to a third party unless required to do so by law.

I understand that the findings of this study may be published and that no information which can specifically identify me will be published.

[exit](#) [previous](#) [I Agree](#)



Wan Sofiah Maar Osman

[batching](#)[logout](#)Understanding educators' *beliefs* about soft skills

Educator Survey

About this survey

This survey focuses on your beliefs about soft skills and their relevance to your discipline and your thoughts about factors that may influence their inclusion in the curriculum. Your participation in this survey is entirely voluntary. By completing and submitting this survey, your consent to participate is assumed.

Terms defined

In this survey, the following terms are used:

Soft skills: the 'generic' qualities, skills and understandings that a university community agrees its students should develop as a result of their coursework studies.

Programme: an approved sequence of course/units which leads to a university award.

Course: an individual course offered within a programme.

Delivery approaches:**Formal activities of teaching & learning**

- a. Embedded model (e.g. integrated into the curriculum of the core subjects such as chemistry, accounting, engineering etc).
- b. Stand-alone subject model (e.g. general university courses such as English language, Islamic and Asian civilisation (TITAS), Entrepreneurship etc or courses that contribute to soft skills development).

Support programmes

- a. Academic focused (e.g. associated with academic matters such as learning skills programme, English Language Support Programme (ELSP) etc).
- b. Non-academic focused (e.g. not associated with academic matters such as co-curriculum and extra co-curriculum).

Campus life

- a. Students' life living in the university residences (e.g. programmes and activities on soft skills development).
- b. Students' life living in the campus surroundings (e.g. programmes and activities on soft skills development).

[exit](#) [previous](#) [continue](#)



[batching](#)

[logout](#)

How to complete this survey

Please set time aside to complete the survey in one continuous session (about 20 minutes). If you cannot complete and submit the survey in one session, close it (exit) and re-enter to start the survey at more convenient time. Please note, this server will timeout if it doesn't hear from you for 20 minutes or longer. If you exit the survey before completing it or your session expires, all your previous responses will not be saved and you will need to restart the survey.

Please take your time to reflect on your responses. Your opinion is important - there are no right or wrong answers.

1. Click on the "Start" button.
2. You are encouraged to answer all the questions. If you do not feel comfortable answering any questions move to the next one.
3. When you have completed the survey, click on the 'Submit' button

Attribution

This survey is adapted from the B Factor Project: Understanding academic staff beliefs about graduate attributes (<http://www.rmit.edu.au/bfactor>). Support for the original work was provided by the Australian Learning and Teaching Council Ltd, an initiative of the Australian Government Department of Education, Employment and Workplace Relations.



Educator Survey: Understanding educators' beliefs about soft skills by [Wan Sofiah Meor Osman](#) is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 2.5 Australia License](#).
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[exit](#) [previous](#) [Start Survey](#)



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[batching](#)

[logout](#)

Section A: Your beliefs about soft skills

Important note

In accordance with ethics approval, data from this survey will be aggregated and de-identified to ensure anonymity.

- | | Yes | No | Not sure |
|--|-----------------------|-----------------------|-----------------------|
| 1. Do you believe soft skills should be included in the curriculum? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Do you believe soft skills should be an important focus for your University? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. Your University, like many others, has an official list of soft skills. How familiar are you with your University's official list of soft skills? | | | |
| Unaware | Moderately familiar | Very familiar | |
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

[exit](#) [previous](#) [continue](#)



Wan Sofiah Meer Osman

[batching](#)[logout](#)

You have completed 3% of this survey.

The following pages ask you to rate how important you consider 7 soft skills commonly used across Malaysian and overseas universities. This list is adapted from the Soft Skills Development Module for Malaysian Higher Education Institutions by the Ministry of Higher Education (2006).

Students' employability

For each of the following soft skills, please indicate how important you believe it is for students' employability:

	Not at all 1	2	Moderate 3	4	Essential 5
4. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#)[previous](#)[continue](#)



Wan Soflah Maar Osman

[batching](#)[logout](#)

You have completed 10% of this survey.

Teaching soft skills in your courses

For each soft skill, please indicate the emphasis which you place on teaching the skill in the courses you teach:

	Not at all 1	2	Moderate 3	4	High 5
11. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. For the soft skills just rated above, do you teach any of these skills as stand-alone courses? (Please select as many as applicable)					
<input type="checkbox"/> Communication skills					
<input type="checkbox"/> Critical thinking and problem solving skills					
<input type="checkbox"/> Teamwork skills					
<input type="checkbox"/> Lifelong learning and information management					
<input type="checkbox"/> Entrepreneurship skills					
<input type="checkbox"/> Moral and professional ethics					
<input type="checkbox"/> Leadership skills					

[exit](#) [previous](#) [continue](#)



Wan Sofiah Meor Osman



[batching](#)

[logout](#)

You have completed 17% of this survey.

Assessing soft skills in your courses

For each soft skill, please indicate the **emphasis** which you place on **assessing** the skill in the courses you assess:

	Not at all 1	2	Moderate 3	4	High 5
19. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#) [previous](#) [continue](#)



Wan Sofiah Meor Osman



[batching](#)

[logout](#)

You have completed 24% of this survey.

Confidence in teaching soft skills

For each soft skill, please indicate your level of confidence in teaching it:

	Low 1	2	Moderate 3	4	High 5
26. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#)

[previous](#)

[continue](#)



Wan Sofiah Meor Osman



[batching](#)

[logout](#)

You have completed 31% of this survey.

Willingness to teach soft skills

For each soft skill, please indicate your level of **willingness to teach** it:

	Low 1	2	Moderate 3	4	High 5
33. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#) [previous](#) [continue](#)



[batching](#)

[logout](#)

You have completed 38% of this survey.

Confidence in assessing soft skills

For each soft skill, please indicate your level of confidence in assessing it:

	Low 1	2	Moderate 3	4	High 5
40. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#)

[previous](#)

[continue](#)



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[batching](#)

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You have completed 45% of this survey.

Willingness to assess soft skills

For each soft skill, please indicate your level of **willingness to assess it**:

	Low 1	2	Moderate 3	4	High 5
47. Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Critical thinking and problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Teamwork skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. Lifelong learning and information management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Entrepreneurship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Moral and professional ethics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. Leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#) [previous](#) [continue](#)



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You have completed 51% of this survey.

Formal activities of teaching & learning

Please indicate how important you believe the **embedded model** (e.g. integrated into the curriculum of the core subjects such as chemistry, accounting, engineering etc) is as an effective method for developing soft skills.

	Low 1	2	Moderate 3	4	High 5
54. Embedded into a compulsory foundation course typically at the beginning of a programme of study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. Embedded into a course typically at the end of a programme of study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Embedded into the curriculum across the programme of study and taught by discipline lecturers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. Embedded into the curriculum across the programme of study and taught by specialist staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. Embedded into the curriculum across the programme of study and taught by both discipline lecturers and specialist staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate how important you believe the **stand-alone model** (e.g. general university courses such as English language, Islamic and Asian civilisation (TITAS), Entrepreneurship etc or courses that contribute to soft skills development) is as an effective method for developing soft skills.

	Low 1	2	Moderate 3	4	High 5
59. Stand-alone course(s) taught by discipline lecturers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60. Stand-alone course(s) taught by specialist staff (e.g. entrepreneurship skills taught by lecturers from Faculty of Business)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. Stand-alone course(s) taught by both discipline lecturers and specialist staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#) [previous](#) [continue](#)



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You have completed 59% of this survey.

Support Programmes

Please indicate how important you believe the support programmes: academic focused (e.g. associated with academic matters such as learning skills programme, English Language Support Programme (ELSP) etc) and non-academic focused (e.g. not associated with academic matters such as co-curriculum and extra co-curriculum) are as effective methods for developing soft skills.

	Low 1	2	Moderate 3	4	High 5
62. Academic focused taught by discipline lecturers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
63. Academic focused taught by specialist staff (e.g. information literacy skills taught by library staff)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
64. Academic focused taught by both discipline lecturers and specialist staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
65. Non-academic focused (e.g. Palapes, Suksis etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#) [previous](#) [continue](#)



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[batching](#)[logoff](#)

You have completed 64% of this survey.

Campus Life

Please indicate how **important** you believe the **campus life**: students' life living in the **university residences** (e.g. programmes and activities on soft skills development) and students' life living in the **campus surroundings** (e.g. programmes and activities on soft skills development) are as effective methods for developing soft skills.

66. Students' life living in university residences

Low 1	2	Moderate 3	4	High 5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

67. Students' life living in campus surroundings

Low 1	2	Moderate 3	4	High 5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Work-integrated learning

Please indicate how **important** you believe the **work-integrated learning** is as an effective method for developing soft skills.

68. Through work-integrated learning experiences (e.g. industrial/practical training)

Low 1	2	Moderate 3	4	High 5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other model

Please indicate how **important** you believe the **other model** is as an effective method for developing soft skills.

69. Developed by students independent of formal activities of teaching and learning, support programmes, campus life and work-integrated learning

Low 1	2	Moderate 3	4	High 5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[exit](#) [previous](#) [continue](#)



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[batching](#)

[logout](#)

You have completed 68% of this survey.

Obstacles

70. In your opinion, are there any obstacles to you teaching soft skills as part of your normal teaching role in courses?

Yes No

71. In your opinion, are there any obstacles to you assessing soft skills as part of your normal assessing role in courses?

Yes No

[exit](#) [previous](#) [continue](#)



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[batching](#)
[logout](#)

You have completed 70% of this survey.

Influence

A variety of factors may influence the teaching and/or assessment of soft skills within a course. Some influencing factors are listed below.

For each factor, indicate the level of influence that you believe it has on the soft skills that you teach in your courses using the scale provided.

	Low 1	2	Moderate 3	4	High 5
72. Professional body / accreditation requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
73. Industry body expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
74. Community expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
75. Your University's expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
76. Your Department's/School's/Faculty's expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
77. Your discipline's expectations (within the university)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
78. Your peers'/colleagues' expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
79. Your personal expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
80. Students' expectations or views (e.g. students' course feedback)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

81. Briefly describe any other factors that you believe have a high level of influence (i.e. rating of 4 or 5) on the soft skills that you teach in your courses

[exit](#)
[previous](#)
[continue](#)



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[batching](#)

[logout](#)

You have completed 79% of this survey.

For each factor, indicate the level of influence that you believe it has on the soft skills that you assess in your courses using the scale provided.

	Low 1	2	Moderate 3	4	High 5
82. Professional body / accreditation requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
83. Industry body expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
84. Community expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
85. Your University's expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
86. Your Department's/School's/Faculty's expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
87. Your discipline's expectations (within the university)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
88. Your peers'/colleagues' expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
89. Your personal expectations or views	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
90. Students' expectations or views (e.g. students' course feedback)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

91. Briefly describe any other factors that you believe have a high level of influence (i.e. rating of 4 or 5) on the soft skills that you assess in your courses

[exit](#) [previous](#) [continue](#)



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[batching](#)

[logout](#)

You have completed 88% of this survey.

Section B: Information about you

Please complete these questions about you. Remember, survey data is de-identified to protect your anonymity.

92. What is the name of the University at which you are employed?

93. Are you employed on a full-time or part-time basis?

- Part-time (less than 50% of full-time equivalent)
- Part-time (50% up to less than 100% of full-time equivalent)
- Full-time

94. What is your current employment status?

- Temporary
- Contract
- Permanent
- Other, please specify

95. What is your current level of appointment?

- Tutor
- Lecturer
- Senior Lecturer
- Associate Professor
- Professor
- Other, please specify

96. What is your gender?

- Male
- Female

[exit](#) [previous](#) [continue](#)



[batching](#)

[logoff](#)

You have completed 93% of this survey.

General discipline areas and related specific disciplines

Use the following list in question 97 to help you to identify your general discipline area. If you teach and/or assess student course work in more than one general discipline, select the one you believe is primary. If your general or specific discipline is not listed, please select the other option.

(This list is adapted from the Australian Government's Department of Education, Science and Training (DEST) website.)

Please note, not all questions on this page may be applicable to you. When a question is not applicable, it will disappear. Therefore, the question numbering may not be sequential.

-
97. What is the general discipline in which you have a teaching and/or assessment role?
- Agriculture, Environmental & Related Studies
 - Architecture & Building
 - Creative Arts
 - Education
 - Engineering & Related Technologies
 - Food, Hospitality & Personal Services
 - General Education & Employment Skills Programmes
 - Health
 - Information Technology
 - Management & Commerce
 - Natural & Physical Sciences
 - Society & Culture
 - Other not listed above
98. Please indicate your specific discipline within Agriculture, Environmental & Related Studies
- Agricultural Science
 - Environmental Studies
 - Fisheries Studies
 - Forestry Studies
 - Horticulture and Viticulture
 - Pest and Weed Control
99. Please indicate your specific discipline within Architecture & Building
- Architecture & Urban Environment
 - Building and related disciplines
100. Please indicate your specific discipline within Creative Arts
- Communication and Media Studies
 - Graphic and Design Studies
 - Performing Arts
 - Visual Arts and Crafts
101. Please indicate your specific discipline within Education
- Curriculum and Education Studies
 - Teacher Education
102. Please indicate your specific discipline within Engineering & Related Technologies
- Aerospace Engineering and Technology
 - Automotive Engineering and Technology

<http://gamp.murdoch.edu.au/cgi-bin/WebObjects/MOSS.woa/6/wo/oKUhE0kV1n7W...> 19/10/2010

- Biomedical Engineering
 - Civil Engineering
 - Electrical and Electronic Engineering and Technology
 - Environmental Engineering
 - Fire Technology
 - Geomatic Engineering
 - Manufacturing Engineering
 - Maritime Engineering and Technology
 - Mechanical and Industrial Engineering and Technology
 - Process and Resources Engineering
 - Rail Operations
103. Please indicate your specific discipline within Food, Hospitality & Personal Services
- Food and Hospitality
 - Personal Services
104. Please indicate your specific discipline within General Education & Employment Skills Programs
- Employment Skills
 - General Education
 - Social Skills
105. Please indicate your specific discipline within Health
- Complementary Therapies
 - Dental Studies
 - Medical Studies
 - Nursing
 - Optical Sciences
 - Pharmacy
 - Public Health
 - Radiography
 - Rehabilitation Therapies
 - Veterinary Studies
106. Please indicate your specific discipline within Information Technology
- Computer Science
 - Information Systems
 - Security Science
107. Please indicate your specific discipline within Management & Commerce
- Accounting
 - Banking, Finance and related fields
 - Business and Management
 - Office Studies
 - Sales and Marketing
 - Tourism
108. Please indicate your specific discipline within Natural & Physical Sciences
- Astronomy
 - Atmospheric Sciences
 - Biological Sciences
 - Chemical Sciences
 - Earth Sciences
 - Food Science and Biotechnology
 - Forensic Science
 - Hydrology
 - Laboratory Technology
 - Mathematical Sciences
 - Medical Sciences
 - Oceanography
 - Pharmacology
 - Physics
109. Please indicate your specific discipline within Society & Culture
- Behavioural Science
 - Curatorial Studies
 - Economics and Econometrics
 - History

- Human Welfare Studies and Services
- Justice and Law Enforcement
- Language and Literature
- Law
- Librarianship and Information Management
- Philosophy and Religious Studies
- Political Science and Policy Studies
- Psychology
- Sport and Recreation
- Studies in Human Society

110. Please indicate your general discipline and specific discipline area that you have a teaching and/or assessment role within.

General Discipline
Specific discipline

111. Do you have workplace/industry experience (excluding university teaching)?
 Yes No
112. How many years of workplace/industry experience do you have that is related (directly or indirectly) to your discipline?
 Less than 1 year
 1 - 5 years
 6 - 10 years
 More than 10 years
113. How many years of university teaching experience do you have?
 Less than 1 year
 1 - 5 years
 6 - 10 years
 More than 10 years
114. Do you have a formal teaching qualification/s? (i.e. includes any teaching qualification such as Post-Graduate Diploma in Teaching and Learning)
 Yes
 No

115. Please identify the qualification/s:

[exit](#) [previous](#) [continue](#)



[batching](#)

[logoff](#)

You have completed 99% of this survey.

Thank you for your assistance with this Survey!

As a reward for your participation in this survey, we will be awarding a \$50 Amazon voucher to one lucky respondent from our prize draw. To enter the prize draw, please provide your email address in the space provided below. If you wish not to enter the prize draw, simply click on the **submit** button to submit your responses.

Please be assured that your personal details will be kept separate from your completed survey to ensure anonymity.

116. Please provide your email address here:

[exit](#) [previous](#) [Submit](#)



Wan Sofiah Maar Osman



[batching](#)

[logoff](#)

Thank you, you have now completed this Survey!

To exit the survey simply **close this browser** or select the **logoff** button located on the left-hand side of your screen.

If you would like to report any technical difficulties you experienced with this survey, please contact Luke Regan at: L.Regan@murdoch.edu.au

If you have any questions about any aspect of this study you can contact the researcher at: wsofiah@hotmail.com

[exit](#)

APPENDIX D: FINDING THEMES

Appendix D1

Translation of finding themes

4.3.1 Establishing context

4.3.1.1 Defining soft skills

... itulah [kemahiran] yang pada saya yang ... membentuk apa ni apa personaliti dia kan ... (22E)

... *to me those [the skills] ... which form what is called one's personality ... (22E)*

... satu hint sayalah kalau nak tengok orang tu ada soft skills, tak ada soft skills apabila seseorang tu menerima pelanggan, senang tak orang tu bercakap dengan dia, kalau orang tu senang makna dia punya tahap soft skills tinggi ... (6E)

... *my hint is if you want to see whether a person has soft skills or not is when he or she entertains a customer, is it easy for him or her to talk to the customer, if it's easy that means he or she has a high level of soft skills ... (6E)*

... makna dia start daripada the way dia fikir, mula start dengan cara dia fikirkan yang kritikal kepada komunikasi dia yang berkesan, interaksi dia antara dia famili dia, kawan-kawan dia dan masyarakat, itu semualah ... (21E)

... *this means it starts with the way he or she thinks, it starts with the critical thinking then effective communication, his or her interaction with family, friends and society, all those ... (21E)*

... kalau kata “kemahiran insaniah” tu masih agak kabur apa “kemahiran insaniah”, tapi kalau “kemahiran insaniah” tu satu istilah yang baru, istilah yang kita sendiri kena belajar balik apa itu “kemahiran insaniah” kan ... (16A)

... *if we say “kemahiran insaniah”, it's unclear what ‘kemahiran insaniah’ is, but if “kemahiran insaniah” is a new term, we ourselves have to learn the term, what does “kemahiran insaniah” mean ... (16A)*

... bila sebut [guna] ... perkataan “insaniah”, lebih besarlah maknanya sebab dia di situ, akhlak di situ, semuanya ada kat situ ... (17A)

... *when we say [use] ... the ‘insaniah’ term, it has a broad meaningful definition because it includes, morals are there, all are there ... (17A)*

4.3.1.2 The value of soft skills

... kebanyakan majikan dia complained, dia complained graduan dia tak ada KI [kemahiran insaniah] sangat ... (2D)

... *most employers they complained, they complained graduates they are lacking of soft skills ... (2D)*

... yang boleh dia apply dalam hiduplah kan, sepanjang hayat so tak semestinya kerja je benda ni ... (9C)
... can be applied in his or her life, throughout his or her life so it's not only necessary for jobs ... (9C)

... hubungan kita sebagai anak ... sebagai pelajar ke and then apa saja peranan kita sebagai insan ... (21E)
... our interaction as a child ... as a student and then on whatever role that we have as human being ... (21E)

4.3.1.3 Importance for getting jobs

... not necessary kan nak jadi manager mesti ambik, line business ... dia [penceramah undangan] kata antropologi ... lain-lainpun [program lain]... you boleh [diterima bekerja sebagai pengurus] dengan soft skills ini mereka memandang you ... (13B)
... not necessary to become a manager you need to take up, the business line ... he [a guest speaker] said anthropology ... as well as other [other programs] ... with soft skills you are able [to be hired as a manager] because they will look up at you ... (13B)

... orang yang transferable skills ni dia ikut situasi, pendekatan berbeza kepada situasi yang berbeza, adapt kena tinggi, berubah-ubah, adaptable dan fleksibel keperluan pekerjaan sekarang ... (6C)
... an individual who has transferable skills he or she will react according to situations, take a different approach for a different situation, should have high adaptability, it involves changes, adaptable and flexible are the requirements for today's jobs ... (6C)

Dialah [soft skills] yang membezakan antara individu, maknanya yang mempunyai soft skills tu sudah pastilah akan berbeza dengan orang yang tiada [soft skills] ... (6C)
These [soft skills] can distinguish an individual from another, which means those who have soft skills absolutely they are different from those who do not have [soft skills] ... (6C)

Bidang professional, disokong oleh soft skills, kena excellent dalam soft skills, susah tidak juga tapi maksudnya must be above averagelah. (17A)
Professional field, supported by soft skills, must be excellent in soft skills, it's not hard but it means must be above average. (17A)

... okey, soft skills itu memberikan impression kepada saya ... (15A)
... okay, to me soft skills can help you make an impression ... (15A)

Lepas dia orang pergi latihan industri tu baru mula sedar... (14B)
Once they have undergone their practical training [internship] then only they are aware ... (14B)

4.3.2 Role of educators

4.3.2.1 Educator views on “my role and your role”

4.3.2.1.1 Who is the most responsible?

School

Beberapa kerat [pelajar] sahaja yang ada [kemahiran ini semasa mereka memasuki universiti] jadi kalau [kita] nak perbetulkan [menangani isu ini], kita harus ada [inisiatif] kalau macam kursus dan sebagainya ... [tetapi untuk membangunkan kemahiran ini] secara lebih sistematik di sekolah. (11B)

Very few [students] have [these skills when they enter university] thus, if [we] want to improve [handle this issue], we need to have [initiatives] such as conducting courses and so on ... [but to develop these skills] systematically is at school. (11B)

... memang start bermula daripada kecik lah, daripada tadika lagi, [ini adalah] benda tu yalah nak membangunkan manusia [dan] bukan tiba-tiba di peringkat universiti mestilah sudah bermula ... daripada tadika, sekolah rendah ... (14B)

... should start at the young age, from kindergarten, [they are the] thing that relates to human development [and] should not out of sudden develop at tertiary level, have to start ... from kindergarten, from primary school ... (14B)

... kita dah salah tengok sebenarnya bukan di universiti kita nak terapkan soft skills ni lifelong learning daripada sekolah lagi ... (15A)

... we have been overlooked, actually it's not at the university we integrate soft skills, this is a lifelong learning which should start from school ... (15A)

... universiti boleh bantulah, terutama yang bahagian-bahagian lebih professional lah ... universiti akan polish ... menambah skills-skills yang tak diberi masa sekolah, mungkin di sekolah dia tak ajar details ... (13B)

... university can assist, especially professional areas ... university will polish ... add in skills which are not delivered in school, may be in school those are not taught thoroughly ... (13B)

University

... memang kita sedari benda tu boleh didapati di mana-mana tetapi kalau di universiti itu lebih teruruslah sepatutnyalah ... dan menjadi harapan masyarakat kepada universiti ... (16A)

... we are aware that these [soft skills] can be obtained anywhere but if at the university by right it's more manageable ... and community put so much hope on university ... (16A)

... universiti yang [mengetahui dan boleh] beritahu kehendak semasa [industri], yang paling dinamik ialah ni lah pendidikan formal, sekolah dan universiti tapi yang paling penting Bahagian Hal Ehwal Pelajar (HEP), maknanya universitilah. (4D)

... university is the one who [acquainted with the information and able to] convey the current needs [of industry], the most dynamic is formal education, school and university but the most important is the Department of Student Current Affairs (Bahagian Hal Ehwal Pelajar; HEP), which means university. (4D)

... polish sahaja ... bukan initiate lagi sepatutnya dia [pelajar] dah boleh ... benda tu ada just ... nak bagi, dia kena upgrade ... universiti transitionlah kepada, sebelum masuk bekerja. (21E)

... polish only ... not initiating, they [students] should be able ... soft skills are in them just ... to make them, they have to improve ... it's a university transition to, before they get employed. (21E)

Students

... sebab individu [pelajar] tu sendiri patut sedar apa yang dia ... kelemahan dia di mana, soft skills dia ... dia perlu ada soft skills itu ... jadi dia orang sendiri patutnya cari soft skills ni bukannya perlu diberikan. (9C)

... because the individuals [students] themselves should be aware of ... their weaknesses, their soft skills ... they should possess those soft skills ... thus, they themselves should be looking for soft skills instead of all are delivered to them. (9C)

Government

Dia orang [kerajaan] dah buat study, dia orang tahu itu adalah kelemahan pelajar bila keluar daripada alam persekolahan, universiti ke alam pekerjaan tapi dia orang tak warwarkan kepada rakyat [termasuk pengajar tentang dapatan kajian] ... (2D)

They [government] have conducted a few studies, they are aware of student weaknesses when the students leave school, from university to employment but they didn't fully inform the public [including educators about research findings] ... (2D)

Saya letak tanggungjawab ni kepada Ministry of Education saya bukan kata Ministry of Higher Education ... yang paling penting saya rasa ... kita punya education system pada peringkat rendah. (7C)

I placed this responsibility to the Ministry of Education, I didn't say the Ministry of Higher Education ... I think the most important ... our lower level of the education system. (7C)

Dia [kerajaan] control everything kan. Sebenarnya dengan duit, dengan infrastruktur apa semua, kalau fikir betul-betul apa, nak create the culture that we need kan ... [dikawal oleh] government. (10C)

They [government] control everything. In fact the money, infrastructure all that, if we carefully think about ... to create the culture that we need ... [it's controlled by] the government. (10C)

Family

... parents are very important also, encourage benda ni [pembangunan kemahiran insaniah] ... saya rasa parents play very orang kata significant role ... dalam building dia [pelajar] punya soft skills ... (1D)

... parents are very important also, to encourage this [soft skills development] ... I think parents are playing a very significant role ... in building their [students'] soft skills ... (1D)

4.3.2.1.2 What about 'individual responsibility'?

Individual is the "key"

... mestilah individu mempunyai tanggungjawab sendiri macam kita nak salahkan ... semua [actor] ada jalinan kesalahan okey, tetapi individu itu sendiri nak berubah [meningkatkan kemahiran insaniah], dia melalui step dia ... (11B)

... definitely an individual has his or her own responsibility if we want to blame ... all [actors] have their own parts to be blamed okay, but for a particular individual to change [improve their soft skills], he or she must follow the steps (11B)

... kelemahan dia dekat mana dan dia [pelajar] tahu apa yang dia nak capai so dia kena berubah towards the steps ... (21E)

... their weaknesses are on what and they [students] know what they are going to achieve so they have to change towards the steps ... (21E)

... walaupun orang tak mengajar apa [kepada pelajar], tak ada apa [yang diajar], if you have kesedaran pada diri sendiri 'this is important I have to' ... (1D)

... although people are not teaching anything [to students], nothing [is taught], if you have your own awareness "this is important I have to" ... (1D)

"Assistance" from others

... walaupun [pelajar] paling [bertanggungjawab] tapi secara individu dia orangpun susah nak dapat sendiri tau. Some dia boleh dapat sendiri, some tu macam, macam kena ada orang tolong pulak ... [dapatkan] kemahiran tu ... macam entrepreneurship kan ... (9C)

... although they [students] are most [responsible] but to acquire this individually is also hard. Some can be obtained by themselves, some needed a kind of, assistance from others ... [to obtain] the skills ... such as entrepreneurship ... (9C)

... macam mana you [pelajar] nak ... memahami ... sesuatu bidang yang you pelajari itu kalau tak ada orang beritahu you, "ini tak boleh, ini tak kena kan, ini yang you boleh buat" ... [awak] mesti ada guru yang menunjuk ... (20E)

... how you [students] are going to ... understand ... the field that you are studying if no one inform you, "this can't, this doesn't suit, this you can do" ... [you] must have teachers to direct [you] ... (20E)

... pensyarah akan bagi support and then dengan beri may be tunjuk ajar, bagi tahu okey you [pelajar] are, “macam ni you should do this or this”, so you tahu kat mana you lacking ... tapi the bigger responsibility is the person himself, [ini adalah] tanggungjawab individulah. (21E)

... lecturers will give support and then show you [students] the way, inform okay you are, “if like this you should do this or this”, so you are aware of what you are lacking of but the bigger responsibility is the person himself, [it’s about] individual responsibility. (21E)

... sekarang ni ianya tak disampaikan dengan jelas kepada pelajar ... kalau dia orang diberitahu itu adalah tanggungjawab mereka, saya rasa dia orang akan faham yang itu adalah tanggungjawab mereka. (2D)

... currently this is not clearly conveyed to students ... if they are informed that’s their responsibility, I think they will understand that’s their responsibility. (2D)

4.3.2.2 Educator views on industry collaboration

4.3.2.2.1 Link between university and industry

4.3.2.2.2 Collaboration between university and industry

... kerjasama tu ada tapi who initiate tu? ... I would say more from university ... (9C)
... cooperation is there but who initiates? ... I would say more from university ... (9C)

... they [industri] have no time to think about this one, they think about the money and profit aja ... dia banyak pilihan apa semua [merujuk kepada graduan] ... unless dia ... nak jadi specialise ... dalam kontek business dia itu. Itu dia bagi training tapi untuk bagi [latihan] ... apa you nak create ni [kemahiran insaniah] tak adalah no time ... and then depa tak nak invest pun. (17A)

... they [industry] have no time to think about this one, they only think about money and profit ... they have many choices [in terms of graduates] ... unless they ... go for specialisation ... in their business context. That one they will give training but to give [training] ... for the one [soft skills] that you are going to create [develop] there is no time ... and then in fact they’re not going to invest. (17A)

... the problem is industry, they are not cooperative ... because dia takut ... you won’t get a 100% [kerjasama] ... because their mindset is “if I give you this ... will use it against me” that’s it ... (8C)

... the problem is industry, they are not cooperative ... because they are afraid of ... you won’t a get 100% [cooperation] ... because their mindset is “if I give you this ... will use it against me” that’s it ... (8C)

... banyak company yang mengeluarkan biasiswa tetapi biasiswa untuk melatih kemahiran dalam ... bidang-bidang yang mereka nak tetapi bukan soft skills. Soft skills ni mereka harap secara tak langsungnya pelajar ni adalah soft skills tetapi kalau mereka nak memberi sumbangan yang lebih langsung bentuknya, mereka harus invest sedikit kewangan, buat connection dengan universiti ... (11B)

... many companies provide scholarships but most are meant to train skills in ... the areas they are interested in but are not on soft skills. In terms of soft skills, they hope students indirectly acquire this but if they are going to directly contribute, they have to invest a small amount of money, have to make connection with university ... (11B)

4.3.3 Teaching soft skills

4.3.3.1 Delivery context

4.3.3.1.1 Educator awareness and involvement

4.3.3.1.2 Educator views on focus of students

... sebab sekolah sekarang ni ianya lebih kepada akademik , kalau dapat A, kalau dapat B atau dapat C, ... benda ini masih lagi dilaksanakan dan dibawa ke universiti ... (2D)

... because schools nowadays focus on academic , if get an A, if get a B or get a C ... this is the practice and this continues in universities ... (2D)

... dua-dua dia bagus, kalau ada kesedaran tapi somehow kalau macam semua satu kelas dah okey, [ini kerana] the culture is there kan ... (10C)

... both they are good at, if awareness is there but somehow if the whole class is okay, [this is because] the culture is there ... (10C)

4.3.3.1.3 Support and resources for delivery purposes

... taklimat untuk tahulah; comment keseluruhannya ianya macam “sekolah” pulak ... dia ada macam taklimat ni tapi kita boring lah. (14B)

... a briefing to be acquainted with; overall comment it's like attending a “school” ... there is a briefing but we get bored. (14B)

4.3.3.1.4 Integration of soft skills

4.3.3.2 Delivery approaches

4.3.3.2.1 Delivery in educational settings

Advantages and disadvantages of formal activities of teaching and learning

Advantages and disadvantages of support programs

Advantages and disadvantages of campus life activities

4.3.3.2.2 Delivery in workplace settings

Advantages and disadvantages of industrial training

Steps taken by university in dealing with industrial training

Steps taken by the university that assist soft skills development

Steps taken by the university that fail to assist soft skills development

Mungkin masalah kita hari ini we have a very short practical training [latihan industri] kan dan kita tak ada kerjasama rapat dengan industri untuk kita buat program ... (7C)

Maybe our problems nowadays is we have a very short practical training [industrial training] and we don't have a close link with industry for us to conduct a program ... (7C)

4.3.3.2.3 Approaches and concluding thoughts

Which approach is best?

... dia [pelajar] akan belajar secara sebab ... ni [pengajar] paksa ... because bila dia terpaksa ... dia kena ambil ... (9C)

... they [students] will learn because ... this you [educators] force ... because when they are forced... they have to take it ... (9C)

... penilaian is no longer a problem kan ... sebab bila ... dia embed you ada elemen exam kat situ, elemen kuliah, macam-macamlah pembentangan dan sebagainya ... (1D)

... assessment is no longer a problem ... because when ... they are embedded, there you have element of exams, lectures, all sort of things such as presentations and so forth ... (1D)

... paling banyak [dikendalikan] di kolej through activities ... (6C)

... the most [are conducted] at the colleges [residential colleges] through activities. (6C)

I always use the analogy like a cake, everything is important the flour: the sugar, the salt, the eggs, even though water, all in, you can't say only flour is important ... so to me yang penting sekarang ni is the coordination. (8C)

I always use the analogy like a cake, everything is important the flour: the sugar, the salt, the eggs, even though water, all in, you can't say only flour is important ... so to me the most important at present is the coordination. (8C)

... peringkat awal tahun satu, tahun dua kita ajar dia orang [pelajar] tapi tahun seterusnya dia orang dah ada interest untuk mempelajari [sendiri] ... (4D)

... at the earlier stage in year one, in year two we teach them [students] but in the following years they already have the interest to learn [by themselves] ... (4D)

... [penilaian] diterap dalam semua matapelajaran dan perlu ada penilaian dia itulah ... tak ada markah [gred] tapi tahap [pencapaian] ... jadi, kita letakkan student itu pada tahap ... (7C)

... [assessment] embedded in all subjects and have to have the assessment ... with no scores [grades] but only the level [performance]... thus, we group the students according to their level ... (7C)

Ini pensyarah punya tanggapan kan oh! Jadi, [tanggungjawab] pengetua dan felo sebab student di kolej [kolej kediaman] kan itu tanggungjawab dia oranglah nak membangun [kemahiran insaniah pelajar]. Dia tak ada, dia tak rasa ada tanggungjawab tu kan, dia tak rasa dia juga part of the educational system that should be responsible in moulding an individual student ... (20E)

This is lecturer perceptions uh-oh! It's [the responsibility of] principals and fellows because students they are at the colleges [residential colleges] it's their responsibility to develop [student soft skills]. They [educators] have no, they don't feel the responsibility, they don't feel that they are a part of an educational system that should be responsible in moulding an individual student ... (20E)

Jadi penilaian bersama ni cuma bukan satu formula [nama naib canselor – identifikasi digugurkan] dan dia satu sistem yang paling baiklah. Sistem itu sendiri paling baik saya nampak ... (11B)

Thus, the joint assessment is not a formula of [name of the vice chancellor – identifier deleted] and it's a best system. I see the system itself is the best ... (11B)

Goal attainment of delivery approaches and suggested alternatives

4.3.3.3 Implementation of delivery approaches

4.3.3.3.1 Perceptions about delivery

4.3.3.3.1.1 Teaching verses learning

Joint responsibility

Dia maksudnya kedua-duanya [harus diajar dan dipelajari] kena ada ya dia kena adalah balance di situ supaya pelajar tu ada guide tapi yang selalunya orang mudah untuk dapat [kemahiran insaniah] adalah, dia sendiri melalui dia sendiri maknanya bukan orang ajar dia tapi dia dapat [kemahiran insaniah] daripada environment ... (23E)

This means both [should be taught and learned] are needed, the right balance should be there for students to have some guides but normally individual easily possess [soft skills] by, he or she experiences this by himself or herself which means it's not someone teaches him or her but he or she obtains [soft skills] from the environment ... (23E)

Student responsibility

... you [pelajar] pelajari sesuatu daripada apa you lihat, bukan kita yang nak mengajar macam ni. Kadang-kadang benda ni dalam diri sendiri itu because daripada experience ... (1D)

... you [students] learn from what you observe, it's not up to us to teach them to perform. Often these skills are obtained by an individual because of his or her experience ... (1D)

Educator responsibility

[Mereka] jadi ... macam robotic lah, pelajar tak boleh fikir sendiri dan perlu diajar. (14B)

[They] become ... like robots, students can't think by themselves and have to be taught. (14B)

Assessment driven

... ini dia benda [kemahiran insaniah] ni dia integrate through kita kata through activities ... maknanya [aktiviti] praktikal. Sebagai contoh saya kata teamwork, kita tak cakap "ini teamwork" ... you bagi tugas dan nak menilai tugas tu lah cara nak menilai tu soft skills dia, melalui aktiviti ... (6C)

... these [soft skills] have been integrated through activities ... which means through practical activities. For example teamwork, we don't mention "this is teamwork" ... you give assignments and it's part of the way you assess their soft skills, through activities ... (6C)

4.3.3.3.1.2 Academic knowledge verses soft skills development

4.3.3.3.1.3 Embedding approaches

Planned activities

Kita tak ajar dia [pelajar] metod secara formal lah, kita suruh dia buat presentation, kita suruh dia. Kita bagi cuma guidelines ... (15A)

We don't formally teach them [students] the methods, we ask them to do presentations, we ask them. We only give guidelines ... (15A)

Dan even sekarangpun, sebenarnya kurang pendedahan di peringkat pensyarah ... bila pensyarah buat, ada KI [kemahiran insaniah] yang tertinggal misalnya keusahawanan, kebanyakan pensyarah dia buat communication skills, leadership, teamwork yang lain tu dia tak ada buat so kena ada penjelasanlah. (2D)

And even now, actually there is a lack of exposure at lecturer level ... when the lecturers embed [soft skills in teaching] there are certain soft skills left out for example, entrepreneurship, most of lecturers they embed communication skills, leadership, teamwork but the other skills they don't, so should have a briefing to explain this. (2D)

... tapi dalam problem-based learning ... kita sebagai fasilitator tak dimintakan untuk jelaskan kepada students [mengenai pembangunan kemahiran insaniah] tapi saya (nama responden-identifikasi digugurkan) yang jelaskan pada students ... inisiatif sendiri ... (4D)

... but in the problem-based learning ... we as facilitators are not required to explain to students [about soft skills development] but I [name of the participant-identifier deleted] explain to the students ... my own initiative ... (4D)

Unplanned activities

... kalau you tak kisah ... as long as you get monthly salary, that's good enough for you, finish your class, students get their grades, actually as a lecturer that's why the VC [naib canselor] punya konsep "good teachers educate great teachers inspire" ... (identifikasi digugurkan)

... if you don't bother ... as long as you get monthly salary, that's good enough for you, finish your class, students get their grades, actually as a lecturer that's why the VC [vice chancellor] is supporting concept of "good teachers educate, great teachers inspire" ... (identifier deleted)

... kadang diberi nasihat ... kita talk on something kan macam memberi kesedaran ke motivasi ke kepada student ... sebab kita bukan hanya pengajar, kita sepatutnya jadi pendidik. (9C)

... sometimes advices are given ... we talk on something to offer awareness or motivation to students ... because we are not only educators, we suppose to be teachers. (9C)

4.3.3.3.1.4 Promotion of the importance of developing soft skills

... untuk itu you [pelajar] should develop your skills, keyakinan diri, jati diri kena kuat, keyakinan diri tu kuat, willing to learn tu yang penting, orang kata jangan takut salah ... suka bagi idea, suka buat discussion dan sebagainya jadi semua itu yang membina ... (1D)

... thus, you [students] should develop your skills, have high self-confidence and strong resilient, high self-confidence and willing to learn are important, people say that do not worry of making mistakes ... keen to give ideas, keen to discuss and so forth, all this are constructive ... (1D)

Benda-benda ni semua kita nilaikan. Beri feedback sebab at the end of the discussion, fasilitator [pengajar] akan beritahu. Okay today's discussion is very good but I see one or two of you [pelajar] is still quiet. Make sure that you join in, and then encourage dia orang ... (4D)

All of these things we assess. Provide feedback because at the end of the discussion, a facilitator [educators] will inform. Okay today's discussion is very good but I see one or two of you [students] is still quiet. Make sure that you join in, and then encourage them ... (4D)

... kadang-kadang pelajar ni dia terlalu pasif, dia tak nak buat tau. Apabila di provoke sikit dia mula bergerak, dia mahu discuss dan sebagainya, secara automatic benda-benda ni akan menggalakkan mereka bercakap, build in the confidence ... (1D)

... sometimes students are so passive, they don't want to participate. When they are provoked then only they become responsive, they are willing to discuss and so forth, automatically such things will encourage them to talk, build in the confidence ... (1D)

4.3.3.3.2 Problems encountered in developing soft skills

4.3.3.3.3. Suggested delivery options

Teaching and learning strategies

... katalah communication, kita bercakap dari segi aspek communication, komunikasi dalam Bahasa Inggeris kan. I rasa benda itu patutnya diberikan environment dan exposure itu diberikan sekolah menengah dan sekolah rendah ... yang boleh kita polish, kita polish lah jadi kalau nak initiate soft skills di peringkat universiti, you mengharap sesuatu yang sangat anulah impossible lah [sukar] ... (17A)

... for example communication, we talk about communication from the aspect of communication, communication in English. I think environment and exposure should be given in the secondary and primary school ... those that we can polish, we will polish but to initiate soft skills at tertiary level, you are hoping for something which is very impossible [difficult] ... (17A)

Filosofi saya, saya should menjadi dia punya role model ... [ia] kelebihan saya, advantage saya sebab saya dah bekerja dengan industri ... [jadi] exposed [telah mempraktik kemahiran itu] ... (7C).

My philosophy, I should become a role model ... [it's] my strength, the advantage is I used to work with the industry ... [so] exposed [had practiced the skills] ... (7C)

... so how you [pengajar] embedded dalam. Saya kata through activities, aktiviti pelajar sebab kita tak mention this is soft skills, ini soft skills tak mention tapi through activities and ... kita punya rumusan itu tadi, kita tahu bahawa [melalui] reflection...rumusan [kita beri] feedback kepada pelajar ... (6C)

... so how you [educators] embed in. I say through activities, student activities because we don't mention this is soft skills, this is soft skills don't mention but through activities and ... from our wrapping up, we know that [through] reflection ... wrapping up [we provide] feedback to students ... (6C)

... jadi mungkin kita boleh tak semestinya mahal juga kalau misalnya tidak di sini [dalam universiti] ... kadang kawasan berdekatan asalkan outside campus ni okey, keluar lepas tu panggil somebody, maksudnya kalau di dalam [universiti] pun bukan dalam jabatan, fakulti yang sama...(13B).

... thus, we might not necessarily expensive if it's not here [in the university]... somewhere closed by as long as outside campus okay, outside and then invite somebody, which means if he or she is from here [the university] but he or she is not from the same department, faculty ... (13B)

Support and resources

Promotion and marketing

Saya rasa kalau KI [kemahiran insaniah]...diwarwar kepada pelajar misalnya iklan, kempen misalnya – kempen kemahiran insaniah untuk menekankan kepentingan KI itu – lebih bagus. (2D)

I think if soft skills are promoted to students through for example, advertisements, campaigns – soft skill campaigns to emphasise the importance of soft skills – it's far better... (2D)

4.3.4 Assessing soft skills

Kalau saya tak ada masalah pasal persepsi [dalam menilai kemahiran insaniah] maknanya persepsi pun melalui pengalaman ... penjelasan dan latihan perlu diteruskan secara rutin terutama kepada pensyarah-pensyarah baru ... subjektif [penilaian] memerlukan kekuatan kemahiran orang itu sendiri ... (6C)

If it's me, I have no problems with perceptions [in assessing soft skills] which means even if it's perception but it's done through experience ... briefing and training should be conducted continuously especially for new lecturers ... it's [assessment] subjective which requires a high level of competency of that particular individual ... (6C)

4.3.4.1 Assessment context

4.3.4.1.1 Educator views on student level of understanding

... bila soft skills ni ... penilaian kita pun subjektif, macam kita kata ... “berapa dia ni dari segi leadership diakan?” Kalau kitapun [merasakan susah] nak bagi [skor] ... nak nilai dia ni kan [begitu juga dengan pelajar nak memahami penilaian]. (9C)

... when it comes to soft skills ... our assessment is also subjective, like what we said ... “what are his or her scores for leadership aspect?” If we also [found it's hard] to give [scores] ... to assess him or her [so do students who would like to understand the assessment]. (9C)

... dia [pelajar] orang faham maknanya dia orang terima [penilaian], memang layak kan [dapat gred itu] ... memang layakkan. Saya rasa yalah, maknanya yang dapat gred tu. (22E)

... they [students] understand once they accepted [the assessment], they deserve [the grades] ... in fact deserve. I think so for those who obtained the grades. (22E)

... penilaian bukan dibuat untuk soft skills ... pelajar tak tahu sama ada kita nilai soft skills ataupun tidak. (16A)

... assessment is not conducted for soft skills ... students don't know whether we evaluate their soft skills or not. (16A)

... Dia [pelajar] orang kurang jelas sebabnya dia orang tahu dia orang perlu lulus subjek itu ... mungkin ada dia orang buat semata-mata untuk apa dia ... lepas saja subjek tu, setengah tu dia tak buat bersungguh-sungguhlah [untuk meningkatkan kemahiran insaniah mereka] ... kriteria penilaian untuk soft skills ni dia orang tak tahu. (23E)

They [students] have low understanding because they know that they have to pass that subject ... maybe they do it just for the sake of ... to get through that subject, some are not even put an effort [to improve their soft skills] ... assessment criteria for soft skills they don't know. (23E)

... saya ingat pelajar tu [tentang soft skills] dia tak tahupun dia penting ... saya ingatkan, kalau tidak hari-harilah tak. Kita nak kena 'berceramah' [mengingatkan] dalam kelas ... you kena participate ... (20E)

I remind the students [about the assessment of soft skills] since they don't really know the skills are important ... I do remind them, but not all the time. We have to 'lecture' [remind] in class ... "you have to participate" ... (20E)

4.3.4.1.2 Support and resources for assessment purposes

4.3.4.2 Assessment methods

4.3.4.2.1 Assessment in educational settings

Assessment in the formal activities of teaching and learning

... okey you [pelajar] nilai you punya kawan-kawan sebab saya tak nak jadi [ada] passenger ni lah tapi selalu "conspiracy", [it] doesn't work ... (9C)

... okay you [students] assess your friends because I don't want the passengers [free riders] but usually it involves "conspiracy", [it] doesn't work ... (9C)

Saya buat formative assessment bukannya summative ... walaupun daripada mula saya asses dia then apa ... I have the tendency ... to take the latest one lah yang dia dah improve bukannya. Bagi saya kalau dia baru masuk tu it's unfair for me to penalise dia. Tapi bila dia dah improve I have to take that improvement into account. (identifikasi digugurkan)

I conduct a formative assessment, it's not a summative ... although I assess them [students] from the beginning then ... I have the tendency.....to take the latest one which they have improved, it's not. For me if they just started it's unfair to penalise them. But when they have improved I have to take that improvement into account. (identifier deleted)

Assessment in support programs

... benda ni [pembangunan kemahiran insaniah] ongoing so to me it's not fair for the students ... to be evaluated at the early stage, [ia adalah] very subjective, some people yes they have the skills already so they can perform, some people they take time. (8C)

... this [soft skills development] is ongoing so to me it's not fair for the students ... to be evaluated at the early stage, [it's] very subjective, some people yes they have the skills already so they can perform, some people they take time. (8C)

Assessment in campus life activities

4.3.4.2 Assessment in workplace settings

4.3.4.2.3 Methods and concluding thoughts

Educator satisfaction with assessment and reporting

...kadang-kadang kita terlepas pandang ada student yang ... student yang aktif, student yang menyerlah tapi tak nampak tau di ... tak di dokumentation kan benda [tahap kemahiran insaniah] tu. (4D)

... sometimes we overlooked, there are students who ... are active, students who are extraordinary but don't notice ... this [performance level of soft skills] is not documented. (4D)

Goal attainment for assessment methods

... the evaluators tu kan adakah semua orang sedar benda ni [bagaimana menilai kemahiran insaniah]? [Mereka]tak tahupun so macam mana kita nak buat penilaian tu kan, kita setakat impart the knowledge kan ... (24E)

... the evaluators, are they aware about this [how to assess soft skills]? [They] are not aware so how we are going to conduct the assessment, we only impart the knowledge ... (24E)

... apa [universiti] macam main-main ... yang pertama kita tidak diberitahu dengan jelas tentang soft skills in terms of the objectives, penilaian ni nak buat macam mana kan? ... (15A)

... it seems they [university] are not serious ... firstly we are not clearly informed about soft skills in terms of the objectives, how to go about assessment? ... (15A)

... soft skills ni kalau kita nak judge whether capai matlamat ke tak bila student kita dah graduate and may be 10 years after the students graduated and entered the job market orang akan kata wah! Dia ni ... is good ... this is the product of XYZ university (identifikasi digugurkan). (4D)

... in terms of soft skills, if we want to judge whether the goals are achieved or not is when our students graduated and maybe 10 years after the students graduated and entered the job market people will say wow! He or she ... is good ... this is the product of XYZ university (identifier deleted). (4D)

4.3.4.3 Implementation of assessment methods

4.3.4.3.1 Perceptions about assessment

... kita kena bagi gred [markah] otherwise student dia tak rasa “memuaskan”... “tak memuaskan” ... pun tak ada kesannya jadi kita kena ada sebab dia berbalik semula kepada pembudayaan asal tu kan ... teras dia apa, dia suka kepada gred, dia tekan kepada gred cemerlang kan, exam oriented, budaya kita dah exam oriented kan ... (identifikasi digugurkan)

... we have to give grades [points] otherwise students they won't feel “satisfactory” ... “unsatisfactory” ... in fact no effect thus, we have to have because this goes back to the core of acculturation ... what's the core, they prefer grades, they emphasise on obtaining excellent grades, exam oriented, our culture is exam oriented ... (identifier deleted)

... tapi kalau communication ataupun leadership dan lain-lain tu kan banyak yang tak boleh dinilai secara direct exam [penilaian] gitu kan, jadi macam communication kita nampak dari amalan ... [daripada] praktikal. (9C)

... but if communication or leadership and other skills, most of them can't directly exam [assess], thus, for instance, communication we can see only from the practice ... [from the] practical. (9C)

... tak akan memberi penilaian sebenar lah, [Jika kita] isi borang dah banyak.....kita tak boleh nilai seseorang tu berdasarkan markah,cuma kita boleh bentuk dia tetapi kita tak boleh nak kata okay you have succeeded 100% having all the soft skills ... Pensyarah isi [borang] kemahiran generik semata-mata dia kena isi tetapi bukan atas ... performance pelajar itu sendiri lah ... (identifikasi digugurkan)

... can't produce a valid assessment, even [if we] have been filling in many forms ... we can't assess an individual based on his or her scores, we can only train them but can't say that you have succeeded 100% having all the soft skills ... Lecturers complete the soft skills [forms] just for the sake they have to but it's not based on ... the performance of that particular student ... (identifier deleted)

... [di situ] enough apa yang mereka [pelajar] hadapi sekarang ni ... exam yang diberi. [Itu sangat] exam oriented so now we want them to be free, they enjoy so there is no element of exam dan sebagainya [untuk kemahiran insaniah]. (1D)

... [there's] enough of what they [students] are facing now ... with the given exams. [It's already so] exam oriented so now we want them to be free, they enjoy so there is no element of exam and so forth [for soft skills]. (1D)

To me kan it's so silly to belajar silat lepas tu jadikan dua kredit, pergi panjat gunung dua kredit, pergi apa ni berenang dua kredit. It's a life need so you don't have to, you don't have to be credited dalam belajar ... Kredit ni subjek yang kita ajar, akademik [pengetahuan akademik] so maknanya, yang lain-lain tu is not credited in academic. (19A)

To me, it's so silly to learn martial art then make it two credits, go for hiking two credits, go for swimming two credits. It's a life need so you don't have to, you don't have to be credited in learning... Credit is for the subject that we teach, academic [academic knowledge] so this means, other than that is not credited in academic. (19A)

4.3.4.3.2 Problems encountered in assessing soft skills

4.3.4.3.3 Suggested assessment options

Assessment instruments

Assessment strategies

Support and resources

Bengkel KPT ianya tak ada [terangkan] instrument, dia cuma terangkan ... memperkenalkan apa itu KI [kemahiran insaniah], macam mana nak melaksanakan [secara ringkas melalui tiga pendekatan] tetapi tak diterangkan penilaian. Penilaian bergantung kepada kreativiti pensyarah, kreativiti universiti. (2D)

MOHE's workshop no [didn't explain about] instrument, it only briefed on ... introduced what are soft skills, how to deliver [briefly through three approaches] but didn't explain about assessment. Assessment depends on lecturer creativity, university creativity. (2D)

Ada [pelajar] yang dapat direct reward [kesan], ada yang indirect. Indirect tu kadangkadangkang macam kita kata dia hikmah later baru dia [pelajar] rasa kan, hikmah tak nampak sekarang, macam lifelong learning ni kan kena buat research. Later baru dia dapat appreciate ... bila dia dah nak [boleh] apply skills tu baru dia rasa dah rewarded lah sebab dia dah dapat [dan] dia boleh guna. (9C)

Some [students] are getting direct rewards [impacts], some indirect. In terms of indirect, for example, sometimes the payback are earned towards the end, the benefits can't be seen now, for instance lifelong learning, have to conduct research. Later then only they [students] appreciate ... once they are about to [can] apply the skills, then only they feel that they are rewarded because they have obtained them [and] can apply. (9C)

No best way to assess

Appendix D2

Advantages and disadvantages of delivery in educational settings and workplace settings

Advantages and disadvantages of formal activities of teaching and learning

There are two approaches in the formal activities approach: embedded model and standalone model. (The translation of finding themes is attached in Appendix D2a.)

Embedded model

The embedded model was seen as a **simple model** and soft skills are learned by students along with their academic knowledge (see Table 4.3). Educators stressed that this approach assists students to better understand their academic knowledge.

They [students] can understand academic [academic knowledge] better with soft skills because they are not just memorising for me to pass the exam. They know how to apply it ... it's practicality. (5D)

Misunderstanding in learning can be avoided as the academic knowledge is not separated from soft skills as both have to be applied together.

Okay ... the first reason to integrate [soft skills] is we don't want to confuse the students ... by [not] separating soft skills [we] won't confuse ... (6C)

By **indirectly learning** the skills along with their academic knowledge, no extra burden is placed on the students in terms of effort or time – indeed, educators can save time.

One thing [is] this [embedded model] won't stress students out because students will learn ... two things at one time ... (4D)

This model is able to generate **high involvement of students** because skills are integrated into their core subject. In addition, the discipline educators who act as facilitators in developing these skills have **full control** over the student learning.

We absolutely obtain student attention, we can control from the aspect of, it's like this, we can control by giving them [students] good results – it's a kind of control that can be done ... (21E)

Educators also perceived that **assessment can be put in place without difficulty** as it can be done simultaneously and comprehensively with the academic knowledge.

Educators know their students and can observe them in class.

... but in classes where ... they [students] have to come to classes okay, for example we observe ... (12B)

Reporting to stakeholders is also no longer a problem.

... this [embedded model] will develop all [soft skills] and actually we also measure the degree [performance] to which ... we can actually inform our stakeholders ... (10C)

This approach also exposes students to **application of their soft skills along with their academic knowledge**.

Educators who embed the skills, especially those with working experience, are also acquainted with the requirements of the professions.

... how should the level of soft skills you [students] need to acquire, you need to acquire in your own profession based on educator experience and observation ... (17A)

Educators identified, however, that soft skills are **learned indirectly** using this model, which may lead to less attention being given to them. If educators do not highlight them students may not know they are learning soft skills. Furthermore, educators do not really train the students in the methods and techniques, although they do provide them with guidelines.

... we don't formally teach them [students] the methods, we ask them to do presentations, we ask them, we only give guidelines ... (15A)

The **formal learning environment** in each discipline is entrenched in the culture and thinking of that discipline, and within each year group the students interact within that culture.

... if you [educators] want to teach, let's say soft skills for mechanical students in that the faculty, so ... their mindset is all mechanical ... (8C)

The educators identified that cross-disciplinary and cross year group interaction are needed to facilitate soft skill learning.

Participants also stressed that this approach **will be ineffective without skills, willingness and understanding of educators** to deliver these skills. Educators as facilitators have to accept the approach for it to be effective.

... sometimes lecturers themselves have less understanding ... less understanding of soft skills. (6C)

Educator 7C believed that if educators are not positive in supporting soft skills development they will not engage specifically with planning, which is needed for delivering the skills.

... we call it early plan. If there is no time normally we will conduct [activities] some other time ... for example a class presentation ... that means lecturers need to be positive in supporting soft skills, if they are not positive in supporting they won't do it ... [it requires] individual initiative.

Skills are needed for educators to manage their teaching and control their students, especially if they are assigned large numbers of students. Educators have to ensure the right balance between academic knowledge and soft skills in their teaching, and cannot compromise academic knowledge for soft skills. They have to deliver both within the

allocated time, and this time constraint was acknowledged by educators. This was supported by educator 8C who suggested that problems do occur, especially with subjects that focus entirely on academic knowledge such as mathematics and chemistry.

... for example like science, okay chemistry, you [educators] can't teach soft skills in chemistry can't okay [very minimal] because like chemistry, mathematics they are so focused ... you can't compromise ...

Educator 5D also expressed concern that the students will tend to forget the foundations and theoretical aspects of knowledge if there is too much focus on practical knowledge and soft skills development.

Educator 15A stressed that educators need to be trained to deliver soft skills.

I think for courses ... soft skills to be embedded in the courses, lecturers themselves need to be trained have to ...

In addition, the participants viewed educators' educational and industry experience as being important. Exposure to various educational experiences (local and overseas) and industry experiences will assist them to better develop soft skills in students. Educators 15A and 18A also mentioned that educators themselves must possess appropriate skills to develop soft skills in students.

On the other hand, educator 10C identified that in the teaching and learning context there is a **lack of recognition** for efforts made in relation to these skills. For example, less recognition is given to teaching and learning soft skills in comparison to research and publication.

... the implementation is a big problem because for another reason, especially when the university goes for Research University (RU) [status], obviously we can see the effect because your Annual Performance Evaluation is like 70% goes to research and publication, they [educators] overlook teaching and learning [including soft skills]...

Another disadvantage of this model, mentioned by educator 2D, is **lack of coordination with other approaches** (support programs and campus life). This lack of coordination can lead to duplication of effort, with educators possibly teaching the methods and techniques of the same skills. If there is coordination, educators can focus on those not covered by other approaches or focus solely on applying and assessing those skills that have been learned using other approaches.

... should have link, a lecturer has to know what have been taught at PLP (Pusat Latihan Pelajar – Centre of Student Training) and he or she only assesses and embeds in his or her teaching thus, he or she does not need to teach again what has been taught by PLP [avoiding] double work ...

In this embedded approach, educators believed a great deal needs to be done to assess those skills, creating increased workload for the educators.

... the disadvantage I think is I will be burdened with more workload due to the assessment of soft skills ... (7C)

Educators identified that difficulties in assessing soft skills arise because assessment cannot clearly separate academic knowledge from soft skills. In addition, they observed that students may only be interested in passing the subject.

... in chemistry itself they [students] have to do presentations ... but ... students can't focus on development [soft skills] rather they focus on passing the exam ... (15A)

Educator 8C expressed the view that in terms of application, if the educators approach soft skill learning in a similar manner to academic knowledge there might be a lack of implementation. This approach may also mean students practice what they have learned only in the class environment. In reality, skills such as leadership are hard to apply in the classroom.

Furthermore, educator 8C suggested that focus maybe given to the academic knowledge than soft skills.

Standalone model

The second formal activities approach is the standalone model. The standalone model was viewed as an approach that can generate **high involvement of students** (see Table 4.3). In this model soft skills are **directly learned** by students and, due to the focus, the students are aware that they are learning soft skills. The educators are either specialists or they are trained to deliver the skills. The students are able to master the skills and develop their potential for excellence as they are trained by **experts with specialist methods and techniques**.

... it's [standalone model] very specific ... so we can focus on ... certain skills we want them [students] to master ... (4D)

Educators indicated that the effectiveness can be seen as this approach is **specific** and formalised in the curriculum.

Similar to the embedded model, **assessment can be put in place by educators without difficulty. Educators know their students and are able to observe them**. In addition, students have opportunities to practice and **apply the specific skills** in a general context.

On the other hand, educators identified that this approach, too, involves students who are in **similar disciplines** and so their **formal learning environment** will not fully facilitate learning soft skills. Educators also expressed the view that **specialist staff may not know the requirements of the professions** and therefore the specific skills will be developed in a general context. Thus, in the opinion of educators, students will be less able to associate the skills with their discipline.

... lecturers of general courses, they don't know the actual requirements of the profession ... (10C)

Another disadvantage identified by the participants is that **focus might be given to delivering knowledge rather than the skills** because these skills are offered as subjects. For example, in a subject such as the Basic Entrepreneurship Module (Modul Asas Pembudayaan Keusahawanan; APK), students will be equipped with entrepreneurship knowledge and their knowledge will be tested by examination. In contrast, developing entrepreneurship skills requires an element of practice. If the educators are lacking in **teaching and learning strategies** to put it in practice, they will end up delivering only the academic knowledge in class.

Again similar to the embedded model, educators need to closely supervise their students in order to assess skills. This process creates **increased workload for educators**. In addition, **problems may occur when one subject is taught by many educators and each uses his or her own perceptions in assessing the students**. One educator may end up giving a high score and another educator may not be as lenient and give an average score for the same output. As mentioned earlier, educators observed that these skills are offered as subjects, and **students may only be interested in passing the examination**, ignoring the fact that they are learning soft skills.

Additionally, the standalone model again may **limit student practice** of what they have learned to class activities, with the possibility that **no association is made to discipline area**.

Advantages and disadvantages of support programs

There are two approaches in the support programs: academic focused and non-academic focused (see Table 4.4).

Academic focused

Academically focused programs may be either voluntary or mandatory, depending on the university. For example, student-advisor programs (identifier deleted) are voluntary in some universities but mandatory in others. If the programs are voluntary, students are given freedom to choose any program of interest. Thus, students will be **self-motivated to learn soft skills** (see Table 4.4). Most of the programs are conducted at **minimal or no cost** for students and have a **flexible schedule**. These provide wider opportunities for students to learn soft skills.

In some universities, a centre is established to conduct academically focused programs. This centre normally recruits **specialist staff**. In this approach, the methods and techniques are **directly learned** by the students. However, if educators from the faculties are invited to conduct academically focused programs, their contribution will be **recognised in their performance appraisal**. Contributions from the faculty were seen as an important element in increasing student involvement. Educator 1D claimed that student involvement can be generated more easily this way because faculty members know their students better and directions from the dean and educators are seen as more relevant.

In the context of assessment, **student attendance is acknowledged either by certificates or grades**. Self-training groups (STG – identifier deleted) and student-advisor programs are amongst the examples. It is mandatory for students to attend STG sessions and participate in activities. Students get a pass or fail. In the academically focused approach, **practice of soft skills is not limited to the class environment**.

This approach generates **low student involvement** if the programs are voluntary. Students may pay more attention to their formal study or have no interest, especially if

they consider these programs to be boring. Educator 3D stressed that in such programs the instructors need to be facilitators rather than lecturers.

I think we need a facilitator not a lecturer [who gives the lecture] because soft skill is not academic based, that's my personal opinion ...

According to educator 8C, these programs should not be conducted similarly to academic knowledge, which involves a lot of teaching and assessing for students to enjoy learning soft skills.

... what we call it English support program, learning skills program which is outside the faculty should be done in a manner not too academic [academic knowledge], then the students will enjoy it ...

Educator 22E mentioned that high student involvement is generated if the programs are not limited to a classroom environment. Educators 1D and 10C claimed that involvement is always high amongst the same group of students who are active and aware of the programs. Educator 4D highlighted that students who are in a discipline area where employment rates amongst graduates are high, such as medicine and nursing, do not show much interest. Institutional culture also plays an important role in changing student attitudes towards soft skill learning.

... it's up to us to create a culture in the institution, we can't do so much in the class but in the institution itself you have to think about doing something to create a culture ... (10C)

Besides, although the programs have a flexible schedule, the students may feel they are an **additional burden** because they are conducted outside their learning contact hours. The programs are separated from their discipline-based studies and students have to allocate time to attend.

... when we separate it [soft skills] became like a burden to them [students] ...
(5D)

Another disadvantage in this teaching and learning context is that while educators or specialist staff can teach the methods and techniques of soft skills, they **do not have full control** over student learning if the programs are voluntary. Students also cannot be equipped with the skills by only attending a few hours.

Teaching and learning is also **ineffective if the educators are not trained** to conduct the programs. For example, educators need to understand the objectives of each program. Lack of clear understanding can also lead to them doing the task without engaging in the designated aim. Further, educator 24E emphasised the importance of communication between management (senior leadership group) and educators (non-senior leadership group) in terms of understanding their roles in the university's effort to develop soft skills. Universities can have a perfect policy but if this does not get to the educators who provide the training, it will defeat the purpose. In this context, relationships between management and educators are more important than between educators and students.

The management [senior leadership group] should clearly communicate to the lecturers and motivate the lecturers to participate [in developing soft skills] – right? ... Whether they want to participate or not, it depends on their relationship with management but not their relationship with students ...

Educators also acknowledged the importance of **coordination with other approaches**. For example, educator 8C identified that coordination is needed to ensure that what has been taught in the faculty is implemented through these additional programs. Educator 8C further stressed the importance of practice outside the walls of academia.

... other units [departments] can support in a sense to make sure that what has been taught in the faculty can be implemented in non-academic form, this means uncomplicated teaching, simple and enjoyable ...

In the context of assessment, educators again said that assessment is **ineffective if the educators are not trained** and they themselves are **not the experts**. Educator 1D indicated, for example, that in a program such as communication skills, the educators themselves need to know the requirements of the skills in order for them to evaluate the students.

Educator 7C also highlighted that the academically focused support program approach demands a lot of effort, especially in terms of budget and time; these programs need greater resources if they are conducted outside class activities.

Non-academic focused

In the second support program approach, non-academic focused, students learn soft skills by participating in co-curricular and extra-curricular activities (see Table 4.4). In most of the universities, co-curricular activities are mandatory and a centre is established to organise the activities. In co-curricular activities, for example the Undergraduate Police Volunteer Corps (Kor Sukarelawan Polis Siswa Siswi; SUKSIS), activities are well structured and guided by the instructional staff. Students may choose SUKSIS if they are interested in joining a police department for their future career. In addition to self-development building, a training allowance is also offered to the students. Although the activities are mandatory, students are given **freedom** in choosing co-curricular activities of their interest, subject to availability.

The extra-curricular activities that are conducted by student associations and clubs are generally voluntary. These activities can balance study and social life.

... you have to balance up your life you know there is no such thing ... working on your area. The non-academic focused is to [for] them [students] to appreciate the life in campus especially and the social life ... and at the same time develop their soft skills. (5D)

Most of the co-curricular and extra-curricular activities are either **non-paying activities** or **conducted at minimal cost**, which benefits students in comparison to parallel activities conducted by profit-making organisations.

Another advantage of the non-academic focused programs is the ability to create a learning environment that can facilitate soft skills development. Educator 8C stressed that social interaction among **students from different discipline areas** offers opportunities for students to express and share their ideas.

Most of the co-curricular activities that are mandatory involve **grades**. In contrast, involvement in extra-curricular activities is recognised by awarding **attendance certificates** to students. Non-academic focused programs are **not limited to the classroom environment with a lot done outside classroom**.

Although the non-academic focused approach offers a lot of advantages, educators identified some disadvantages as well. One of the disadvantages is **low student involvement**. Educators were in agreement that students may focus on their studies if they consider these activities are not in line with their interests and needs. Similarly students may not realise the benefit of **indirectly learning soft skills** in non-academically focused programs. In addition, educator 3D and 4D pointed out these activities may be seen as **burdening the students** as the activities are conducted outside their learning contact hours and take up more of their time. This may interrupt their study. Educator 6C, however, was not in favour of giving students freedom to choose their mandatory co-curricular activities. Given freedom, they may not choose activities

that improve their soft skills. Ideally, according to educator 6C, student weaknesses need to be identified and suitable activities need to be suggested for them in a proper plan. This view was supported by educator 10C, who said students may choose an activity that is convenient to them, does not take much time and offers good scores.

Co-curricular activities that include a specific module may have some limitations such as activities needing to be conducted in a scheduled time and only a certain numbers of students being accepted. This will not give a lot of opportunities for students to learn soft skills.

Some educators also believed there is **lack of coordination with other approaches**. If there is no link between what has been taught in these activities and what is taught by educators in the core subjects, it will defeat the purpose.

In terms of assessment, educator 15A suggested that if pass or fail is given, students will take co-curricular lightly because this will not affect their results.

... if co-curricular is tied up to pass or fail, I don't think this helps at this university.

Advantages and disadvantages of campus life activities

Campus life, the third approach, is based on the understanding that soft skills are developed through **involvement in activities**. Students learn soft skills in **informal learning environments** that give them **freedom and flexibility** to join in and conduct activities as they choose (see Table 4.5). Freedom to learn is said to generate interest and creativity in students, reducing boredom and stress.

... this will carry away student boredom because ... these [campus life activities] always ... those simple things such as telematch, the one that ... reduce their stress ... (4D)

Campus life activities can be conducted at any time throughout the year and **may involve many students**. The activities are organised by students at university, faculty or residential college level. Activities maybe jointly organised with other public and private agencies or organisations as well as non-governmental organisations (NGOs). Students are encouraged to join or conduct any activities of interest inside or outside class environment. According to educator 10C, by conducting their own activities, students have **sense of ownership**, which also generates interest in this approach.

... let these [activities] become institutional culture, absolutely. I think this is very effective because students do this willingly, they have the ownership ...

In addition, **resources and facilities** are provided by those universities supporting campus life activities. Facilities such as transport assist students in joining or conducting activities, especially **outside the class environment**. Campus activities allow **students from different discipline areas and years of study** to interact informally. This can provide a supportive learning environment to better develop soft skills in students. In terms of assessment, **student attendance is acknowledged** either for assessment or recognition (certificate) purposes. One of the universities conducts an assessment of campus life activities (e.g. residential college activities) for the purpose of monitoring students' soft skills achievement. Recognition is normally granted in the form of certificates. According to educator 12B, soft skills, specifically communication skills, which are learned in the formal faculty surroundings can be transferred to the formal industry settings.

The disadvantage of this approach identified by educators is the **indirect learning** of soft skills. If soft skills are not highlighted to students, they might overlook the fact that those activities can develop their soft skills.

Once again students **might be burdened** by over commitment to these activities conducted separately outside their learning contact hours. Normally these activities are **optional and student involvement is low**. Students pay more attention to their studies. Mostly involvement is generated from the same active group of students. Educators 20E and 21E are of the view that if the activities are made mandatory, a learning culture can be developed and student involvement can be monitored. When they are optional there is **less control**.

One way of implementing this is by giving merit to students in terms of priority to stay in the residential colleges. But this will defeat the purpose if students join the activities for merit rather than to learn soft skills.

Again, **lack of coordination** with other approaches was identified as a disadvantage. For example, according to educator 2D, there is no link between the key actors: Centre for Student Training (Pusat Latihan Pelajar; PLP), students' associations and educators. The gap exists because each player focuses on their own programs and activities and gives limited attention to what the other players are doing.

... for example [students'] associations, programs conducted by PLP and courses conducted by the faculty, if these three can work together, have link, integrate, for example, what has been taught at PLP ... communicated to [students'] associations, also communicated to lecturers so if there is link it will be better but at the moment I think, I observe there is a gap.

This approach **does not give much room for the educators or activity advisors to get to know the students and observe them** as the activities are not conducted on a regular

basis. Thus, assessment will be hard to conduct, and staff cannot really assess the students, especially when many students are involved. In the context of practice, although students can be exposed to a different environment (inside and outside class environment), their **learning context is still centred around university training**, and this does not really expose the students to a real life experience.

Advantages and disadvantages of industrial training

The participants were asked about industrial training and its contribution to soft skills development. The participants identified that industrial training is required in some universities in order for students to graduate. In some universities, whether industrial training is required or optional depends on discipline area. The duration of industrial training also varies from one discipline area to another.

Industrial training involves feedback and assessment and normally two supervisors will be appointed, one by the university and the other by the hosting organisation. The supervisor from the university usually pays a visit to the organisation in order to oversee the students. Feedback from supervisors is essential. In terms of assessment, students have to submit an industrial training report. They are given either a pass or fail, or in some cases a grade for overall industrial training assessment. Each university has its own practice for getting industrial placements. Usually, no allowance is provided by the universities or the organisations for industrial training. The participants made some observations about management of student industrial placements, in particular that universities should consider whether industrial training is required or not for certain discipline areas. Educators 1D and 13B emphasised the importance of verifying the discipline areas that really need industrial training and deciding on the organisations that the students will benefit from. If this is considered carefully, students who do not need

to undergo industrial training will not have the difficulties associated with making arrangements for placements, including accommodation and transportation, which involves a lot of time and money.

In addition, educators are of the view that universities should also consider the optimal duration of placements so that the industrial training will not waste industry resources and time. Furthermore, they observed that public and private organisations cannot accommodate many students for industrial training as the available places are limited. Higher education institutions (HEIs) should also determine the suitable time of year to send their students for industrial training. Educator 22E emphasised that if the students are sent in the middle of their study, they can use their industrial training experience to understand theory when back at university. However, if industrial training takes place in their final year, they can practice what they have learned.

... but if this is conducted in the middle of [their study], thus, a following semester once they came back they ... can use their practical [experience] along with the theories that they are learning ...

Finally, HEIs should also consider where to send their students for industrial placement. In general, students will gain a lot of experience if they are attached to a private rather than a public organisation because the private organisation will expose them to the process and operation of the organisation. Educator 22E said when the private organisations accepted students for industrial training they utilised that opportunity, which benefits both the organisations and the students. According to educator 5D, there are a few instances where the organisations offer students employment after graduation because of this exposure.

Conversely, educator 22E expressed concern that public organisations view accepting students for industrial training as their civic responsibility, rather than focusing on

training the students, and thus students do not learn much. Moreover, most high level jobs involve confidentiality and restrictions to which students cannot be exposed, meaning they end up doing low level administrative jobs.

... at the public organisations, I think not much [is learned], [students] learn photocopying, then filing, then distributing forms at the counter. I think what they have learned ... not much learning...

In the interviews, participants identified several advantages and disadvantages of industrial training for developing student soft skills (see Table 4.6). Three major elements also emerged during analysis of their perceptions: teaching and learning, assessment, and application. The most important advantage identified by educator 11B is exposure to the working environment where **learning takes place in context**. Furthermore, **high involvement** of students is expected as the students can apply both academic knowledge and soft skills and this approach provides **association with discipline area**.

... training in the industry itself or practical [training] to do things, at the same time develop their [students] skills and develop ... apply what they have learned, subject-specific ... (1D)

Nevertheless, there are a few disadvantages in the industrial training approach. Soft skills are **indirectly learned** by students as industrial training pays more attention to academic knowledge rather than soft skills, and students may not be aware they are learning soft skills.

... only a certain part of the discipline area [involve soft skills], before they [students] want to do this [industrial training], for example communication, they must have but most of the time they [organisations] emphasise on technical skills, technical knowledge ... (6C)

When it comes to assessment, **less attention is given to soft skills or soft skills are indirectly evaluated.**

In terms of monitoring, educator 22E revealed there is **insufficient monitoring** of student progress by the university supervisor. For example, the university supervisor may pay only one visit to the organisation and the students are normally required to submit only a final report.

Another thing is monitoring ... which means we only monitor this once or based on his or her [the student's] final report. Thus, in my opinion, this industrial training is not really effective.

This leaves the organisation supervisor with the important task of monitoring the student progress. Normally students undergo **short-term industrial training** in which they gain limited exposure and experience. Additionally, there is a **lack of cooperation** between universities and organisations. Educators claimed that if the organisations do not assign relevant tasks to students and give students opportunities to learn, they will not gain much from the industrial training.

Appendix D2a

Translation of finding themes

Advantages and disadvantages of formal activities of teaching and learning

Embedded model

Okey ... integrate [kemahiran insaniah] ni sebab pertama kita kata tidak mengelirukan pelajarlah ... [tidak] membahagikan soft skills [kita] tidak mengelirukan ... (6C)

Okay ... the first reason to integrate [soft skills] is we don't want to confuse the students ... by [not] separating soft skills [we] won't confuse ... (6C)

One thing, dia [model terapan] tak stress students because students will learn ... two things at one time ... (4D)

One thing, this [embedded model] won't stress students out because students will learn ... two things at one time ... (4D)

Kita memang dapat attention student, kita boleh control dari segi, macam ni, kita boleh control dengan bagi dia [pelajar] result baik ke – apa kan itu control dari segi boleh ... (21E)

We absolutely obtain student attention, we can control from the aspect of, it's like this, we can control by giving them [students] good results – it's a kind of control that can be done ... (21E)

... dia [model terapan] memang akan develope semualah [kemahiran insaniah] dan kita actually pun akan measure the degree [pencapaian] to which ... kita boleh actually beritahu pada our stakeholders ... (10C)

... this [embedded model] will develop all [soft skills] and actually we also measure the degree [performance] to which ... we actually we can inform our stakeholders ... (10C)

... how should the level of soft skills yang you [pelajar] kena acquire ... tau you kena acquire in your own profession based on experience and observation dia [pengajar] ... (17A)

... how should the level of soft skills you [students] need to acquire ... you need to acquire in your profession based on educator experience and observation ... (17A)

...kita tak ajar dia [pelajar] metod secara formal lah, kita suruh dia buat presentation, kita suruh dia ... kita bagi cuma guideline ... (15A)

... we don't formally teach them [students] the methods, we ask them to do presentations, we ask them ... we only give guidelines ... (15A)

... tidak begitu berjaya ... kadang-kadang pensyarah sendiri kurang faham, kurang faham tentang soft skills. (6C)

... won't succeed ... sometimes lecturers themselves have less understanding, less understanding of soft skills. (6C)

... early plan lah kita panggilkan. Kalau tak ada masa biasanya kita akan buat [aktiviti] masa yang lain lah ... macam presentation dalam kelas tak cukup masa, ... makna dia pensyarah tu kena positif untuk menyokong KI ni, kalau dia tak positif untuk menyokong dia tak akan buat ... [ia memerlukan] inisiatif sendiri. (7C)

... we call it early plan. If there is no time normally we will conduct [activities] some other time ... for example a class presentation, that means lecturers need to be positive in supporting soft skills, if they are not positive in supporting they won't do it ... [it requires] individual initiative. (7C)

... lecture like for example like science, okay chemistry you [pengajar] tak boleh ajar soft skills dalam chemistry tak boleh okay [sangat minimum] ... because like chemistry, mathematics they are so focused ... you can't compromise ... (8C)

... lecture like for example like science, okay chemistry you [educators] can't teach soft skills in chemistry can't okay [very minimal] ... because like chemistry, mathematics they are so focused ... you can't compromise ... (8C)

cuma saya rasa untuk kursus ... soft skills ini terapkan dalam kursus embedded ini para pensyarah sendiri perlu dilatih kan jadi kena ... (15A)

I think for courses ... soft skills to be embedded in the courses, lecturers themselves need to be trained have to ... (15A)

... pelaksanaan tu satu masalah yang besar sebab lagi satu especially bila universiti semua nak go for Research University (RU) [status] memang kita nampak effect yang sebab kalau your SKT (Sasaran Kerja Tahunan) is like 70% pergi pada research and publication, dia [pengajar] tak nampak yang teaching and learning ni [termasuk kemahiran insaniah] ... (10C)

... the implementation is a big problem because for another reason especially when the university goes for Research University (RU) [status] obviously we can see the effect because if your Annual Performance Evaluation) is like 70% goes to research and publication, they [educators] overlook teaching and learning [including soft skills] ... (10C)

... ianya kena ada hubungan pensyarah ni kena tahu apa yang diajar di PLP (Pusat Latihan Pelajar) dan dia nilai dan terapkan [kemahiran insaniah] di dalam pengajaran so dia tak perlu nak mengajar balik apa yang diajar oleh PLP ... [mengelak] dua kali kerja ... (2D)

... should have link, a lecturer has to know what have been taught at PLP (Pusat Latihan Pelajar – Centre of Student Training) and he or she only assesses and embeds [soft skills] in his or her teaching thus, he or she does not need to teach again what has been taught by PLP ... [avoiding] double work ... (2D)

... kekurangan saya rasa saya akan mengambil tambahan beban kerja kepada assessment KI ... (7C)

... the disadvantage I think is I will be burdened with more workload due to the assessment of soft skills ... (7C)

... dalam kimia sendiri dia [pelajar] kena buat presentation ... tetapi ... student dia tak boleh focus on development [soft skills] rather they focus on passing the exam ... (15A)

... in chemistry itself they [students] have to do presentation ... but ... students can't focus on development [soft skills] rather they focus on passing the exam ... (15A)

Standalone Model

... dia [model mandiri] very specific ... so we can focus macam ... certain skills tu kita nak dia orang [pelajar] master kan. (4D)

... it's [standalone model] very specific ... so we can focus on ... certain skills we want them [students] to master. (4D)

... lecturer subjek umum ni dia tak akan tahu sebenarnya the requirements of the profession ... (10C)

... lecturers of general courses, they don't know the actual requirements of the profession ... (10C)

Advantages and disadvantages of support programs

Academic focused

... so apa it's up to us to create a culture in institution, we can't do so much in the class tapi dekat institution itu sendiri you have to think of about doing something to create a culture ... (10C)

... so it's up to us to create a culture in institution, we can't do so much in the class but in the institution itself you have to think about doing something to create a culture ... (10C)

The management [kumpulan kepimpinan kanan] should clearly communicate to the lecturers and motivate the lecturers to participate [dalam membangunkan soft skills] – kan? Sama ada dia nak partipate ataupun tidak participate bergantung kepada hubungan dia dengan management bukan hubungan dia dengan student ... kan? (24E)

The management [senior leadership group] should clearly communicate to the lecturers and motivate the lecturers to participate [in developing soft skills] – right? Whether they want to participate or not it depends on their relationship with management but not their relationship with students – right? (24E)

... other units [bahagian] can support in a sense to make sure that what has been taught at the faculty can be implemented in non-academic form, maknanya pengajaran yang mudah, simple and enjoyable ... (8C)

... other units [department] can support in a sense to make sure that what has been taught at the faculty can be implemented in non-academic form, this means uncomplicated teaching, simple and enjoyable ... (8C)

Non-academic focused

... kalau ko-kurikulum tu dikaitkan dengan markah lulus tak lulus saya rasa tak akan bantulah kan di universiti ni. (15A)

... if co-curricular is tied up to pass or fail, I don't think this helps at this university. (15A)

Advantages and disadvantages of campus life activities

... dia bagi students hilangkan rasa bosan sebab ... benda-benda [aktiviti kehidupan kampus] ini selalu, benda-benda yang simple macam sukaneka ke, benda yang ... akan kurangkan stress dia orang ... (4D)

... this will carry away student boredom because ... these [campus life activities] always, those simple things such as telematch, the one that ... reduce their stress ... (4D)

... buat benda [aktiviti] tu jadi institutional culture, dia memang. Saya tengok memang very effective because students do this willingly, dia ada ownership ... (10C)

... let these [activities] becomes institutional culture, absolutely. I think this is very effective because students do this willingly, they have the ownership ... (10C)

... misalnya persatuan [pelajar], program yang dijalankan oleh PLP dan kursus yang diadakan oleh fakulti, kalau tiga-tiga ni disatukan, ada linklah, disepadukan misalnya apa yang diajar di PLP diberitahu jugak di persatuan [pelajar], diberitahu juga di kursus untuk pensyarah tu so kalau ada kaitan tu lebih baguslah tapi sekarang saya rasa, saya nampak macam ada gap. (2D)

... for example [students'] associations, programs conducted by PLP and courses conducted by the faculty, if these three can work together, have link, integrate, for example, what has been taught at PLP ... communicated to [students'] associations, also communicated to lecturers so if there is link it will be better but at the moment I think, I observe there is a gap. (2D)

Advantages and disadvantages of industrial training

... tapi kalau dibuat ditengah-tengah [pengajian], apa nama ni semester lepas tu ni dia balik sini mungkin dia boleh apa nama ni ... boleh gunakan praktikal [pengalaman] tu dengan teori yang dia belajar ... (22E)

... but if this is conducted in the middle of [their study], thus, a following semester once they came back they ... can use their practical [experience] along with the theories that they are learning ... (22E)

... dalam pejabat kerajaan ni saya rasa tak banyaklah [dipelajari], [pelajar] belajar photostat, lepas tu filing, kemudian duduk kat kaunter bagi borang. Saya ingat apa yang dia belajar kan, tak ada dapat banyak belajar ... (22E)

... at the public organisations, I think not much [is learned], [students] learn photocopying, then filing, then distributing forms at the counter. I think what they have learned, not much learning ... (22E)

... memang latihan in the industry tu sendiri ataupun [latihan] praktikal to do things kan, pada masa yang sama develop dia [pelajar] punya skills dan develop ... apply apa yang dia belajar, subjek spesifik ... (1D)

... training in the industry itself or practical [training] to do things, at the same time develop their [students] skills and develop... apply what they have learned, subject-specific ... (1D)

... hanya sebahagian tertentu lah dalam bidang [melibatkan kemahiran insaniah], macam sebelum dia nak ni [menjalani latihan industri], communicate dia kena ada tapi kebanyakan dia orang ni menekankan kepada technical skills, technical knowledge ... (6C)

... only a certain part of the discipline area [involve soft skills], before they [students] want to do this [industrial training], for example communication, they have to have but most of the time they [organisations] emphasise on technical skills, technical knowledge ... (6C)

Satu dari segi pemantauan ... maknanya kita hanya pemantauan sekali je ataupun report akhir dia [pelajar]. Jadi saya ingat pada sayalah, tidak begitu berkesan lah praktikum ni. (22E)

Another thing is monitoring ... which means we only monitor this once or based on their [the student's] final report. Thus, in my opinion, this industrial training is not really effective. (22E)

Appendix D3

Goal attainment of delivery approaches and suggested alternatives

Goal attainment of delivery approaches

(The translation of finding themes is attached in Appendix D3a.)

Formalisation of soft skills development

Educator 2D emphasised that the soft skill modules and approaches have only recently been formalised at HEIs. It is premature to judge at this juncture as the impact can only be seen after some time. Educators 8C and 10C stressed that it takes time to change the attitudes of all the people involved.

... it takes time to change attitude, it takes time to develop their professional skills [soft skills] ... (10C)

Institutional culture

The institutional culture determines the direction of the university in its efforts regarding the development of soft skills. An encouraging environment, which includes access to resources and facilities, is able to support soft skills development. If the focus of the universities is more on research this can divert educator attention away from soft skills development.

... now the culture in the university is to push [educators] for going towards concentrating on research with publications, as a result students are disorganised [teaching and learning are given less attention], if the support programs, this is similar because the one who run this again are the lecturers, so that when the focus of lecturers is diverted to some other things, this causes a problem and the same thing goes to campus life. (10C)

Educator role

The core responsibilities of the educators who are involved in the various approaches are on teaching and doing research. Thus, consideration needs to be given to educator acceptance, educator workload, educator capability and allocation of time. One educator (identifier deleted), a professor, commented that the previous university curriculum (50 years ago) had integrated academic knowledge and soft skills very well and produced good graduates. According to this participant, soft skills will be obtained once knowledge has been grasped. Competent people are those who effectively use knowledge together with experience. The participant argued that when the system looks at academic knowledge separately from soft skills this may confuse students. The students who are actively developing their soft skills may be distracted from learning academic knowledge.

Those out there who are active when we segregate like this, those who are extremely active to acquire soft skills will be distracted in ... their formal education ... (identifier deleted)

Student role

The acceptance and attitudes of the students towards soft skills development play a role in the success of the approaches. These include their awareness of the importance of soft skills and of the way the various approaches benefit them.

... the basic things, the university can offer. For me if the individual, the student really takes these formal activities and then he or she joins the support programs and then he or she really takes the advantage of the campus life, I'm sure he or she can completely have these soft skills ... (21E)

The element of practice

Finally, the educators once again indicated the essential nature of practising the skills.

... can teach somebody how to communicate one to one but if you [educators] don't provide ... them [students] with the opportunity to practise, you don't correct their mistakes, you don't guide them, then they will never learn. (10C)

Students should be given the opportunity to practise the skills they have learned; however, most of the time, the practice is limited to the university training. Students are therefore not completely exposed to real world experience and skills.

... real world then they [students] know because if campus life ... is a formal training [in university context] but it's not the real ... (8C)

Suggested alternatives

Encouraging environment

Educators strongly suggested that universities should create institutional cultures that support soft skills development. Educators 10C and 24E expressed the opinion that this is important to generate willingness in educators and students to develop soft skills. Once the right institutional culture is developed, students will be self-driven to develop their soft skills rather than enforcement driven.

However, educator 24E claimed the university environment currently does not acknowledge the importance of soft skills development. According to educator 15A, unless an encouraging environment is created the university is not really doing their job in developing student soft skills.

I think the university is not really playing their role unless ... the university provides a conducive environment. At present it's not conducive ...

Educator 10C proposed that universities should develop institutional cultures that value soft skills such as ethics, morals and entrepreneurship. Students should be given freedom to develop their soft skills.

... so it's up to us to create culture in institution, we can't do so much in the class but in the institution itself you have to think of about doing something to create a culture of this [soft skills development] such as ethics, moral responsibility, even entrepreneurship ...

Educator 12B, who supported one university in providing avenues such as a speech corner and setting up an English speaking zone, said such action will support the university in establishing an institutional culture that facilitates soft skill learning. Students are free to express their opinions and able to improve their language skills. Educator 1D added that by providing premises such as food stalls, entertainment centres (bowling and karaoke) and a student mall (e.g. one stop centre with facilities such as convention or meeting point, photocopying, telephone and air ticket purchase) can create an environment that facilitates students in developing soft skills. At the same time, by giving the students opportunities to run the above business premises, they can learn to apply the skills.

The interview data highlighted the views that modelling by educators and an informal approach can be used to create an encouraging environment.

- *Modelling by educators*

Two of the participants suggested that the educators themselves should be role models. Students can observe and indirectly learn the skills. Educators are expected to possess soft skills in order for them to develop soft skills in students. Educator 5D stressed that the educators who teach should also apply the skills.

... we are the soft skills [role] models because we actually applied it and at the same time what we applied, we teach ...

- *Informal approach*

The educators believed that soft skills can be developed through informal approaches in which their performance is not tied to their academic knowledge. Educator 18A supported the idea that soft skills development should be done through informal approaches.

... to me everyone has ... [the] potential to be a good person, to ... become an asset to the society, okay, but not everyone can be academic, can achieve academic success ... but everyone has a potential to be a good and productive person [by possessing soft skills] in his own way ...

Real world interactions

Three educators suggested that another approach is to expose students to real world experiences by any means. This can be done through activities that can be conducted outside the university environment.

... most importantly the practical part, for example when you [educators] talk about entrepreneurship, you may take them [students] to visit ... certain places that allow them to have practical experience ... leadership skills, take them to the camp if you are interested in military ... that's the approach ... we learn go to real world. (8C)

Exit training

Independent training by people other than educators was also suggested as an avenue, given educators are fully occupied with their formal activities of teaching and learning. This *exit training* was suggested for those who have graduated, and it can be conducted by university alumni.

... at present they [educators] feel soft skills [teaching and learning] cause disruption. Thus, once they [students] graduated maybe university alumni can conduct something and invite them for training, exit [training] after [they've] graduated? It's not ... a part of curriculum anymore ... (4D)

Although this view was expressed by only one participant, it may still reflect a point of view held by others.

Appendix D3a

Translation of finding themes

Goal attainment of delivery approaches

Formalisation of soft skills development

... it takes time to change attitude, it takes time to develop dia punya professional skills [kemahiran insaniah] ... (10C)

... it takes time to change attitude, it takes time to develop their professional skills [soft skills]... (10C)

Institutional culture

... sekarang ni culture dekat universiti yang dia nak push [pengajar] going towards concentrating on research dengan publication, as a result student memang berterabur lah kan [kurang perhatian kepada pengajaran dan pembelajaran], kalau macam support programme ni sama yang run pun lecturers jugak kan, so bila lecturer punya fokus ke tempat lain, dia kan jadi masalah jugak lah sama dengan tu lah campus life. (10C)

... now the culture in the university is to push [educators] for going towards concentrating on research with publications, as a result students are disorganised [teaching and learning are given less attention], if the support programs, this is similar because the one who run this again are the lecturers, so that when the focus of lecturers is diverted to some other things, this causes a problem and the same thing goes to campus life. (10C)

Educator role

Orang yang sangat aktif kat sana bila ... bila kita segregate macam ni orang yang terlalu aktif dalam nak dapatkan soft skills will be distracted in ... their formal education ... (identiti digugurkan)

Those out there who are active when ... when we segregate like this those who are extremely active to acquire soft skills will be distracted in ... their formal education ... (identifier deleted)

Student role

... the basic things, yang universiti boleh beri. Bagi saya kalau misalnya orang, memang seorang pelajar yang memang ambik this memang formal activities and then dia join the support programs and then dia memang take advantage of the campus life saya sure dia boleh complete saya rasa memang dia boleh dapat these soft skills ... (21E)

... the basic things, the university can offer. For me if the individual, the student really takes this formal activities and then he or she joins the support programs and then he or she really takes the advantage of the campus life, I'm sure he or she can completely have these soft skills ... (21E)

The element of practice

... can teach somebody macam mana nak bercakap one to one tapi kalau you [pengajar] tak bagi ... dia [pelajar] praktis, tak betulkan dia, tak guide dia, then dia will never learn. (10C)

... can teach somebody how to communicate one to one but if you [educators] don't provide ... them [students] with the opportunity to practise, you don't correct their mistakes, you don't guide them, then they will never learn. (10C)

...real world then they [pelajar] know sebab kalau campus life ... is a formal training [dalam konteks universiti] tetapi it's not the real ... (8C)

... real world then they [students] know because if campus life ... is a formal training [in university context] but it's not the real ... (8C)

Suggested alternatives

Susah lah sebab ... dia [kemahiran insaniah] melibatkan ... apa orang kata spiritual, ni kan dia sifat mendalam inner so macam susah maybe kita kalau subject yang kita boleh control kan kita bagi exam kita tahu lah feedback dia tapi ini kita tak tahu ... (21E)

It's hard because ...these [soft skills] involve ... what we call spiritual, this is internal attitudes inner so it's quite difficult maybe if the subject we can control, we give exams, we get the feedback but this one we don't know ... (21E)

Encouraging environment

I think universiti tak mainkan peranan sangat kecuali ... universiti menyediakan suasana yang kondusif. Sekarang ni tak kondusif ... (15A)

I think the university is not really playing their role unless ... the university provides a conducive environment. At present it's not conducive ... (15A)

... so apa it's up to us to create culture in institution, we can't do so much in the class tapi dekat institution itu sendiri you have to think of about doing something to create a culture of ini lah [pembangunan kemahiran insaniah] macam ethics, moral responsibility even entrepreneurship ... (10C)

... so it's up to us to create culture in institution, we can't do so much in the class but in the institution itself you have to think of about doing something to create a culture of this [soft skills development] such as ethics, moral responsibility even entrepreneurship ... (10C)

- *Modelling by educators*
- *Informal approach*

Real world interactions

...most importantly the practical part lah, for example when you [educators] talk about entrepreneurship, you bawak dia lawat kat satu-satu tempat yang practical ... leadership skills bawak dia pergi kem apa nama katakan kalau you minat on tentera ... itu je approach ... kita belajar go to real world. (8C)

... most importantly the practical part, for example when you [educators] talk about entrepreneurship, you may take them [students] to visit certain places that allow them to have practical experience ... leadership skills take them to the camp if you are interested in military ... that's the approach ... we learn go to real world. (8C)

Exit training

... sekarang dia [pengajar] rasa soft skills [pengajaran dan pembelajaran] mengganggu. Jadi bila dia orang [pelajar] dah bergraduat mungkin alumni universiti boleh adakan sesuatu yang macam ni boleh panggil dia orang for training ... exit [latihan] lepas [mereka] graduat ke? Dia bukan ... part of curriculum anymore ... (4D)

... at present they [educators] feel soft skills [teaching and learning] cause disruption. Thus, once they [students] graduated maybe university alumni can conduct something and invite them for training ... exit [training] after [they've] graduated? It's not ... a part of curriculum anymore ... (4D)

Appendix D4

4.3.3.3.2 Problems encountered in developing soft skills

(The translation of finding themes is attached in Appendix D4a.)

Involvement

Ten of the educators stated that low student involvement in learning soft skills and low educator involvement in teaching soft skills can cause problems. The following factors may cause low involvement of students and educators in developing soft skills:

Beliefs about soft skills

Educator 18A argued that society in general does not really pay attention to soft skills but rather focuses on academic achievement. Moreover, soft skills are only considered to be a small portion of teaching, and educators get very little credit for teaching them, for example in key performance indicators (KPI). As a result, students and educators do not pay much attention to these skills.

... and then these people skills [soft skills] thing, just a small component which is not even graded, not even in the KPI so who cares, no not in KPI. (18A)

This was also supported by educator 4D who agreed that students are examination oriented. Educator 1D commented that if the programs and activities are not related to their study they will be reluctant to get involved. Student involvement is a major problem in the semi-controlled environment, particularly for voluntary activities.

... even currently we [the university] are offering the soft skills [activities] ... they [students] will [participate] ... because of the ... mandatory requirement then only they hurriedly [develop soft skills] but to see them on a voluntary basis involved, it's hard to think.

According to one educator (identifier deleted) who supported assessment in developing soft skills, student involvement is low in the semi-controlled environment, such as in a student-advisor program. This is because they do not understand how the program is assessed and the importance of independent learning in tertiary education.

They [students] should understand ... because studying at the university they have to learn to be independent and even at that point we actually can't give [training] to all, which means each individual has their own strength, we only just assess their ability and a bit guiding them if what they are doing is wrong – this is wrong but at that point we assess them.

Furthermore, educator 19A stated once soft skills are added into the curriculum and educators explicitly develop the skills, students become confused about which elements to focus on.

... they [students] don't know which to focus [on]. If they focus on soft skills then ... [students are worried] academic achievement will be low, if they focus on the academic [academic knowledge], soft skills will be left out but when they are looking for jobs, all these matter most ...

However, if they are forced to participate, they do so to avoid unpleasant consequences, such as not getting a place in the residential colleges.

... when they [students] are studying at the university, staying at the colleges [residential colleges], the colleges force them by saying you must get involved ... force them with a promise they can stay at colleges ... (19A)

In addition, educator 13B argued students may not have any interest in joining the programs because their focus is on their personal activities. They prefer to spend time doing those activities which satisfy them most.

... for those [students] ... who don't want to attend [activities] they focus on their academic but ... there is also a group who are not bothered about the outside world, they are in their own world with their friends ...

In relation to low educator involvement, educators 8C and 25E highlighted that the nature of either the subjects or soft skills does not allow much time for development, although educators are willing to develop these skills.

... in the teaching program but some of not, some of them [soft skills] can't be embedded ... yeah, nature of themselves ... (25E)

Educators also claimed soft skills development means extra workload.

... if we elaborate this [soft skills], this is going to confuse, becomes complex and will add more to the workload ... (6C)

Educator 8C argued that they cannot successfully develop student soft skills if the educators themselves do not possess these skills.

... for you to be able to deliver the idea of generic skills [soft skills], the agents okay in this case the teachers, educators, they should have possess these attributes first, if they themselves do not possess ... there is no way how good, beautiful your mapping is won't become a success, sorry to say.

Institutional culture

Educator 10C highlighted that an institutional culture that strongly supports soft skills development does not yet exist. Such a culture will change the mindset of students from being forced to be involved in the activities, to being willing to get involved. Willingness and awareness are important factors to motivate students to involve themselves in the activities. Educators have to play their role in making the students aware of the importance of the activities.

... many of them [students] feel that they are forced to but actually if we create the environment, they actually will get involved, willingness will be there and they will see the advantages ...

It is also important for students to note that such activities are comparatively very costly if they take classes outside university (e.g. swimming class).

Educator 13B stressed that a shift in thinking is needed in this sense.

... these [campus life activities] are opened to all students thus these are conducted but the students have to have ... a mental revolution, which means there are those who have the interest, and many will attend but those who perceive this is unimportant also exist ...

University system

According to educator 6C, even though some students do realise the importance of the programs (for example, those that are academic focused), their tight academic schedule may not allow them to be involved unless the programs are mandatory. Educator 16E claimed the ‘semester system’ also contributes to a lack of student involvement because not much time is allocated for students to get involved in such programs compared to the ‘term system’.

Okay, [there are] certain approaches through co-curricular activities ... but there is no ideal way as the concept of semester won't allow many things to be conducted ... (16E)

Educator 1D added that the university is bound by many procedures that force students to focus on their study, particularly in regard to financial support. The students have to finish their degree courses within the stipulated time frame as determined by their financial sponsors. For example, the National Higher Education Fund Corporation (Perbadanan Tabung Pendidikan Tinggi Nasional; PTPTN) provides education loans to students under certain terms and conditions. These terms and conditions leave them with little freedom to take more responsibility for their education through active involvement in educational experiences for soft skills development.

... the problem is the university is bounded by many procedures which we need to follow, particularly all the financial support ... if [we] can, we would like them [students] ... to take less courses ... they study in one semester, then they work in the following semester ... gain experience but the problem is our students are not allowed to do so ...

As stated above, it is clear that the involvement of students and educators is one of the problems facing by HEIs in soft skills development.

Class size

About a quarter of the educators (6) faced problems related to class size. It is difficult to develop student soft skills in a big class. Activities such as problem-based learning and class presentation are difficult to conduct. Educators also cannot supervise and recognise their students well, which is important for assessing these ‘attributes’.

... even if you [educators] do all these things if your students, [there] are so many, how can you be effective? If you can't even remember [them] all ... (3D)

Educators need to improvise their teaching approach and plan their activities carefully due to a big number of students. Consequently, students’ focus on learning soft skills is reduced as less attention is given to each of them individually.

... if the class is big, the attention of students is not there. We also have to change our approach, our teaching approach because we emphasise on lecture ... and if we take much time on the presentations, take much time focusing on the individual student, this will interrupt the whole class ... (23E)

Time constraints

About a quarter of the educators (6) also mentioned that they have time constraints in developing student soft skills. With a short academic semester (about 14 weeks), it is difficult to find the right balance between the academic knowledge and soft skills in the

embedded model. Educators have to follow the syllabus and to compress everything to fit within the allocated time frame. This was emphasised by educator 8C.

This is the problem ... because they are making it [semester length] short, when it's short, compressed, everything is compressed ...

This was confirmed by educator 9C.

... the constraint is from the aspect of we don't have ample time ... (9C)

Coordination

Coordination was identified by several educators (4) as a problem in developing student soft skills. The analysis of their perceptions fell into two contexts: coordination of teaching and learning soft skills in school and university; and coordination between approaches within the university environment. At the entry level, educators have no idea on student soft skill level. Educators believed that soft skills should have been developed earlier, in secondary schools, and therefore the university not depended upon for their successful development. Within the university environment itself, again educators have no idea as to the level attained and what has already been learnt by students, due to the absence of coordination in approaches in developing student soft skills. As highlighted earlier, educator 8C identified that coordination becomes a problem because of ownership. Those who are involved in each approach may see their parts as more important than the others. Educator 4D said sometimes campus life activities tend to interrupt formal activities of teaching and learning. For example, family health activities for medical students normally scheduled on Saturday or Sunday coincided with campus life activities and have to be rescheduled. Educator 9C expressed frustration with coordination when the extra or make-up classes have to be

conducted due to the unavailability of students as they are occupied with campus life activities.

But as a lecturer I myself sometimes [get] frustrated because when we want to have extra classes ... or make up classes, students will say “We have college [residential colleges] activity”. Thus, for me as a lecturer sometimes feel ... it seems that we ourselves are not free [able] to conduct our own extra activities as they [students] have many extra activities.

Educator 1D indicated that efforts have been intensified to involve all the key actors either at the faculties or residential colleges in the (academic focused) support programs. The purpose is to let everyone cooperate and experience the responsibilities and the difficulties faced by the Centre for Student Training (Pusat Latihan Pelajar; PLP). This educator said the approach cannot be implemented exclusively at the PLP in order to increase student involvement. If the educators at the faculty are involved, students may have more interest as a directive from their deans or educators is considered more relevant. The same goes for the residential colleges programs; the directive from the principals and fellows is considered more relevant. Furthermore, if PLP conducts the programs by itself, it is hard to get cooperation from other key actors. Educators at the faculty might question PLP on the activities or they may reluctant to cooperate unless the directive comes from the deans. The ‘cooperation’ was referred to by educator 1D as a ‘smart partnership’ among the key actors. Their contribution is acknowledged in the performance appraisal and they are rewarded with a token.

... we [educators at PLP] let the faculty involve because of students, firstly, the faculty know their students better, secondly, instructions from the dean and lecturers at their faculty are more relevant compared to our instructions, some of the lecturers or some of the deans, they may not want to cooperate with PLP rights: “If our students already possess this [soft skills] ... you want to train them again, we don’t want that”. Thus, when we implement this approach everybody will experience, let everyone cooperate ... smart partnership ... we also asked for a little allocation from the university for token purposes.

Institutional support

Educators also identified lack of resources and facilities to support the activities, and lack of training, as problems in developing soft skills. Educator 16A highlighted that there was insufficient budget for the preparation and conducting of activities. As a result, the activities are less impactful to students.

I'm so disappointed with the course [Basic Entrepreneurship Module – Modul Asas Pembudayaan Keusahawanan; APK], our aim is big but can do nothing, no budget, budget constraint ... it's hard and the effect is not much, we know that we can do much better.

In terms of preparation, the educators believed that they are not well trained, particularly in certain skills, such as entrepreneurship.

... and we ourselves are not well trained, can feel the lacking and feel like lying to ourselves, that's how we go about it [Basic Entrepreneurship Module – Modul Asas Pembudayaan Keusahawanan; APK] and we know that we don't have much knowledge in that ... (16A)

The above mentioned problems illustrate the challenges that lie ahead on the road towards soft skills development.

Appendix D4a

Translation of finding themes

4.3.3.3.2 Problems encountered in developing soft skills

Involvement

Beliefs about soft skills

... even sekarang ni kita [universiti] offer soft skills inipun [aktiviti] ... mereka [pelajar] akan [mengambil bahagian] ... because of the ... dah wajib requirement then dia orang berlumba-lumbalah [membangunkan kemahiran insaniah] tapi to see kalau nak berlumba-lumba secara sukarela tu susah kita nak fikirkan. (1D)

... even currently we [the university] are offering the soft skills [activities] ... they [students] will [participate] ... because of the ... mandatory requirement then only they hurriedly [develop soft skills] but to see them on a voluntary basis involved it's hard to think. (1D)

Sepatutnya mereka [pelajar] memahami dalam ... sebab belajar di universiti ni mereka mesti belajar berdikari dan kalau di situpun sebenarnya kita tak boleh nak bagi [latihan] kepada semua, maksudnya setiap orang ada kelebihan masing-masing kan kita Cuma just nilai kebolehan dia dan memberi sedikit bahawa mereka buat ni salah, buat ni salah tetapi di situ lah tempat kita menilainya. (identifikasi digugurkan)

They [students] should understand ... because studying at the university they have to learn to be independent and even at that point we actually can't give [training] to all, which means each individual has their own strength, we only just assess their ability and a bit guiding them if what they are doing is wrong, this is wrong but at that point we assess them. (identification deleted)

...budak-budakpun [pelajar] tak tahu mana satu yang hendak di...difokus kan...Jika nak fokus soft skills then ... [pelajar bimbang] akademik turun, nak fokus akademik [pengetahuan akademik], soft skills tak ada, nanti bila dia nak kerja, nak tengok semua ... (19A)

... they [students] don't know which to focus [on]. If they focus on soft skills then ... [students are worried] academic achievement will be low, if they focus on the academic [academic knowledge], soft skills will be left out but when they are looking for jobs, all these matter most ... (19A)

... bila dia [pelajar] belajar kat universiti dia duduk kat kolej [kolej kediaman], kolej paksa dia, kata you must get involve dengan ... force depa ni is janji nak duduk kat kolej ... (19A)

... when they [student] are studying at the university, staying at the colleges [residential colleges], the colleges force them by saying you must get involved with ... force them with a promise they can stay at colleges ... (19A)

... Bagi [pelajar] yang ... yang ada juga yang tak mahu pergi [aktiviti] tu dia fokus akademik kan tapi ... kan ada juga ada kumpulan-kumpulan yang jenis tak ambik tahu tentang dunia luar, dia dengan dunia dia dengan apa ni kawan-kawan dia ... (13B)
... for those [students] ... those who don't want to attend [activities] they focus on their academic but ... there is also a group of them who are not bothered about the outside world, they are in their own world with their friends ... (13B)

... kalau kita terangkan ini [kemahiran insaniah] ... ini dia macam satu yang boleh mengelirukan, kompleks dan menambahkan lagi bebanan tugas ... (6C).
... if we elaborate this [soft skills] ... this is going to confuse, becomes complex and will add more to the workload ... (6C)

... for you to be able to deliver the idea of generic skills [kemahiran insaniah], the agents okay in this case the teachers, educators, they should have possess these attributes first, kalau dia sendiri pun tak ada ...there is no way how good beautiful your mapping is won't become a success, sorry to say. (8C).
... for you to be able to deliver the idea of generic skills [soft skills], the agents okay in this case the teachers, educators, they should have possess these attributes first, if they themselves do not possess ... there is no way how good beautiful your mapping is won't become a success, sorry to say. (8C)

Institutional culture

... ramai [pelajar] rasa terpaksa tapi sebenarnya if we create the environment, memang orang akan ikut, willingness ada dan dia akan nampak kebaikan dia kan ... (10C)
... many of them [students] feel that they are forced to but actually if we create the environment, they actually will get involved, willingness will be there and they will see the advantages ... (10C)

... yang ini [aktiviti kehidupan kampus] dibuka untuk semua pelajar-pelajar jadi memang, memang ada dibuat cuma pelajar-pelajar ni lah yang perlu di ... direvolusi mental lah maksudnya ada yang tak minat, ada yang...ada yang minat, ramai juga yang pergi tetapi yang...yang tak menganggap ini penting pun ada ... (13B)
... these [campus life activities] are opened to all students thus, these are conducted but the students have to have ... a mental revolution which means there are those who have the interest, and many will attend but those who perceive this is unimportant also exist ... (13B)

University system

Okey ... pendekatan tertentu melalui kegiatan luar ... tetapi tak ada benda yang ideal memandangkan dalam konsep semester kita ni boleh membunuh banyak perkara ... (16E)
Okay ... certain approaches through co-curricular activities ... but there is no ideal way as the concept of semester won't allow many things to be conducted ... (16E)

... masalahnya kita ni universiti is very much banyak terikat dengan peraturan yang harus diikuti particularly all the financial support ... kalau boleh kita nak dia [pelajar] ... ambik sikit-sikit course ... belajar satu semester, satu semester lagi dia bekerja ... dapatkan experience kan tapi masalahnya pelajar kita tak boleh buat macam tu ... (1D)
...the problem is the university is bounded by many procedures which we need to follow particularly all the financial support ... if can we would like them [students] ... to take less courses ... they study in one semester, then they work in the following semester ... gain experience but the problem is our students are not allowed to do so ... (1D)

Class size

... tapi kalau kelasnya besar tumpuan para pelajar tak ada kat situ. Kita pulak kita terpaksa ubah cara kita, cara kita mengajar sebab dia lebih kepada lecture kan dan lecture dan kalau kita ambil masa untuk buat pembentangan, ambil masa untuk fokus kepada seseorang, dia akan mengganggu seluruh kelas ... (23E)
... if the class is big, the attention of students is not there. We also have to change our approach, our teaching approach because we emphasise on lecture and lecture and if we take much time on the presentations, take much time focussing on the individual student, this will interrupt the whole class ... (23E)

Time constraints

This is the problem ... because dia mereka telah making it [jangka masa semester] bila dah short compress, everything is compress ... (8C).
This is the problem ... because they are making it [semester length] short, when it's short compress, everything is compress ... (8C).

... Itulah kekangan dia dari segi kita pulak tak cukup masa ... (9C)
... the constraint is from the aspect of we don't have ample time ... (9C)

Coordination

Tapi sebagai pensyarah tu I myself kadang-kadang frustrated sebab nya nanti kita nak buat extra kelas ke ataupun kelas ganti, student kata kami ada aktiviti kolej, itu yang for me as lecturer kadang tu rasa macam ... macam kitapun tak free nak buat kita punya aktiviti yang extra lah kan, dia orang [pelajar] pulak ada banyak extra aktiviti. (9C)
But as a lecturer I myself sometimes get frustrated because when we want to have extra classes ... or makeup classes, students will say "We have college [residential colleges] activity". Thus, for me as a lecturer sometimes feel ... we ourselves are not free [able] to conduct our own extra activities as they [students] have many extra activities. (9C)

... kita [pengajar di PLP] gunakan fakulti is because pelajar, ... fakulti lebih tahu pelajar-pelajar dia satu, yang kedua arahan dekan dan pensyarah di fakulti masing-masing tu lebih relevan daripada arahan...arahan kita, kalau kita mengarahkan mungkin some of the lecturers or some of dekan tak mahu beri kerjasama right dengan PLP: "Kalau student kita dah ada ni [kemahiran insaniah] ... you nak buat lagi, we don't want that". Jadi bila guna pendekatan ini maknanya biar semua orang merasa, biar semua orang bekerjasama, so the students pun mungkin boleh, smart partnershiplah ... kitapun cuba dapatkan sikit peruntukan daripada universiti nak bagi token tadilah. (1D)

... we [educators at PLP] let the faculty involve because of students, firstly, the faculty know their students better, secondly, instructions from the dean and lecturers at their faculty is more relevant compared to our instructions, some of the lecturers or some of the deans, they may not want to cooperate with PLP rights: "If our students already possess this [soft skills]... you want to train them again, we don't want that". Thus, when we implement this approach everybody will experience, let everyone cooperate, so the students also might, smart partnership ... we also asked for a little allocation from the university for token purposes. (1D)

Institutional support

Saya cukup kecewa dengan kursus pembudayaan [Modul Asas Pembudayaan Keusahawanan – APK] ni, hasrat kita besar tapi [kita] tak boleh buat apa-apa tak ada bajet, kekangan bajet ... sukar dan kesannya tak berapa sangatlah, kita tahu kita boleh malah kita boleh buat benda yang lebih baik. (16A)

I'm so disappointed with the course [Basic Entrepreneurship Module – Modul Asas Pembudayaan Keusahawanan; APK], our aim is big but [we] can do nothing, no budget, budget constraint ... it's hard and the effect is not much, we know that we can do much better. (16A)

... dan kita sendiripun tidak dilatih dengan baik, rasalah kurangnya dan rasa macam ya lah macam menipu diri sendiri je, rasa-rasa macam tu lah kita buat tu (Modul Asas Pembudayaan Keusahawanan – APK) dan kita sendiri tahu benda tu tak banyak ... (16A)

... and we ourselves are not well trained, can feel the lacking and feel like lying to ourselves, that's how we go about it (Basic Entrepreneurship Module – Modul Asas Pembudayaan Keusahawanan; APK) and we know that we don't have much knowledge in that ... (16A)

Appendix D5

4.3.4.3.2 Problems encountered in assessing soft skills

(The translation of finding themes is attached in Appendix D5a.)

Instrument

The most commonly cited problem relates to the instrument of assessment. Most of the educators (17) identified that the subjectivity of soft skills makes these skills difficult to assess. Educator comments clustered around two major issues: reliability and validity. Educator 1D emphasised that no specific instrument has been identified for assessment of soft skills that is seen to be solid, concrete, practical, meaningful, consistent and fair.

... from the aspect of assessment [it] is not easy ... what I mean is the assessment ... which is consistent ... it's hard to assess. [I] would like to assess but there is no assessment method which is solid, concrete, practical and fair.

Educator 13B, in referencing the embedded model, claimed that although there is no specific measurement, assessment can still be conducted based on observation throughout the semester. Conversely, educator 10C argued that assessment based on human perceptions can be inconsistent.

... we try to be consistent but human perception ... is there because we are not machines. Unless we mechanise then only we achieve ... consistency all the time.

The educators stressed the problems can be curtailed if there is a standard assessment format (rubric) and if feedback is provided by the educators. Thus, educators 5D and 6C, in their responses to the embedded model, claimed that the rubric will assist assessment. Educators acknowledged that assessment of soft skills is mixed with the assessment of academic knowledge.

... have to have rubric, have to have reflection, inform students their level of performance, even through activities we know how to, even we know the techniques to embed, to report we give points, give scores ... includes in the academic [academic knowledge] if embedded ... (6C)

Assessments that involve many criteria are complex and constitute a tedious marking process. One educator, when referring to the student-advisor program, was of the opinion that the form for assessment includes many criteria, is very hard to answer and cannot be completed if the students do not meet their educators. This participant also lacked interest in filling in the complicated form and indicated that this process is futile.

... [there's] a lot of criteria we have to answer ... the questions ask all kind of things but in reality we can't answer, if the students don't come, [we] can't answer, and then we were bored to answer ... I think it's wasting of time, to fill in all sort of forms ... (identifier deleted)

One educator (identifier deleted), in referencing the embedded model, verified that apart from the continuous assessment (such as presentations) that are mixed with academic knowledge, educators also have to separately assess student soft skills. They have to use a standard form that involves a lot of detail and consumes time to the extent that some educators are still working on the forms although the new semester is about to begin. To be able to commit to such tasks, educators need an early plan, especially if they have many students. Class activities such as presentations may need to be conducted at some other time outside normal academic contact hours. Some educators perceived this process as a burden because it increases their workload.

Educator 9C claimed that even though the educators can use the criteria to assess the students, it is still difficult to be 100 per cent fair. Educators 15A and 22E argued,

however, that even though the assessment is not concrete, a joint assessment that produces consistent result for a particular student can be accepted.

I have my own approach to assess but if their friends also conduct the assessment [peer evaluation], what [scores] they assign which means my assessment and their assessment are consistent ... which means everybody says ... the same thing, consistent ... and I think I'm not wrong [have no doubt] ... (22E)

In terms of a 'result', educator 1D, in referencing to co-curricular activities, expressed the view that giving students pass or fail grades for their soft skills performance is much fairer than giving them grade points, as there is no suitable instrument. This argument was also supported by educator 23E, who said the purpose of the assessment is not to give grade points to students but to train them.

... in regard to the assessment, sometimes we only use pass or fail to train them [students], it's not our intention to give them A, B, C, D.

Role of perceptions in assessment

The role of perceptions in the assessment of soft skills is regarded as an issue by more than half of the educators (14). Educator 15A said educators can only generally assess soft skills through perceptions, which are based on gut feelings, making the assessment somewhat subjective. In further describing this issue, educators offer a number of reasons why perceptions can become a problem. Firstly, educator perceptions are subject to conflicts of interpretation. Educator 1D said educator interpretations vary from one to another, despite a standardised criterion. In the standalone model, problems occur when many educators are teaching the same subject in different classes. Some educators are 'hard' assessors and some are 'lenient', and inter-rater reliability becomes an issue. In addition, educators may also face conflicts of interpretation when the assessment of soft skills is calculated together with the assessment of academic

knowledge in the embedded model. Educator 17A highlighted this problem by referring to the example of presentations. The educators may grade their students low if they are lacking academic knowledge although they can communicate well or vice versa.

... professional [academic knowledge] and soft skills elements are combined which means there is no, I have to assess only his or her soft skills ... only his or her hard skills, it's not like that when they are combined, there is conflicts of interpretation ... among those who conduct the assessment ...

Secondly, perceptions are subject to bias. Educators may be biased if they are not familiar with the students. According to educator 6C, assessments should be undertaken on condition that educators are familiar with their students, and able to monitor their performance before they assess their soft skills.

... we know ... who are our students, then only we use perceptions, if other people like you [researcher] who just came in can't use perceptions ... bias.

Furthermore, educators 4D and 8C observed that student performance may change over time, and therefore educators should take time to be familiar with the students, not assess the students too early in the semester. One educator (identifier deleted) claimed that educators could be biased if they assess their students based on too few interactions. For example, leadership skills cannot be observed based on limited interactions. Educator 8C again stressed that, in addition, the performance of students may be influenced by their interaction with educators. Students will communicate freely with those they are comfortable with.

Competency of educators

The third issue identified by six educators is the competency of educators. Educators acknowledged that training is required in order to assess student soft skills. Educator

1D claimed if the educators are not experts in a particular soft skill, it is hard to assess student soft skills (e.g. communication skills).

... for instance, we want to assess a person from the aspect of communication skills but we are not experts in communication skills, we want to assess but we know this student – uh-oh! He or she can communicate and so forth but the grade is either A or B or C, how you are going to assess?

As mentioned earlier, educator 6C stressed that the view ‘competency’ is important in assessing soft skills. One educator (identifier deleted), when referring to the student-advisor programs, indicated that educators are not well informed on how to assess the students. According to educator 24E, assessment is normally based on educator experience and learning; therefore, educators should be trained to conduct assessments. Educator 23E stressed that not everyone has the ability to assess soft skills, and so decisions as to who should perform assessments are also difficult. For example, there is a dilemma about whether the assessment should be given to a professor (discipline lecturer) or specialist staff.

... the only thing we said is who should we assign to assess, it's questionable, should it [assessment] be given to a professor or those who are qualified and possess those skills, we can see that he or she is good, only certain people which means not everyone can assess ...

Educator 8C demonstrated that the students are aware of the assessment of soft skills but those who train the students may not be competent. Thus, training for ‘trainers’ in co-curricular activities has to be conducted almost every year to equip them with ways to develop and assess soft skills.

As highlighted above, the educator perceptions on assessment and the problems in assessing soft skills need to be given attention in order to improve the assessment process.

Appendix D5a

Translation of finding themes

4.3.4.3.2 Problems encountered in assessing soft skills

Instrument

... dari segi penilaian, is not easy ... maksud saya penilaian yang konsisten ... memang sukar untuk menilai. Memang [saya] nak nilai tapi tidak ada satu kaedah penilaian yang solid yang konkrit, praktikal dan saksama. (1D)

... from the aspect of assessment, is not easy ... what I mean is the assessment ... which is consistent ... it's hard to assess. [I] would like to assess but there is no assessment method which is solid, concrete, practical and fair. (1D)

... kita try lah untuk to be consistent tapi human perception ... memang ada sebab kita ni bukan machine. Unless kita mechanise kan baru lah boleh dapat betul-betul ni kan sama consistent all the time. (10C)

... we try to be consistent but human perception ... is there because we are not machines. Unless we mechanise then only we achieve the consistency all the time. (10C)

... mesti ada rubrik, mesti ada reflection, beritahu tahap pelajar dekat mana, through activity pun kita tahu macam mana, even teknik kita nak terapkan kita tahu, melaporkan kita bagi point lah, bagi skor ... masuk dalam akademik [pengetahuan akademik] kalau embedded ... (6C)

... have to have rubric, have to have reflection, inform students their level of performance, even through activities we know how to, even we know the techniques to embed, to report we give points, give scores ... includes in the academic [academic knowledge] if embedded ... (6C)

... [terdapat] a lot of criteria yang kita kena menjawab ... dia tanya macam-macam lah tapi kita sebenarnya kita tak boleh nak jawab, kalau pelajar tak datang jumpa [kita] tak boleh jawab, lepas tu kita boring nak jawab ... membazir masa lah saya rasa, nak mengisinya pun all kinds of borang nak isi ... (identifikasi digugurkan)

... [there's] a lot of criteria we have to answer ... the questions ask all kind of things but in reality we can't answer, if the students don't come, [we] can't answer, and then we were bored to answer ... I think it's wasting of time, to fill in all sort of forms ... (identifier deleted)

Saya ada penilaian saya sendiri tapi kalau kawan-kawan menilai [penilaian peer], berapa [skor] dia bagi maknanya apa yang saya nilai dengan orang lain nilai serupa je ... maknanya semua orang kata macam tu lah kan ... sama, konsisten ... dan saya tak rasa bersalah lah [tiada keraguan] ... (22E)

I have my own approach to assessment but if their friends also conduct the assessment [peer evaluation], what [scores] they assign which means my assessment and their assessment are consistent ... which means everybody says ... the same thing, consistent ... and I think I'm not wrong [have no doubt] ... (22E)

... dia kalau penilaian tu kadang-kadang kita guna lulus dengan gagal sahaja untuk melatih dia orang, bukan tujuan kita nak bagi dia apa dia A, B, C, D. (23E)

... in regard to the assessment, sometimes we only use pass or fail to train them [students], it's not our intention to give them A, B, C, D. (23E)

Role of perceptions in assessment

... elemen professional [pengetahuan akademik] dan elemen soft skills tu disekalikan kan maknanya dia tak ada, I kena nilai soft skills je orang ni nilai ... dia punya hard skills je, dia tidak begitu bila disekalikan, ada di kalangan orang yang membuat assessment itu ada conflicts of interpretation ... (17A)

... professional [academic knowledge] and soft skill elements are combined which means there is no, I have to assess only his or her soft skills ... only his or her hard skills, it's not like that when they are combined, there is conflicts of interpretation among those who conduct the assessment ... (17A)

... kita tahu ... pelajar kita siapa, baru kita buat persepsi, kalau orang buat macam you [penyelidik] datang tak boleh buat persepsi sekarang ... bias (6C).

... we know ... who are our students, then only we use perceptions, if other people like you [researcher] who just came can't use perceptions ... bias. [6C]

Competency of educators

... katakan, kita nak menilai orang tu dari segi communication skills, kita bukan pakar dalam communication skills, kita nak menilai but we know pelajar ni – oh! dia boleh bercakap dan sebagainya but the gred is either A or B or C macam mana you nak tentukan? (1D)

... for instance, we want to assess a person from the aspect of communication skills but we are not experts in communication skills, we want to assess but we know this student – uh-oh! He or she can communicate and so forth but the grade is either A or B or C, how you are going to assess? (1D)

... cumanya kita kata kita nak bagi siapa yang nilai tu, tandatanya le pulak adakah nak bagi kepada professor ataupun orang yang memang selayaknya yang kita tahu dia ada semua kemahiran insaniah ni, kita nampak dia bagus, orang tertentu sahaja maknanya bukan semua orang boleh menilai ... (23E)

... the only thing we said is who should we assign to assess, it's questionable, should it [assessment] be given to a professor or those who are qualified and possess those skills, we can see that he or she is good, only certain people which means not everyone can assess ... (23E)

APPENDIX E: DISSEMINATIONS OF FINDINGS

Appendix E

Presentations and publications

Conferences

Meor Osman, W.S., Girardi, A., Paull, M., & Hobson, J. (2012). Using a mixed methods approach in understanding educators' experience of teaching and learning soft skills at higher education institutions, *The Seventh International Conference on Interdisciplinary Social Sciences*. Universidad Abat Oliba CEU, Barcelona, Spain.

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Meor Osman, W. S., & Girardi, A. (2011). An exploratory study examining educators' perceptions about teaching and assessing entrepreneurship skills at Malaysian public higher education institutions. *The Fourth World Universities Forum, The Hong Kong Institute of Education, Hong Kong*.

Publications

Meor Osman, W. S., & Girardi, A. (2012). An exploratory study examining educator perceptions about teaching and assessing entrepreneurship skills at Malaysian public higher education institutions, *Journal of the World Universities Forum*, 4(4), 81–99. (<http://wuj.cgpublisher.com/product/pub.173/prod.319>)

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