

Work-Integrated Learning programs in Human Resource Management

By Laura Rook

**A thesis submitted as part of the requirements for the degree of Doctor of
Philosophy (PhD)**

University of Western Sydney

2015

Dedication

This thesis is dedicated to my loving husband, Jonpaul. His strong belief in me, and unconditional love and support has sustained me throughout this journey.

Acknowledgements

There are several people I would like to thank for their support throughout my candidature.

Firstly, I would like to extend my sincerest gratitude to my supervisors, Dr Jim Mitchell, Associate Professor Terry Sloan, and Ms Genevieve Watson. You have been a spring board for ideas and feedback at each step of the research. Jim, thank you for your support and guidance in this last year. Terry, thank you for always pointing me in the right direction and inspiring confidence in my writing. Genevieve, thank you for your ongoing support and friendship over the years. Your untiring enthusiasm, thorough feedback and deep understanding of my research have made the completion of this thesis possible. I would also like to extend my sincere thanks to Dr Lesley Kuhn for introducing me to the wonderful world of complexity.

Secondly, I would like to thank my friend and colleague Bree Barker. I sincerely appreciate the time you have spent listening and discussing my research. You have been a valuable source of guidance throughout my candidature.

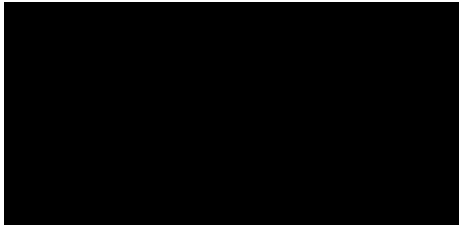
Thirdly, I am grateful to those who have participated in my research. Thank you for being willing to participate openly by sharing your honest thoughts with me.

Lastly, my deepest gratitude goes to my husband and family. You have been extremely supportive and encouraging over the years.

Statement of authentication

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text.

I hereby declare that I have not submitted this material, in either full or in part, for a degree at this or any other institution.



Laura Rook

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List of abbreviations

ABS Australian Bureau of Statistics

ACEN Australian Collaborative Education Network

ALTC Australian Learning and Teaching Council

CAQDAS Computer Assisted Qualitative Data Analysis System

CDL Career Development Learning

CES Complex Evolving System

ER Employment Relations

HECS Higher Education Contribution Scheme

HR Human Resources

HRM Human Resource Management

IR Industrial Relations

TAFE Technical And Further Education

UK United Kingdom

VET Vocational Education and Training

WACE World Association for Cooperative Education

WIL Work -Integrated Learning

Glossary

A broad approach to learning and teaching

In the context of defining Work-Integrated Learning, a broad approach to learning and teaching is where a range of workplace related teaching and learning activities are employed to engage students with the world of work.

Curriculum- based placement

A carefully structured unit, or units, as part of an undergraduate degree, which requires the student to complete a discipline relevant work placement in an organisation.

Employability

Employability is defined as the “relative chance of finding and maintaining different kinds of employment” (Brown, Hesketh & Williams 2002:11)

Employability skills

Employability skills are the non- technical skills required to be an effective and active participant in the workplace (Ithaca Group 2012b)

Employment relations

Employment relations is generally regarded as a “bridging term that both integrates industrial relations and HRM, and broadens the boundaries of both disciplines to encompass a wider range of stakeholders and environmental factors” (Balnave, Brown, Maconachie & Stone 2009:29).

Extra-curricular

Activities external to the university curriculum that students can participate in. Students do not receive credit for participation.

Graduate attributes

Graduate attributes are the “skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable to a range of contexts” (Barrie 2004:262). Graduate attributes are used to inform curriculum design and the provision of learning experiences at university (Barrie, Hughes & Smith 2009).

Graduate employability

Graduate employability is “the potential a graduate has for obtaining and succeeding in, graduate- level positions” (Knight & Yorke 2004:2). In the context of the Australian higher education sector employability is about giving graduates opportunities for developing a set of attributes relevant to their chosen profession and generic attributes, skills or abilities that can be applied in a range of contexts (Barrie 2004; Cranmer 2006; Holmes 2001).

Human Resource Management (HRM)

In general, Human Resource Management (HRM) is considered to be a strategic approach to labour management which focusses on the links between employees and the organisation and the influence of this link on organisational performance (Balnave et al. 2009). In this research HRM is referring to the university program offered by universities of which HRM related subjects are integrated over the course of their studies and leads to the outcome of an award specialising in HRM. Often HRM is a major or minor of study option as part of a general Business and or Business and Commerce degree.

Industrial Relations

Industrial relations are concerned with “the activities of employees and their unions, employers and their associations, Governments and state institutions in determining the rules that regulate employment relationships” (The relationship between employer and employee) (Balnave et al. 2009:16)

Mental models

Mental models are “A concentrated, personally constructed, internal conception, of external phenomena (historical, existing or projected), or experience, that affects how a person acts” (Rook 2013:10).

Nodes

The term node is derived from the Computer Assisted Qualitative Data Analysis System (CAQDAS) called NVivo 10 ®. Nodes are just like codes as they are a “collection of references about a specific theme, place, person or area of interest” (Daws 2012:5).

Soft skills

The desirable skills separate from a discipline’s specific job knowledge. Soft skills are also referred to in this research as generic graduate attributes or employability skills.

University course

A university course refers to the entirety of a student’s experience while studying at university.

University program

Integrated series of activities completed over the progression of education at university (3-4 years) which leads to an outcome (degree).

University unit

Also referred to in this research as a university subject, “units are the individual components that make up a qualification or degree...”(Open Universities Australia 2013:1).

Work-Integrated Learning (WIL) programs

A Work-Integrated Learning program in this research is an “umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” (Patrick, Peach, Pocknee, Webb, Fletcher & Pretto 2008:iv).

Abstract

Work-Integrated Learning (WIL) in higher education is not new. What is new is the recent increase in the scale and diversity of student engagement in communities and workplaces (Cooper, Orrell & Bowden 2010). The increased commitment to WIL program implementation in Australian universities is primarily driven by industry and Australian Federal Government demand. In order to address skill shortages, meet future needs of the economy, and satisfy the need for a highly skilled, adaptable and productive workforce, industry and Government are pushing for employable, work ready individuals. In response to this demand Australian higher education institutions are developing a range of WIL programs across all disciplines. A review of this literature on WIL finds a gap about the range of WIL programs being offered in the undergraduate discipline of Human Resource Management (HRM). Given previous research on WIL in Business (of which HRM is a subset) has identified skills gaps in business graduates, and that WIL has been framed as having the capacity to address skill shortages, this exploration of WIL programs in HRM is significant.

This research explores the mental models of four stakeholder groups (academics, careers advisors, professionals and students) in the context of WIL programs offered in undergraduate HRM degrees in Australian universities. It focuses on the stakeholders' perceptions and experiences of WIL programs in HRM. This research provides answers to why there is a range of WIL programs offered in the teaching of HRM undergraduates, and the impact of a range of WIL programs on the teaching and employability of HRM undergraduates. This examination provides insight into the many developmental aspects of WIL programs in undergraduate HRM degrees, including how graduate attributes and employability are viewed by the

stakeholders, the role of WIL, and the challenges experienced when embedding a WIL program into the curriculum.

The four stakeholder groups (academics, careers advisors, professionals and students) provided for a total of 38 semi-structured interviews. In order to examine the responses from the participants and understand the behaviour of complex social systems, this research used Mitleton-Kelly's (2003b) principles of complexity. With the assistance of the Computer Assisted Qualitative Data Analysis System (CAQDAS) NVivo 10 ®, the data was coded and then analysed to compare the different stakeholders' mental models of WIL.

This research has found that while single units or subjects of WIL in HRM are being adopted in individual universities, a range of WIL programs exist across the university sector. The mental models when compared revealed a mismatch about the purpose of WIL between the academics and the other stakeholder groups. Further, across all stakeholder groups there was a general lack of understanding of the role and purpose of graduate attributes. Many factors were identified as influencing the development of WIL programs in HRM including a lack of resources, clash of agendas, academics mental models, the nature of the HRM profession, and the complex evolving system (CES) of universities. Lastly, the impact of the range of programs on the teaching and employability of HRM undergraduates were considered. It was found that having a range impacted on how WIL programs and the concept of employability were being perceived and how future WIL programs may be developed, including the role of academics in WIL curriculum development.

Complexity analysis revealed that there are varying levels of connectivity across the CES, including disconnection in understanding WIL elements

across stakeholder groups. Universities are making short term changes as a result of a focus on adapting to the external environment, rather than co-evolving with their environment. The academic stakeholders' negative discourse surrounding WIL development, and the bureaucratic, rigid and inflexible state of a university environment was found to be having a negative effect on course design and networking with industry. This means that universities are not exploring their space of possibilities, thereby not developing innovative new ways of working. As a result universities' sustainability is threatened. Overall, it was found that the range of WIL elements are having a negative impact as the academics are seeking guidance and direction about the one best way, or model of a WIL program. Seeking the one best way contradicts complexity principles and research (Patrick et al. 2008) which suggests that having more than one strategy operating at a time within an organisation is beneficial to an organisations sustainability.

This thesis adds to the body of literature which informs research in WIL. The research has considered the development of WIL programs in HRM in order to address the impact of a range of WIL programs. It offers a rigorous account of the conceptualisations of major stakeholder involved in the process of WIL. In addition, it provides evidence and direction for the development of future WIL programs. Mental model identification with a complexity analysis was used to analyse and interpret the interviews of participants. This is a unique way of viewing the patterns of interaction and relationships of individuals within the university context of WIL. Overall, it has provided a holistic analysis of universities, and WIL programs in undergraduate HRM.

Chapter 1– Introduction

Over the last two decades several global changes have occurred which have affected the way higher education operates. These changes include economic globalisation, the massification and diversification of the higher education system, ever-increasing competition, and new professional requirements and demands from customers, investors and society (Barker 2011; Tynjala, Valimaa & Sarja 2003). Consequentially, higher education has become more closely linked with its environment, including business enterprises and the community. In order for higher education institutions to remain competitive and sustainable, the higher education system faces the challenge of developing new forms of interaction and collaboration with working life.

In Australia recent changes in Federal Government policy, industry and student expectations have further emphasised the need for higher education institutions to develop new ways of interacting with the workplace. The recent Australian Federal Government policy changes have meant that there will be an increase in the number of students attending university by 2013, producing additional 217,000 graduates by the year 2025 (Department of Industry Innovation Science Research and Tertiary Education 2009). In addition, the Federal Government is committed to ensuring access to university is increased so that “...Australians from all backgrounds who have the ability to study at university get the opportunity to do so” (Department of Industry Innovation Science Research and Tertiary Education 2009:12). Industry is bringing the relationship between higher education and the workplace closer through their demands for highly skilled work ready graduates. Industry are seeking graduates who have the skills and knowledge required for effective, and active participation in the workplace and economy.

The changes in the higher education sector are influencing the way in which higher education is viewed. As the boundaries between the workplace and higher education begin to blur, their relationships are strengthened. With a heightened focus on educational attainment and the demand for work ready graduates, current and prospective students are demanding education that provides opportunities to develop both discipline knowledge and work ready skills. As such the call for workplace learning in formal education is increasing. Work-Integrated Learning (WIL) programs where theory and practice are merged are being implemented discipline wide to close the gap between knowledge and learning in formal education and learning and knowledge gained in the workplace. Built on the foundations of learning theories such as Kolb (1984) and Wenger (1998, 2004), WIL programs fill this gap through the development of communities of practice where knowledge is developed through reflection on experiences.

Significantly different to learning that occurs purely in the workplace, WIL programs are an “umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” (Patrick et al. 2008:iv). Traditionally, WIL, where education is integrated with professional work experience as part of the coursework, has been available for students enrolled in the degrees of sport, engineering, nursing, midwifery and teaching (McLennan & Keating 2008). For other disciplines, WIL through placement-type work often is an optional activity that students must actively seek out on a competitive basis. Research of WIL in the educational areas where it has been traditionally provided insists on WIL placements as the students engagement in learning is reported to increase (Kozar & Marcketti 2008). Furthermore, in the research on WIL within the areas of sport science (Sleap & Reed 2006), engineering (Collin & Tynjala 2003) and health, community and education studies (Rhodes & Shiel

2007) WIL has been described as an important vehicle to enable students to develop their personal and professional repertoire of skills and knowledge, thus having a positive influence on the development of their employability skills.

With research reporting positive links between WIL, graduate attributes and employability, WIL is increasingly being considered by universities driven by a heightened focus on the employability of graduates sector wide (Australian Learning and Teaching Council 2009; Slep & Reed 2006). In addition, the new higher education system is encouraging competition in the university sector through reduced red tape and increase flexibility. As the increase in the interest of WIL increases both discipline and sector wide, a range of WIL programs are being developed across the higher education sector. This range of programs may differ according to the disciplinary focus, measurability of outcomes and selected assessment methods, and or the graduate attributes that are being developed. With increased competition and the demands from industry and students who now expect a payoff from their investment in education (Abeysekera 2006), institutions are being forced to review their teaching and learning practices to ensure that they continue to provide quality education in the 21st century. This is leading to a number of terms being used, and applications of the concept, because universities are rushing to implement WIL as it becomes seen as a way for universities to recruit and retain students.

1.1 Scope of the research

The process of WIL can be thought of as under theorised (Edmond, Hillier & Price 2007) as research interest related to WIL is often wholly focussed on how WIL contributes to the development of generic employability skills (Smith, Brooks, Lichtenberg, McIlveen, Torjul & Tyler 2009). Additionally there is no clear agreement or meaning of the different descriptors used to

describe or shape the activities within the notion of WIL (Bennett 2009; McLennan & Keating 2008; Smith et al. 2009). Generally, Australian universities are using a range of approaches to framing WIL (McLennan & Keating 2008) and often there is an inconsistency in definition and interpretations in practice, as well as structure (Bennett 2009). It is possible that the varying understandings and applications of the concept of WIL is a result of the people working in different positions. This means that each of the stakeholders working with WIL may either hold similar or differing understandings, and perceptions of the concept. Therefore if what are important are the stakeholders' perceptions of reality, then fundamental to understanding the notion of WIL is the identification of the stakeholders' individual mental models. Identifying a person's individual mental model is important because mental models influence how a person views the world, thus having a powerful influence over how a person acts (Starkey, Tempest & McKinlay 2004).

As discussed in the previous section WIL development in universities is increasing and with this increase a range of WIL programs are being developed. The literature review will establish that there is a range of WIL programs being developed, and that many of the terms associated with WIL such as graduate attributes and employability are ambiguous. In addition to this, it is observed that there is a gap in the research concerning the range of WIL programs being developed in undergraduate HRM degrees. Therefore the main objective of this research is to reveal the individual mental models of relevant stakeholders about the range of WIL programs in undergraduate HRM degrees.

1.2 Research questions and objectives

In response to the gaps in the literature about WIL programs in HRM undergraduate degrees, this research considers two broad research questions:

RQ1- Why is there a range of WIL programs offered in the teaching of Human Resource Management undergraduates?

RQ2- What is the impact of a range of WIL programs offered in the teaching and employability of HRM undergraduates?

In order to answer these research questions the mental models of individuals involved in the process of participating in the design and development of WIL programs in HRM were explored. Four stakeholder groups were identified: academics, careers advisors, professionals and students; and these are considered the cases for consideration in this research. An individual mental model definition which was developed and applied in previous research (Murray 2010) was the basis for the design of the semi-structured interview questions. In order to reveal, understand and explore what is motivating the development of a range of WIL programs, the mental model definition was used as a tool for examining and understanding the stakeholders' perspectives. In essence the following mental models were explored:

- The stakeholders' understanding of the development of WIL programs in HRM, including their conceptualisation of WIL.
- The stakeholders' understanding of graduate attributes.
- The stakeholders' understanding of the employability of Human Resource Management graduates.
- The stakeholders' understanding of what is driving WIL program development in universities, including in HRM.

- The stakeholders' understanding of the challenges associated with implementing WIL programs

From the findings of the mental model identification, a complexity analysis using ten generic principles (Mitleton-Kelly 2003b) of complex social systems was completed. These principles include: connectivity and interdependence, co-evolution, far-from equilibrium, historicity and time, space of possibilities, feedback, path dependence and increasing returns, self-organisation, emergence and the creation of new order. The complexity principles provide a new way viewing the data and thinking about strategy and management in organisations. This different view argues for the co-creation of an enabling environment and infrastructures that facilitate rather than inhibit co-evolving systems (Mitleton-Kelly 2003a, 2003b). In consideration of the research questions and the methodological approach of combining mental model identification with a complexity analysis, the major objectives of the research are to:

- Contribute to theorising the notion of Work-Integrated Learning through its revealing of, and analysis of, the assumptions of the major stakeholders' (academics, careers advisors, professionals and students).
- Present evidence and direction to those involved in establishing and developing industry partnerships and Work-Integrated Learning experiences to improve the capacity of Work-Integrated Learning within Human Resource Management degrees;
- Provide evidence that the identification and analysis of the mental models of stakeholders involved in the process of Work-Integrated Learning, via a complexity-based inquiry, is helpful in understanding how current programs are designed, thus showing areas where improvement is needed.

1.3 Organisation of the thesis

This thesis is organised into six chapters. Chapter one introduces the thesis by providing a brief explanation of the context of WIL in higher education, the scope of the research and research questions.

Chapter 2 reviews relevant literature in understanding the concept of WIL and the development of WIL programs in higher education. Through surveying the literature, it was found that there is range of WIL programs being offered to students in higher education, yet the concept of WIL and the concepts surrounding the development (graduate attributes) and possible outcomes of WIL (employability) remain ambiguous. Consequentially, many challenges and drivers for WIL are identified in the literature. In the literature examining WIL programs it is observed that exploration of the range of WIL programs in the undergraduate HRM discipline had not been done. Therefore out of the literature review, the research questions were formed. These are stated above in section 1.2.

In chapter 3, the methodological approach and methods used to conduct the research are explained in detail. In order to make clear the fundamental values that are guiding the journey of this research the chapter considers the paradigms guiding the research. This research takes an interpretivist perspective as it is the perceived meanings of reality of the participants involved in this research that are examined. Therefore, the identification of the stakeholders' mental models is useful in understanding why there is a range and the impact of the range of WIL programs in undergraduate HRM. Mitleton-Kelly's (2003b) complexity framework of ten generic principles is described as they are useful in understanding complex behaviour in human social systems. Next, a case study methodology and the reliability and validity of the research are explained. Purposive and snowball sampling techniques are explained and semi-structured interviews are described as the

data collected method. Lastly, the Computer Assisted Qualitative Data Analysis System, NVivo 10 ® is detailed for its use in categorising the themes revealed from the data, and Mitleton-Kelly's (2003b) principles are described in terms of how they have been applied in this research.

In chapter 4 the findings of this research are presented. The mental models of each stakeholder group are presented under the themes that emerged from the data. The chapter first identifies that WIL is perceived as a broad approach to learning and teaching, as encompassing a range of workplace contextually based activities or a curriculum-based placement. Four models of WIL in HRM are identified and WIL curriculum-based placements in HRM were argued to be less commonly offered as compared to other disciplines. There is a lack of understanding of graduate attributes and the majority of participants define employability as someone with a specific set of soft skills. Both internal and external factors were identified as the drivers of WIL, while the role of WIL in universities was perceived as both strong and threatening. Several challenges of the implementation of WIL were identified by participants, including the nature of the HRM profession. Lastly, the many recommendations made by all stakeholders reveal there is a process in developing and implementing WIL programs into the undergraduate curriculum. Overall, stakeholder mental models about the development of WIL programs in HRM were found to often be contradictory and in conflict between and across groups.

Chapter 5 is an analysis of the findings using Mitleton-Kelly's (2003b) complexity principles previously discussed in chapter 3. WIL programs in HRM are analysed through viewing universities as complex evolving systems (CES). On the whole the sampled universities were found to be creating an inhibiting environment, rather than facilitating the conditions needed for the effective development of WIL in HRM. As such it is

recommended that universities create an enabling environment that is connected and flexible and that embraces uncertainty and change.

In chapter 6, the main findings of the research are summarised and the research questions are answered. The limitations of the research are discussed and the contributions of the research are outlined. This includes the implications for research, practice and methodological implications. The following section addresses these contributions.

1.4 Justification for the research

This research adds to the body of research concerning WIL programs. More specifically it provides new knowledge in the area of understanding the range of WIL programs in undergraduate HRM degrees, and highlights the need for further application of the research methods employed to other discipline areas.

1.4.1 Theoretical contribution

To date, there has been no research examining the impact of the range of WIL programs in undergraduate HRM. This research has contributed to theorising the notion of WIL through the revealing of, and analysis of, the mental models about the whole process and range of WIL programs, and the implications of that range as held by the major stakeholders' (academics, careers advisors, professionals and students). As such this research has contributed to the body of literature pertaining to the development of WIL programs in undergraduate degrees including the concepts of graduate attributes and employability.

1.4.2 Methodological contribution

Examining the range of WIL programs in undergraduate HRM degrees using mental model identification combined with a complexity analysis, presents a

unique way of understanding the stakeholder relationships and motivations in the development of WIL. In this research, a complexity analysis of the mental models of four stakeholder groups and the use of NVivo 10 ® coding software provided for a holistic view of the process of WIL program development. Through this unique holistic way of thinking about the organisation in order to interpret and understand the research problem within, a new way of organising to improve performance is exposed. In essence the methodological contribution is centred on the combination methods and or tools used to reveal the answer to the research questions, including the use of mental model identification with a complexity analysis. The following chapter will review literature on WIL.

Chapter 2- Literature review

2.1 Introduction

The aim of this literature review is to address key theories underpinning the concept of Working-Integrated Learning (WIL) with the purpose of highlighting the gap in the literature concerning undergraduate WIL programs in Human Resource Management (HRM). To achieve this aim this chapter will explore and analyse theoretical developments in relation to WIL in Australian Universities.

This review begins by drawing on key theories about how people learn, as it is these theories that can provide an understanding of the concepts underpinning current WIL development in universities. Theories addressed include constructivism and mental model development, as well as work by Wenger (2004), Nonaka (1994) and Kolb (1984). This literature emphasises that learning and knowledge can be generated and sustained through relationship building (Wenger 2004), mental model developments, experience (Kolb 1984), and through the interplay of tacit and explicit knowledge in organisations (Nonaka 1994).

Next, the review explores the many conceptualisations of WIL and WIL programs. Following this is a summary of the challenges shaping the design of WIL. The review then analyses what is driving the need for WIL, highlighting the significant influence of the Australian Federal Government, industry, and students. The literature suggests that these drivers are shaping university education through curriculum development and funding. Additionally, universities are also using WIL linked to outcomes (Graduate attributes and employability) to differentiate them nationally in a student-centred market (Patrick et al. 2008).

2.2 How do people learn?

Before discussing the definitional aspects of WIL, it is important to note how WIL in universities has been developed. The learning theories discussed below not only describe learning in different contexts (communities, classroom, and work place), but support individuals learning through experience. Whatever the exact process of learning and meaning construction, educators and employers continue to design and develop authentic learning environments in the classroom and on the job (Wilson 2011). It is for this reason that this section of the literature review evaluates learning theories that are of relevance to the process and development of WIL.

Constructivism is a learning theory that says people make sense of the world through personal constructs (Kelly 1963). Jonassen (1991:10) argues that constructivists believe “thinking to be grounded in our perception of physical and social experiences”, which in turn create “mental models that explain to the knower what he or she has perceived”. In this view learning is very much influenced by the participants’ experiences. There is however, a further point to be considered. Although individuals are influenced by their experiences, what is learnt is not always context specific. If learning new knowledge was entirely context specific the transferability of skills and knowledge would not be possible. In final consideration, this theory suggests that an individual and or students learning are dependent on physical and social experiences in various contexts. Therefore, a students learning is enhanced when they are given the opportunity to learn in different contexts, including the workplace.

The sentiment expressed in the quotation above, embodies the view that it is through our social and physical experiences that mental models are formed (Jonassen 1991). Although mental models have been described by many

theorists from different disciplines (Craik 1943; Doyle & Ford 1998; Fiske & Taylor 1991; Forrester 1971; Kim 2004; Morecroft 1994; Murray 2010; Norman 1983; Richardson & Pugh 1981; Rook 2013; Senge 2006; Sterman 1994; Vazquez, Liz & Aracil 1996), they can generally be thought of as the building blocks to making sense of our world. Through our perceptions and actions, mental models have the ability to influence the construction of our reality and the process of learning (Kelly 1963). An equally significant definition is offered by Learning Organisation theorist Senge (2006:163) whom has defined a mental model as “deeply held internal images of how the world works” that can affect our ways of thinking and acting. More recently, through prior work, a synthesis of the previous literature on mental models, a robust definition of an individual mental model has been developed as “A concentrated, personally constructed, internal conception, of external phenomena (historical, existing or projected), or experience, that affects how a person acts”(Rook 2013:10). This definition is considered to be robust in nature because it has been validated through prior research (Murray 2010). Mental models therefore can influence the process of learning and our actions.

Wenger’s (1998, 2004) work on ‘communities of practice’ is also an important concept to consider within the scope of this research, as it puts significant emphasis on learning from being part of a community. Wenger (2004) states that knowing is being a part of, and participating in, complex social learning systems. Complex social learning systems are where relationships are formed within communities and these relationships enable sharing of knowledge (Wenger 2004). According to Wenger (1998, 2004), learning is about the interplay between competence and experience. In other words, in each community, stakeholders become competent in their surroundings and how their world is understood. Through new outside experiences, stakeholders’

competencies are altered and the communities' surroundings are redefined. Evidence in support of this position, is found in the recent Australian national WIL scoping study in universities. Patrick and colleagues (2008) found the need for the development of strong partnerships among stakeholders within the community of WIL . This was said to enable a common understanding of the roles and responsibilities of one another, and assisting in producing more productive, adaptable transformative employees of the future (Patrick et al. 2008).

Generally, Wenger's (1998) work provides a basis for understanding the importance of communities of practice to learning and the formation of relationships within these communities, such as in the case of WIL. It is however important not to overemphasise the strengths of Wenger's work on communities of practice as the applicability of the work has been questioned (Cox 2005; Illeris 2003). Illeris (2003) has stated that Wenger's work fails to include the process about how and why people in these communities learn, while Cox (2005) suggests that the ambiguity in the terms 'community' and 'practice' have led to different conceptualisations and applicability of the concept. For the purpose of this research a community of practice is a community of "sustained mutual relationships" among stakeholders where ways of doing things are shared and the flow of information and learning is encouraged (Wenger 1998:125-126). Synonymous with Patrick and colleagues (2008), it is therefore assumed that WIL is enhanced through the formation of a community of practice.

It was identified above that Wenger's (1998) work fails to include the process about how and why people in communities learn (Illeris 2003). This gap has been previously addressed by Learning theorists Kolb (1984) and Nonaka (1994) in their models on the process of learning. Kolb (1984) draws on the work of experiential learning foundational theorists John Dewey, Kurt Lewin

and Jean Piaget to develop his own experiential learning cycle. At the centre of Kolb's (1984:41) experiential learning theory, learning is defined as "...the process whereby knowledge is created through transformation of experience. Knowledge results from the combination of grasping experience and transforming it". The cycle has four stages; concrete experience, reflective observation, abstract conceptualisation and active experimentation; and is built on six propositions. The first proposition is that learning is best viewed as a process, and as such in higher education the primary focus should be on "...engaging students in a process that best enhances their learning" (Kolb & Kolb 2005:194). In order to achieve this, feedback on their learning efforts is essential. The second proposition "All learning is relearning" (Kolb & Kolb 2005:194) is comparable to the concept of 'unlearning' which has been discussed and researched by learning organisation theorists, management scholars and several authors worldwide (Kim 2004; Nystrom & Starbuck 2004; Senge 1990, 2006; Senge, Ross, Smith, Roberts & Kleiner 1994; Uldrich 2011; Wind, Crook & Gunther 2006). The process of unlearning involves bringing your assumptions and ideas to the surface so that they may be examined and tested, potentially avoiding becoming complacent and not open to change. The third and fourth propositions are about learning being an adaptive process where "learning requires the resolution of conflicts between dialectically opposed modes of adaption to the world" (Kolb & Kolb 2005:194). The fifth proposition considers that learning is a result of a synergetic relationship between an individual and the environment, while the sixth proposition follows a constructivist theory of learning whereby learning is constructed and reconstructed through the personal constructs and experiences of the learner (Kelly 1963; Kolb & Kolb 2005).

The six proposition underpinning Kolb's experiential learning theory discussed above weighs heavily on the individual getting an opportunity for

an experience and or development of a relationship with the environment. In the case of WIL in higher education, a student must therefore be given the opportunity to transform real work experience through a holistic learning process of reflexive, adaptive activities where feedback is provided on the effectiveness of their learning efforts. Essentially, this can be achieved through developing WIL programs that enable these conditions.

Nonaka's (1994) work is particularly specific about the process or 'spiral of knowledge' individuals go through in order to learn. The central theme to Nonaka's work is that knowledge is created through an ongoing process between tacit and explicit knowledge (Nonaka 1994). Tacit knowledge is personal knowledge that is difficult to express in words, while explicit knowledge can be expressed in words, and therefore can be easily stored, transmitted and in most cases taught through specific steps and precise sequences (Dhanaraj, Lyles, Steensma & Tihani 2004; McShane & Travaglione 2003; Polanyi 1966). Individuals generate new knowledge through a continual dialogue between tacit and explicit knowledge. Abeysekera (2006) has suggested that it is this generation of dialogue between tacit and explicit knowledge that is the purpose or aim of WIL programs. Additionally, Nonaka (1994:14) argues that while individuals generate new knowledge, "...organisations play a critical role in articulating and amplifying that new knowledge". This is because the relationships formed in organisations develop 'communities of interaction' (Nonaka 1994:15) which have the capacity to amplify the development of new knowledge. Therefore, it could be suggested that Nonaka's spiral of knowledge is another concept which underlies WIL practices because WIL has the capacity to enhance a student's ability to form relationships or professional partnerships (McIlveen, Brooks, Lichtenberg, Smith, Torjul & Tyler 2008) that can support lifelong learning.

The above learning theories define ways of understanding how individuals learn in different contexts. Traditionally, it is one or more of these learning theories that can inform or guide the teaching styles and or assessment methods used at university (Minter 2011; Weisz & Smith 2005). This includes the development of WIL in universities which is often organised around the experience of the individuals participating. Each of the learning theories discussed above make an important contribution to our understanding of the development of WIL programs in higher education.

2.3 What is Work- Integrated Learning?

As a concept, there is no universally accepted definition of WIL. The ambiguity of defining WIL exists in the understanding of whether learning that occurs in the workplace irrespective of formal structures, such as curriculum designed objectives can actually be called WIL. In addition to this, research into formal WIL programs has found there is ambiguity in the interpretations and elements of teaching and learning among stakeholders. This section will examine the literature on what characterises WIL and WIL programs.

2.3.1 Learning at work or Work-Integrated Learning?

Learning in formal education is different from learning at work for several reasons including that the former is prescribed by formal curriculum and competency standards, learning outcomes are more predictable, and there is an emphasis on the content of teaching (Tynjala 2008). Despite these differences, there are similarities which are narrowing the gap between learning in higher education and learning in the workplace (Tynjala 2008). Relevant to this research, is the increasing co-operation between workplaces and education that is allowing the workplace to function as a context for formal learning and training. This is blurring the lines between learning in

formal education and learning at work, and therefore giving rise to terms such as WIL.

The term WIL is being used to refer to learning which can occur as part of a formally endorsed university course or totally independent or complementary of studies. In this sense, WIL is a broad term to describe “learning which is embedded in the experience of work...whether the work is paid or unpaid; or full-time or part-time; or formally endorsed as part of a university course; or extra-curricular and complementary of studies; or totally independent of studies; in the past, present, or future” (McIlveen, Brooks, Lichtenberg, Smith, Torjul & Tyler 2009:1). This means that WIL is any learning that occurs regardless of the context (workplace or university) in which the learning takes place (Tynjala 2008).

To summarise, through viewing WIL broadly as above, both work related curriculum based activities and work related activities which are extra or totally independent of studies are all considered to be WIL. This view is however contested by many other authors whom argue that WIL is an “...intentional aspect of university curriculum...” (Cooper, Orrell & Bowden 2010:1). This means that work related experience external to a university curriculum are not considered to be WIL because they “... are not integrated with the academic curriculum, do not promote learning through a process of reflection and analysis, do not provide student support, and learning is not situated, constructed or experiential...” (Cooper, Orrell & Bowden 2010:43). This curriculum based view of WIL is explored following.

2.3.2 Work-Integrated Learning programs

Section 2.3.1 has presented literature that argues WIL includes all learning that is embedded in the experience of work. This research is concerned with programs that are developed as part of an integrated course of study at

university in the area of HRM. Therefore, the literature in this section argues that WIL is a term given to WIL programs that are integrated within the university curriculum. This means that rationale behind WIL goes beyond merely providing a workplace environment (Smith 2012). The term WIL program and WIL used interchangeably hereafter refers to WIL activities which are embedded in the university curriculum. This section will examine the Australian literature on WIL programs including the stated aims, principles of good practice and positive outcomes of WIL while also revealing the gap in the literature concerning research of the range of WIL programs in undergraduate HRM.

2.3.2.1 What is a WIL program?

Like Cooper, Orrell and Bowden (2010) discussed above, McLennan and Keating (2008) argue that across the wide range of Australian universities WIL is considered to be the structured activities which are embedded in university courses, integrate theory and practice, and are assessed on, therefore accredited. Other authors supporting this view define WIL as a range of activities that bring together formal coursework with industry learning in a purposeful way (Brown 2010; Patrick et al. 2008; Reeder 2000). It is strongly argued in this view and in this research that WIL is used as an all-encompassing term for different curriculum based approaches that provide "...meaningful opportunities relevant to the real world" (Patrick et al. 2008:13). The commonalities evident in the above definition indicate that WIL is curriculum- based and integrates theory with the workplace. These authors are essentially describing a WIL program. This is significantly different to the already discussed broad view of WIL in section 2.3.1 which views WIL as encompassing all learning which is embedded in the experience of work.

Whilst there are many similar terms to describe WIL programs, not all portray a WIL program as described in this thesis. This research specifically examines WIL programs in undergraduate HRM curriculum in Australian universities. For the purpose of this research a WIL program is defined as an “umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” (Patrick et al. 2008:iv). WIL programs in this research are viewed as ranging from one subject to a number of subjects that have specific objectives, and deliberately merge theory and practice within a carefully designed curriculum. This definition was selected as it is contextually relevant to the parameters of this research being about the development of WIL programs in undergraduate HRM degrees. Furthermore, within the context of higher education, this definition is broad enough so that the research will remain open to the many understandings of the concept provided by the participants of this research. The stated aims of WIL programs will now be addressed.

2.3.2.2 Aims of WIL programs

Literature indicates that there are several aims of a WIL program. Abeysekera’s (2006) research into WIL in Australian undergraduate accounting degrees argues that the aim of a WIL program is to bridge the gap between tacit and explicit knowledge. This understanding is congruent with organisational learning theorist Nonaka (1994) and his concept of the spiral of knowledge (discussed in section 2.2 above). This is exemplified through understanding the knowledge a student learns in an academic institution resides with the individual (tacit), and only through WIL programs are they able to make the link between tacit and explicit knowledge. Barrie (1999) supports and extends this concept by stating it is through WIL programs that involve actual work experiences that students

learn to become professionals. He states that to become a professional the student must extend their learning context to include "...some degree of learning in the context of actual work experiences rather than the context of the university classroom or laboratory" (Barrie 1999:3).

On the other hand, WIL is often viewed as more than actual work experiences as Barrie has stated. For example, at the University of Newcastle "WIL is seen as occurring in a workplace, in the community, within the university, and real or simulated, as long as the experience is authentic, relevant and meaningfully assessed"(Shinnick, Doherty, Larkings & Roberts 2008:5) . As such the University of Newcastle identifies that their WIL programs aim to develop good teaching and learning outcomes, in order to provide graduates who are flexible and ready for the workplace (Shinnick et al. 2008). This aim of providing work ready graduates is supported by McLennan and Keating (2008). McLennan and Keating (2008:2) state that WIL in Australian universities is increasingly being positioned "as one of the key opportunities for improving the work-readiness of all graduates even in areas that have not traditionally been linked to clear employment outcomes."

Alternatively, other universities in Australia are strengthening their commitment to WIL through their strategic direction and policies for the provision and support of WIL (McLennan & Keating 2008). For example, The University of the Sunshine Coast states that WIL programs have several purposes. These are categorised under two key areas: student learning and regional engagement. Under the area of student learning it is stated that WIL programs at the university aim to enhance the transition from student to professional through the application of theory in workplace contexts, to apply and further develop graduate attributes, and to enhance teaching and learning of employability skills (The University of the Sunshine Coast 2009). Under the area of regional engagement it is stated that WIL programs aim to

provide support to local business, open up opportunities for future research and innovative partnerships, and gain feedback about the needs and interests of business through open communication channels between business, industry and professions (The University of the Sunshine Coast 2009).

Smith and colleagues (2009) examined the relationship between Career Development Learning (CDL) and WIL in the curriculum. The authors found that there is a strong relationship between CDL, WIL, graduate attributes and graduate employability. More specifically, their report argues that CDL and WIL are "...educational vehicles for graduate attributes and graduate employability" (Smith et al. 2009:13). This could be interpreted as CDL being a lifelong process with WIL as a stepping stone to a holistic process of reflecting on your skills (graduate attributes), and meaningful work experiences to transform your career over time (employability). This suggests that WIL aims to enhance the development of graduate attributes, leading to the positive outcome of enhanced graduate employability. It is for this reason that graduate attributes and employability are discussed in section 2.4 and 2.5.

A review of the literature reveals several aims of a WIL program. WIL programs aim to bridge the gap between tacit and explicit knowledge, ensure students are work ready, enhance the development of employability skills and graduate attributes, and aim to help student learn to become professionals. The range of WIL programs available to students is now reviewed.

2.3.2.3 A range of WIL programs

WIL programs in this research are viewed as ranging from one subject to a number of subjects. They have specific objectives, and deliberately merge

theory and practice within a carefully designed curriculum. The literature on WIL is replete with detailed descriptions of the range of WIL programs being developed within universities across the Australian higher education sector. Some of these programs and models of WIL are explored.

In a paper about the challenges of mainstreaming WIL, McLennan and Keating (2008) describe how WIL is being framed in a small sample of Australian universities. The examples used describe WIL as a “range of experiential learning activities” (Swinbourne), “training and practical experience in a location physically different from the university” (Murdoch), and “meaningful application of theoretical learning to the workplace” (Griffith) (McLennan & Keating 2008:6). According to McLennan and Keating (2008) the common element present in most WIL programs in Australian universities is an emphasis on structured activities that integrate theory with practice. Despite this common element, the authors acknowledge that Australian universities are including a range of different approaches in their WIL programs including co-operative education, work placements, field work and workplace research.

In undergraduate accounting degrees, an exemplar of this range is identified by Abeysekera (2006). Abeysekera (2006) identifies six types of WIL program activities. These are classified as work placements, cooperative education, work based programs for organisations, workplace based programs, internships, and service or community learning. Relevant to this research understanding of a WIL program are the last two models identified, internships and or service or community learning. Internships and service or community learning programs are described by Abeysekera (2006) as a carefully monitored work experience in which students have intentional learning goals, and actively reflect on what is being taught and learned throughout the experience.

However, it has been argued that WIL is more than a structured work experience with intentional learning goals. McNamara, Kift, Butler, Field, Brown and Gamble (2012) have explored the role of WIL as a capstone experience. Capstone experiences are considered to be a subject completed in the final year of the students degree, and are designed to aid students in making sense of what they have accomplished to prepare themselves for their future careers (McNamara et al. 2012). After a review of the link between WIL and capstone experiences the authors contend that WIL should be viewed as a smaller component of a larger, more holistic, capstone experience rather than a singular unit in its own right (McNamara et al. 2012). Within this concept of a capstone experience the WIL programs on offer to students vary and can include case study analysis, work placements, simulation and internships (Holdsworth, Watty & Davies 2009).

Lawson, Fallshaw, Papadolpolous, Taylor and Zanko (2011) conducted research into professional learning in the business curriculum in Australian universities. The term professional learning is “often used to encapsulate dimensions of educational programs that highlight contemporary industry issues explicitly linked to industry and professional bodies” (Lawson et al. 2011:61). It includes WIL, industry engagement and authentic learning environments (Lawson et al. 2011). Their research identified eight main types of professional learning currently used in the business curriculum: industry case studies, industry simulation, industry practitioner delivery, industry mentoring, industry study tour, industry placement, industry competition and an industry project (Lawson et al. 2011). The eight types of professional learning identified in the business curriculum all involve direct interaction between the students and industry. Their research proposes that professional learning in the business curriculum is viewed as involving direct interactions

with industry, and within this model there are a range of industry linked WIL activities.

Daniel and Shircore (2012) recently proposed the development of a sequential and integrated WIL framework for application across faculty and degree programs. The proposed program sees WIL as a sequential process. The first year of the degree is structured around observation and simulation of in house projects, the developmental period (years 2-3) students actively participate in WIL activities which are still internally managed by the university, and in the final year students participate in a capstone experience where they are able to engage directly with industry or the profession (Daniel & Shircore 2012).

The types of WIL models being used in Australian Tertiary institutions can include placements or practicums, co-operative programs, project work problem based learning, teaching through rich case studies, simulations, and virtual WIL, professional mentoring, clinical placements, internships (Australian Collaborative Education Network (ACEN) 2011; Gibson, Brodie, Sharpe, Wong, Deane & Fraser 2002; Mackaway, Winchester-Seeto, Coulson & Harvey 2011; Patrick et al. 2008; Peach & Gamble 2011). The applications of these models vary across disciplines in terms of the individual program elements. This means that WIL programs are often unique to the tertiary institution. For example WIL programs are being developed as capstone experiences (Bates 2008; McNamara et al. 2012), a range of WIL activities that are directly linked to industry (Lawson et al. 2011), and simulations or virtual WIL programs (Davies & Shirley 2007). These unique and individual programs are evidenced across a wide range of disciplines including the criminology, business, management, accounting, law, health, education, and engineering. This review of past Australian research about WIL programs has revealed that there is a gap in the research on WIL programs in

undergraduate HRM degrees. The range of WIL programs in HRM and the impact of having a range has not been explored in undergraduate HRM. As such, this research will explore this gap.

2.3.2.4 Effective WIL program principles

In addition to describing a WIL program, including the aim of a WIL program, some literature argues that there are specific elements of teaching and learning, and principles of good practice, that need to be integrated into a WIL program in order for it to be effective. A review of these follows.

Atchison, Pollock, Reeders and Rizzetti (2002) have listed 11 principles of good practice for the effective design and management of WIL activities. These principles include: WIL is integral to the curriculum, and WIL be designed to accommodate diverse learners, where learning is targeted and assessed and includes both technical and generic learning targets (Atchison et al. 2002). In addition to this the WIL experience is graded to included varied and novel tasks where the learners develop career plans, all participants are involved in the preparation and evaluation of the activity, the activity has high level support and the activity helps to build partnerships with enterprises (Atchison et al. 2002).

There is an array of literature written on assessment in higher education, including debate on assessment methods for WIL programs. The national scoping study of WIL in Australian higher education finds that effective WIL programs have clearly defined and tailored assessment methods (Patrick et al. 2008). More specifically some authors argue that effective WIL programs encourage the use of assessments that incorporate reflection and that integrate theory and practice (Crebert, Bates, Bell, Patrick & Cragnolini 2004; Jorgensen & Howard 2005). Richardson and colleagues (2009) have argued that feedback from workplace supervisors is an integral part of the

assessment of WIL programs. More recently through the development of an evaluative framework for WIL curricula, Smith (2012) strongly argues that the alignment of assessments with integrated learning outcomes is essential for WIL curricula. According to Smith (2012) the deliberate development of integrative learning activities and assessments will help students in their ability to integrate the theoretical knowledge with practical knowledge and discern what, when and how such integrated knowledge could be applied.

Cooper, Orrell and Bowden (2010) have identified seven underlying characteristics common to all WIL programs. These characteristics include: purpose; context, the workplace; integration; curriculum; learning; partnerships; and support. The authors state that all WIL programs should have clear goals, expectations and intended outcomes for all stakeholders, and be a true integration of formal learning and productive work through real-world problem solving, abstract thinking, discipline specific and vocational skills (Cooper, Orrell & Bowden 2010). Additionally, there must be a constructive alignment between the workplace and learning in the curriculum, and students should participate in a spiral of learning where “theory and practice are conceptualized and reconceptualised, with each spiral deepening the students understanding” (Cooper, Orrell & Bowden 2010:41). Lastly, the authors argue that WIL cannot be effective without strong partnerships between industry and higher education institutions, and that student’s and workplaces require support throughout the entire process of WIL, before, during and after the WIL program (Cooper, Orrell & Bowden 2010). This stakeholder collaboration and or approach to the development of WIL programs has also been reinforced in the work of Patrick et al. (2008) and Atchison et al. (2002).

2.3.2.5 Conclusions

In addition to the ambiguity about what can and cannot be termed WIL, Bennett (2009) found that within WIL programs stakeholders' have both major and subtle differences in terms of interpretations for the identically named activities such as internships. Bennett's (2009) research was conducted in an Australian University with the findings further explored internationally by comparing documents from two World Association for Cooperative Education conferences (World Association for Cooperative Education (WACE) 2005, 2007), and one Asia Pacific conference 2008 (World Association for Cooperative Education (WACE) 2008). Overall, he found that when a faculty lacks a specific definition and typology of WIL, confusion among stakeholders' occurred. This meant that what constituted WIL was considered to be subjective in nature. This suggests that despite what the literature says in regards to what does or does not constitute WIL, it is the stakeholders' involved in developing WIL programs in universities that hold subjective understandings and influence the way WIL programs will be taught. It is for this reason that this research will examine the stakeholders' mental models (subjective views) about WIL in the context of designing and developing WIL in HRM including the examination of graduate attributes and employability which are discussed following.

This section of the literature review has examined several themes surrounding WIL programs. Significantly, it was revealed that the concept of WIL is contentious and often the terms used to describe WIL related activities are ambiguous. It was found that there are many aims of a WIL program including the ability to enhance graduate skills thus increasing the employability of individuals, even in disciplines where it has not been previously employed. Literature about WIL programs are discussed and it was found that there is a range of WIL programs offered to students;

however the range of WIL programs and the impact of this range have not yet been addressed in the undergraduate discipline of HRM.

2.4 Graduate attributes

The concept of graduate attributes is addressed in this research because the literature discussed above (2.3.2) suggests that student engagement in WIL programs can improve a student's capacity for developing graduate attributes.

In Australian education, generic or non- technical skills are addressed in several different ways. These include, general capabilities (Australian curriculum for schools), the employability skills framework (Vocational Education and Training VET), graduate attributes (University), the Australian core skills framework (Cross-sectoral framework for addressing language, literacy and numeracy skills), the Australian blueprint for career development (Career management competencies) and the Australian Qualifications Framework (spans all education and training sectors) (Ithaca Group 2012b). In general, generic graduate attributes or non-technical skills can include language, literacy and numeracy skills along with other broader skills required to participate in society such as 'citizenship' or 'ethical behaviour' and skills relevant to employment (Ithaca Group 2012b). Although there are many ways in which generic or non-technical skills are addressed in Australian education, this research is specifically focussed on undergraduates in HRM. Therefore this section of the literature review focuses on literature on Australian undergraduate attributes, as it is these attributes that are relevant to the research questions.

Defining and measuring graduate attributes is difficult and contestable. Broadly speaking, generic graduate attributes in Australia have come to be accepted as an orienting statement of educational outcomes used to inform

curriculum design and the provision of learning experiences at university (Barrie, Hughes & Smith 2009). Specifically, generic graduate attributes are the “skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable to a range of contexts” (Barrie 2004:262). In essence, graduate attributes are the generic attributes listed by universities, sought after by employers and developed by students. Universities use them in course development, including WIL courses in HRM.

The Australian Qualifications Framework is a national framework that regulates qualifications in Australian education (Australian Qualifications Framework 2013a). This means that although universities develop graduate attributes institutionally, the AQF plays a role by influencing the design and accreditation of degree qualifications. Therefore at the bachelor degree level (level 7 of the AQF), it is stated that graduates will a specific level of knowledge, skills and ability to apply the knowledge and skills. In summary it is stated that undergraduates graduating at the bachelor level “... will have broad and coherent knowledge and skills for professional work and/or further learning “(Australian Qualifications Framework 2013c:13).

Higher education in Australia has seen significant growth over the last decade, and for higher education providers to maintain their accreditation in the future, they will be faced with tighter controls and measurements to ensure quality in education (Donleavy 2012). Clanchy and Ballard (1995) position graduate attributes within the shift of ideology in the early 1990s where higher education was now thought of in terms of outputs rather than inputs. According to Clanchy and Ballard (1995:156) a report published by the Higher Education Council in 1992 (Higher Education Council (HEC) 1992) sparked this shift in ideology of higher education in Australia by stating that attributes are to represent the central achievements or primary

objective of higher education. Despite this specificity, the reports understanding of specific graduate attributes and the measurement or ability for universities to provide them were vague (Clanchy & Ballard 1995). This situation continued into for a decade as Barrie's (2006) research points out the lack of consistency, vagueness and misinterpretation of graduate attributes among stakeholders. As such, graduate attributes are now about to be monitored following appointment of the Tertiary Education Quality Standards Agency (TEQSA) to audit them against the Australian Qualifications Framework (AQF) and each university's own mission statements (Donleavy 2012).

Barrie's (2003, 2004, 2006, 2007) work identifies that graduate attributes can be understood differently by different people. Rather than it being a collective understanding within the university community, individual academics develop and integrate their conceptualisation of graduate attributes into teaching and learning practices at university. Barrie's (2003) research of academic perspectives has identified four interrelated conceptions of the nature of graduate attributes as outcomes, and six related understandings of the process of teaching and learning such attributes and certain outcomes. The first conception (*precursor conception*) is the view that generic attributes are necessary precursor skills and abilities that students are expected to possess prior to their higher education experience, and "...any inclusion of such skills in a university education would be for remedial purposes only" (Barrie 2003:107). In this view generic attributes are viewed as largely irrelevant in the context of university learning, thus discipline knowledge is what is acquired in the course of a university education (Barrie 2003). The second conception found in his research is the view that generic attributes are complementary (*complementary conception*). Generic attributes are viewed as "useful additional skills that complement or round out

discipline knowledge” (Barrie 2003:108). Essentially, generic attributes are viewed as both separate and secondary to discipline knowledge. The third conception (*translation conception*) expressed by academics was that generic attributes are abilities or skills that help to apply discipline knowledge, “thus potentially changing and transforming disciplinary knowledge through its application” (Barrie 2003:111). In this view graduate attributes and disciplinary knowledge are set side by side, in a closely linked mutual relationship. The last conception (*enabling conceptions*) views generic attributes as learning outcomes that infuse and enable all scholarly learning (Barrie 2003:114). In this conception, generic attributes are not viewed as precursors (1), they are not viewed as commentary and separate (2), or viewed as parallel to disciplinary knowledge (3), but rather they are seen as integral to disciplinary knowledge. Generic attributes in this last conception have the ability to change or transform knowledge to meet new challenges and contexts (Barrie 2003).

Barrie’s (2003) research also reveals six qualitatively different understandings of the way attributes are developed by students: remedial, associated, teaching content, teaching process, engagement and participatory. The six understandings are hierarchical in nature and subsume elements of the lower preceding category (Barrie 2003). These views held by the academics in Barrie’s (2003) research about the nature of generic attributes (four conceptions), and also how students develop graduate attributes (six understandings), have significant implications for the way in which teaching and learning practices are implemented to achieve these outcomes.

Despite the research suggesting that graduate attributes are ambiguous, it has been reported that students who participate in WIL activities have reported a positive effect on the acquisition of both technical and non-technical skills, as well as the ability to understand how the knowledge

gained from their higher education can be applied practically in the workplace (Bridgstock 2009; Cooper, Orrell & Bowden 2010; Freudenberg, Brimble & Vyvyan 2010; Little & Harvey 2006; National Commission for Cooperative Education 2011; O'Reilly & Khoury 2010). This suggests that WIL activities are having a positive effect on the student's acquisition of a set of skills or generic attributes which have the capacity to enhance the employability of that student. The concept of employability is therefore addressed.

2.5 Employability

The literature argues that a positive outcome of participation in WIL programs is increased employability (McLennan & Keating 2008; Smith et al. 2009). It is for this reason that the concept of employability is discussed in this review.

The concept of employability has been applied within a range of different contexts (McQuaid & Lindsay 2005). Its focus has shifted between industry, company and individual and this has resulted in a range of different meanings of employability. This section of the literature review will give a brief understanding of the recent shift of the responsibility of employability onto the individual, along with a discussion about the newly developed employability skills framework for the future.

According to Forrier (2003), publications about the concept of employability first date from the 1950s with the publication by Feintuch (1955). Over the last six decades employability has been viewed in several different ways. This includes being viewed as serving an economic purpose such as achieving full employment (1950-1960s), as having occupational knowledge and skills (1970s), and in the 1980s employability was viewed from a company level as a way of matching labour supply and demand (Forrier

2003). Since the 1990s organisational trends such as downsizing, privatisation and outsourcing has resulted in employability being viewed as a labour market instrument, used by individuals as a new form of job security to ensure career possibilities beyond the borders of organisations (Clarke 2008; Forrier 2003).

From a conceptual basis, employability has been defined as the “relative chance of finding and maintaining different kinds of employment” (Brown, Hesketh & Williams 2002:11). These authors also suggest that the way employability is typically defined is flawed because it ignores the idea of ‘duality of employability’. In other words employability not only depends on fulfilling the requirements of a specific job but also on how one stands relative to others within the hierarchy of job seekers. This idea of duality of employability continues to be a point of discussion and debate when designing and implementing models of employability (Forrier 2003; McQuaid & Lindsay 2005).

As jobs become more transient, the responsibility for employability lies with the individual (Clarke 2008). A review of the Australian literature on employability has revealed that discussions about employability refers to individuals obtaining and maintaining a set of ‘employability skills’ rather than a general or broader discussion on the concept of employability as whole (Cleary, Flynn, Thomasson, Alexander & McDonald 2007; Franz 2008; Jackson 2012; Oliver 2010; Sheldon & Thornthwaite 2005). This is further evidenced in the establishment of the recent employability skills framework (Ithaca Group 2012a). The adoption of the term employability skills is discussed in section 2.5.1 following.

Clarke (2008:60) suggests that as a concept, employability “...deserves further exploration in order to establish a link between theory and practice as

well as fostering mutual understanding of what it means to be employable and a mutual acceptance of responsibility for developing and maintaining employability". In support of this, United Kingdom authors Speight, Lackovic and Cooker (2013:123-124) state that for universities to progress and engage employability in the curriculum there needs to be "open debate on the meaning of employability in the context of its mission and values", and a broader view of learning in the curriculum. These recommendations came as a result of the research findings that student, staff and employer stakeholders' viewed "...learning for employability as a threat to discipline learning" and this impacted curriculum development (Speight, Lackovic & Cooker 2013:112). Moreover, other international research and models of employability have also considered stakeholder perceptions of their role in employability when developing models of employability (Forrier 2003; McQuaid & Lindsay 2005; Nilsson & Ellstrom 2012; Pool & Sewell 2007). This research will examine stakeholder perceptions of the concept of employability through open discussion.

This research is situated within higher education and as such it is important to consider the concept of graduate employability. Graduate employability has been specifically referred to as "the potential a graduate has for obtaining and succeeding in, graduate-level positions" (Knight & Yorke 2004:2). Other definitions of graduate employability describe individual attributes or the acquisition of a set of skills for the workplace. This means that individuals are now given the opportunity to be responsible for their own employability which involves learning to manage their own careers by building a repertoire of skills and experiences, while moving within the labour market (Arthur, Khapova & Wilderom 2005; Clarke 2008; Pool & Sewell 2007). In the context of the Australian higher education sector employability is about giving graduates opportunities for developing a set of attributes relevant to their

chosen profession and generic attributes, skills or abilities that can be applied in a range of contexts (Barrie 2004; Cranmer 2006; Holmes 2001).

Literature on graduate employability has for the last decade been dominated by the discourse of skills (Holmes 2001). This is addressed in the following section.

2.5.1 The adoption of 'employability skills'

It is argued that employability now focusses on the individual and what might be termed their 'employability skills' (Clarke 2008; Ithaca Group 2012b; McQuaid & Lindsay 2005). Employability skills are the non- technical skills required to be an effective and active participant in the workplace (Ithaca Group 2012b) and form a significant subset of generic attributes (refer to 2.3) (Jackson 2009). Employability skills are being developed through graduate attributes at the institutional level of universities (Cleary et al. 2007).

Employment related skills gained increased attention in the 1990s when the Mayer committee was formed to develop a set of key competencies and framework for entry level employment skills with a focus on school to work (Ithaca Group 2012b). These competencies were expanded in 2002 to focus beyond the school-to work arena by including "...the skills needed in vocational education and training to transition to work plus the generic skills required in the workplace" (Ithaca Group 2012b:5). These expansions lead to the development of an employability skills framework and the establishment of the now popular term 'employability skills'.

This 2002 report was developed by the Australian Chamber of Commerce and Industry with the Business Council of Australia in conjunction with peak employer bodies with funding from the Commonwealth Government (Department of Education Science and Training, Australian Chamber of

Commerce and Industry & Business Council of Australia 2002). The report identified eight employability skills and a set of personal attributes which together contribute to overall employability. The eight employability skills identified include; communication, team work, problem solving, initiative and enterprise, planning and organising, self-management, learning and technology. The personal attributes identified by employers as essential components of employability skills included: loyalty, commitment, honesty and integrity, enthusiasm, reliability, personal presentation, common sense, positive self-esteem, sense of humour, balanced attitude to work and home life, ability to deal with pressure, motivation and adaptability. These identified skills were taken up by the VET sector in Australia (Ithaca Group 2012a).

Recently (2012) there has been a framework developed from the skills identified above. The framework takes the skills and behaviours identified by employers as important for successful participation at work (above) and identifies the “generic underpinning skills and knowledge needed to meet these requirements” (Ithaca Group 2012a:6). These have then been organised into 3 areas: cluster 1-Navigate the world of work, cluster 2- interact with others and cluster 3- get the work done. The purpose of the framework is to provide a common understanding, and or language reference point for those who develop curriculum, programs and learning and assessment resources as well as those trainers and educators who work with job seekers (Ithaca Group 2012a). As it is only a new framework in draft implementation stages, its impact or influence upon individual learning and university institutions has yet to be realised. However as the framework is applicable across a broad range of diverse contexts, wide spread take-up could be expected.

It has been suggested that WIL increases employability for students through enhanced skill development including the acquisition of these employability

skills. This is supported by research that found WIL has the capacity to have a positive effect on post-graduate employment (Business Council of Australia 2011; Cranmer 2006; McLennan & Keating 2008; Smith et al. 2009; Yorke 2006). However, there is still some research claiming significant gaps in the employability skills of business graduates (Freudenberg, Brimble & Cameron 2011; Jackson 2009, 2013a) and a low percentage of students being able to transfer what is being taught in formal learning institutions to the professional workplace (Lindstaedt, Kump, Beham, Pammer, Ley, Dotan & Hoog 2010). Jackson (2013a) goes on to note that research into the area of stakeholder perceptions of employability, specifically research with stakeholders other than employers is less common. This research will address this gap by conducting research about employability and employability skills with relevant stakeholders in HRM including students, careers, employers and academics.

2.6 Challenges for the implementation of WIL programs

Australian research has identified several challenges associated with the design, development and implementation of WIL programs. This section of the literature review will address some of the main challenges that were frequently discussed in studies. Challenges for implementing WIL are addressed so as to provide an overview of the difficulties faced by stakeholders in developing and delivering WIL in Australian universities. Research discussed below that has a business discipline specific focus includes Lawson et al. (2011), Choy and Delahaye (2011), and Rowe, Mackaway, Winchester-Seeto (2012).

2.6.1 Resource intensiveness

A reoccurring challenge identified in the literature is that of a lack of available resources for providing WIL opportunities (Lawson et al. 2011; McLennan & Keating 2008; Patrick et al. 2008). Additionally, as WIL becomes

more widespread the ability to secure placements and other resources will be difficult (McLennan & Keating 2008). Patrick et al. (2008) has identified 'adequately resourcing WIL' was one of five major challenges when mainstreaming WIL in Australian universities. The authors suggest that a decrease in available funding opportunities from the Federal Government, as well as the Government's often rigid policies has meant many universities have had to rely on student revenue to provide placement opportunities, even in the already established 'old timer' disciplines such as nursing, education and engineering (Patrick et al. 2008:32). Other resource issues identified included workload and time constraints for both academics and employers, costs to employers and costs to students who may have to maintain part time work while trying to find the time to participate in WIL placements, and a "lack of recognition of the amount of work and skills required to run successful WIL programs" (Patrick et al. 2008:34). McLennan and Keating (2008) have also identified resource intensiveness as a key challenge when implementing WIL into the Australian university curriculum. They support Patrick et al.'s (2008) resource issue of costs and expand further to include the concerns of the "transaction costs of maintaining partnerships with many employers, sourcing WIL opportunities, developing and evaluating curriculum for WIL and supporting a body of student who are geographically dispersed..." (McLennan & Keating 2008:11).

Lawson et al. (2011) state that a lack of institutional support for WIL can have considerable impact on the resources made available to academics for the development and delivering of WIL initiatives. Academic participants in focus group discussions stated that a lack of support through an institutional framework made it difficult to deliver WIL (Lawson et al. 2011). Policies were found to be time consuming and were described as cumbersome as they often hinged on partnerships with external parties (Lawson et al. 2011).

Another issue noted as impacting on available resources was the way in which WIL was viewed by the institution. WIL was often viewed as low priority and lacking academic rigour, and as a result resources were not provided by the institution (Lawson et al. 2011). This is further supported by research that suggests the undervaluing of WIL when compared to other academic roles such as research and classroom based teaching has led to decreased resources available (Emslie 2011). Thus, Emslie (2011) suggests that through appreciating and valuing the work involved in WIL, access to resources will increase.

2.6.2 Embedding WIL

Another issue identified by McLennan and Keating (2008) as being a challenge to mainstreaming WIL in Australian universities, is the challenge of embedding WIL in pedagogy and courses. McLennan and Keating (2008:11) have stated that embedding good quality WIL practices into the curriculum requires "...universities reframing their pedagogical approach to integrate theoretical, professional and experiential models of learning". This not only requires a significant amount of resources and commitment to WIL, it requires a change in perspective for academics and students. For academics, it requires adaption of different teaching and learning styles and for students it is about seeing the importance and relevance in engaging in WIL to their future prospects and careers (McLennan & Keating 2008).

2.6.3 Stakeholder relationships

Maintaining relationships between relevant stakeholders becomes important to consider when designing and implementing a WIL program. It has been stated that there are challenges with managing expectations and competing demands of stakeholders (Patrick et al. 2008), in understanding the role of each stakeholder in the process of WIL (Rowe, Mackaway & Winchester-Seeto 2012) and in fostering partnerships between the university and host

organisation including fitting in with industry needs (Berman 2008; Choy & Delahaye 2011; Lawson et al. 2011; McLennan & Keating 2008).

Managing expectations and competing demands of stakeholders is part of maintaining positive stakeholder relationships. Patrick et al. (2008) however found that this is a major challenge when implementing WIL into the Australian university curriculum. Patrick et al. (2008) found that competing stakeholder interests of employers, students and universities created an expectations gap, and as such an integrated stakeholder approach where there is common understanding of the procedures and commitment of all was needed. Rowe, Mackaway and Winchester-Seeto (2012:115) support this as they have suggested that a “clearer understanding of the stakeholder roles and better communication are important steps to providing adequate support to host supervisors”. Rowe and colleagues (2012) research went on to design a conceptual framework, analysis and reflection tool to be used by academics and host supervisors in order to establish the roles the host supervisor is expected to perform. However, this tool is limited in its application as its development was influenced more by those disciplines where there is a tradition of using placements, such as nursing and engineering. Essentially, both Patrick et al. (2008) and Rowe et al.’s (2012) research have highlighted an apparent disconnect in communication between stakeholders involved in the process of developing and delivering WIL programs.

Several authors (Berman 2008; Choy & Delahaye 2011; Lawson et al. 2011; McLennan & Keating 2008) have specified that another challenge facing Australian universities in the process of implementing WIL, is the fostering of partnerships, including the ability for the university to ‘fit in’ (McLennan & Keating 2008) with industry needs. Choy and Delahaye (2011:159) indicate that the traditional role and power universities have over the content and

types of learning activities and outcomes “...serves the interests of the university well” but “...falls short of adequately meeting the needs of the workplace and learners”. This ‘cultural gap’ (Berman 2008) has been described as a significant barrier to successful collaborations among stakeholders.

2.6.4 A collaborative approach to WIL

The literature above in section 2.6 has discussed some of challenges associated with implementing and or mainstreaming WIL into the Australian university curriculum. Other challenges include inadequate skills and a lack of experienced academic and general staff (McLennan & Keating 2008), ensuring worthwhile WIL experiences (Patrick et al. 2008), and a reluctance by academics to change teaching and learning practices to accommodate the required different pedagogical approach and skill set for developing WIL (Lawson et al. 2011). The same literatures identifying these challenges have also suggested a way of overcoming or mediating some of these challenges. A collaborative or inclusive stakeholder approach to the development of WIL programs has been advocated. It has been suggested that “the design of WIL necessitates input from all stakeholders” (Choy & Delahaye 2011:159), so that a common understanding of the responsibilities and commitment required is achieved (Patrick et al. 2008; Rowe, Mackaway & Winchester-Seeto 2012). It was further suggested that WIL opportunities be part of the curriculum, and be supported by university wide policies and approaches (Patrick et al. 2008).

2.7 Motivations for WIL

WIL has become of increased interest to Australian Universities and businesses, whether through placement-type WIL, or through broadly ensuring strong industry and community engagement in their course delivery (Costley 2007; Freudenberg, Brimble & Vyvyan 2010; McLennan & Keating 2008; Reeders 2000). This section addresses the motivations or

drivers of WIL in Australia. This assists in establishing the role different stakeholders are having on the development of WIL, and gives insight into how WIL programs are being developed.

2.7.1 Australian Federal Government influence

The recent expansion of WIL programs in Australia has been driven by Federal Government agenda in order “...to address skills shortages and provide all students with work-related experiences to increase work readiness” (Orrell 2011:5). The Australian Federal Government is a major stakeholder influencing trends and courses in higher education by way of funding, policies and governing legislation of industry and workplaces, through setting up independent regulatory bodies such as Tertiary Education Quality Standards Agency, and through a commitment to the sustainability and growth of the economy.

Over the past decade, there have been several changes to Federal Government funding of the higher education sector (Patrick et al. 2008). Up until 2004 higher education funding was administered under the Higher Education Funding Act 1988. In 2005 the Higher Education Support Act 2003 became the main piece of legislation governing higher education in Australia, marking a crucial day for the history of WIL in Australia (Orrell 2011). This Act has since had 3 amendments, the most recent being in 2012. This Act has forced Australian universities to review current WIL programs focussing on “the level of oversight, direction and management of student learning” (Patrick et al. 2008:33). Moreover, in order for higher education providers to get commonwealth grant scheme funding they have to meet specific requirements set out in The Higher Education Support Act 2003 ‘administration guidelines’ (Patrick et al. 2008).

According to Bates (2008) the changing funding arrangements for university WIL courses has meant that courses now need to be directed and accountable to specific academic criteria concerning the quality and nature of the university input. This has meant that for WIL courses to be funded there needs to close monitoring of the learning and performance of the student and ongoing regular input between university staff and student (Bates 2008). The assessment process and the management of educational objectives and content need to be managed by the university and universities are now required to define and manage performance levels achieved by the students in the WIL course (Bates 2008). The Australian Federal Government therefore is influencing and or motivating the development of WIL course through their funding requirements.

In 2008 the Australian Federal Government initiated an investigation into examining the capacity for higher education in Australia to meet the future needs of the Australian economy and community (Bradley, Noonan, Nugent & Scales 2008). The independent panel developed a substantive report stating that in the future "...it will be crucial for Australia to have enough highly skilled people able to adapt to the uncertainties of a rapidly changing future" (Bradley et al. 2008:xi). In 2009 the Australian Government acted on the report recommendations by developing a reform agenda. The 10 year reform agenda affirmed that a key feature of higher education will be to provide "support for a highly productive and professional labour force" (Department of Industry Innovation Science Research and Tertiary Education 2009:7). In order to do this the Government announced its "...ambition to increase the educational attainment of the population such that by 2025, 40 percent of all 25-34 year olds will have a qualification at bachelor level or above" (Department of Education Employment and Workplace Relations (DEEWR) 2011:3; Department of Industry Innovation Science Research and

Tertiary Education 2009:12). This will undoubtedly have an impact on student intake in universities.

The 10 year reform agenda outlined several other significant areas of change to the Australian higher education system. Central to these changes is the student centred approach to funding which was introduced in 2012. This meant that funding for student places at Australian public universities became dependent on student demand. This would essentially allow an additional 50,000 students to participate in higher education (Department of Industry Innovation Science Research and Tertiary Education 2009). Decreased restrictions on university places now meant students would have more choices. The other reforms to higher education included: transparency about the performance of higher education systems, increase of participation in higher education including people from low socio economic backgrounds, upgrade of university and TAFE infrastructure, enhance the quality and accreditation in higher education, redirection of student income support, a fair deal for Australia's regions, building a stronger connectivity with vocational education and training sectors, and "a relationship built on mutual respect, trust and agreed funding compacts" between Government and educators (Department of Industry Innovation Science Research and Tertiary Education 2009:9). This rather ambitious vision for the expansion and restructure of the Australian higher education sector will have an impact on how universities will structure their teaching, learning and research, as they become more dependent on the choices students make.

The significant impact of Government legislation on higher education in Australia has been examined by Ernst and Young. Ernst and Young (2011) commissioned two reports into the Government's proposed changes. Their published report outlined important insights into the potential future state of the higher education sector as of a result of the Government student centred

funding system. The study was conducted industry wide and included interviews with 20 executives from seven universities in Victoria, and a survey of a 1,000 students on the drivers of choice (Ernst & Young 2011). Ernst and Young (2011:8) have suggested that shifting the power to the consumer means universities will have to re-establish themselves in the market by clearly understanding the consumers they are targeting. The increase in competition and the entry of multiple new players are threats the higher education sector will now face as a result of the Governments new reforms (Ernst & Young 2011). Essentially, this demand driven funding system will have universities wondering how to remain competitive.

With the higher education now considered to be a consumer driven market (Ernst & Young 2011) it could be suggested that universities will need to assess what their customers (students) want in order to remain sustainable. In turn, if the Government reaches their target of 40% of all 25-34 year olds having at least one qualification at a bachelor level, student's will need to consider what will be the differentiating factor for them when they apply for a job. With the power in students' hands it will be important for universities to consider what is driving the student's choices. Ernst and Young's (2011:10) report may provide universities insight into their customers as they found that the top 3 student drivers of choice are: quality of education, career opportunities and the specific course offered. The authors further suggest creating strong industry links and tying them into student experience and career pathways (Ernst & Young 2011). This suggests that WIL opportunities that are built on strong industry links and tied to a student's career could be a way for universities to "...achieve a clearly differentiated market position" (Ernst & Young 2011:13).

The Australian Qualifications Framework (AQF) is an integrated national policy established to set the level and quality of skills and knowledge within

each qualification spanning across education and training sectors (Australian Qualifications Framework 2013b). The AQF was established in 1995, and was recently (2011) revised “...to ensure that qualification outcomes remain relevant and nationally consistent, continue to support flexible qualifications linkages and pathways and enable national and international portability and comparability of qualifications”(Australian Qualifications Framework 2013c:9). This recent revised edition makes numerous references to lifelong learning and the ability for individuals to apply their education to the workplace. For example the AQF states that graduates at a bachelor level “...will have broad and coherent knowledge and skills for professional work and/or further learning” (Australian Qualifications Framework 2013c:18). This is exemplary of the way in which a policy framework funded by the Government can influence the higher education sector.

The Tertiary Education Quality Standards Agency (TEQSA) is an independent national accrediting body and regulator of the higher education sector in Australia (Australian Government Tertiary Education Quality and Standards Agency 2013b; Australian Qualifications Framework 2013c). TEQSA provides for national consistency through regulating the AQF standards, protects students through ensuring quality and transparency in higher education opportunities, ensures the higher education system is meeting Australia’s social and economic needs for a highly educated and skilled workforce, and “protects and enhances Australia’s reputation for and international competitiveness in higher education as well as excellence, diversity and innovation” (Australian Government Tertiary Education Quality and Standards Agency 2013a). This agency will also have governance over graduate attributes, an orienting statement of educational outcomes used to inform curriculum design and the provision of learning experiences at university (Barrie, Hughes & Smith 2009; Donleavy 2012). This regulating

body therefore has an influence on the way in which courses will be designed in the future, including the provisions of WIL programs.

2.7.2 Industry influence

Industry is driving the increased development of WIL programs through their demands for 'employable' or 'work ready' graduates (Bridgstock 2009; Business Council of Australia 2011; Orrell 2011; Patrick et al. 2008), through participation in establishing the employability skills framework (discussed in 2.5.1), and through their need to fill skill shortages and short and long term recruitment objectives (Patrick et al. 2008).

The recent Business Council of Australia's (BCA) report (2011) recognises, that it is essential for universities to continue to improve the quality and relevance of teaching and learning in order to deliver the type of employable graduates that Australia needs to lift the overall productivity, and community prosperity of the nation. A work ready graduate is another term used to describe the measurement of, and employability of graduating students at university. Demands for employable graduates are driving the occurrence of WIL initiatives in universities as these initiatives can provide opportunities for students to develop their knowledge and skills learnt in the lecture theatre through applying them in the practical setting of a workplace (Choy & Delahaye 2011; Freudenberg, Brimble & Cameron 2011; Patrick et al. 2008).

Moreover, industry peak bodies have heavily influenced the establishment of 'employability skills' and the employability skills framework (discussed in 2.5.1). The Australian Chamber of Commerce and Industry along with the Business Council of Australia undertook the research project *employability skills for the future* that lead to the identification of personal attributes and eight employability skills for today's employees (Cleary et al. 2007;

Department of Education Science and Training, Australian Chamber of Commerce and Industry & Business Council of Australia 2002). The recent development of the 'employability skills framework' (Ithaca Group 2012b) developed from the 2002 report identifying personal attributes and eight employability skills (discussed in 2.5.1 above), has been widely acknowledged as an accurate account of what employers need in the workforce (Cleary et al. 2007). Consultation from employers and endorsement by industry representatives reinforced the framework as articulating exactly what employers want from graduates. This framework aims to illuminate the non-technical skills and knowledge that underpins successful participation in work through providing a foundation for education providers across all sectors to develop employability skills into their products (Ithaca Group 2012b). As WIL placement programs are part of a university's product, and when designed properly have the potential to produce productive outcomes for organisations (Choy & Delahaye 2011), this framework developed in conjunction with employers will notionally drive the development of more WIL initiatives.

Research has found that industry is motivated to participate in WIL programs by their need to fill skill shortages and satisfy recruitment needs (Mckinnon 2011; Patrick et al. 2008). Patrick and colleagues (2008:19) found that an employer's "motivation to engage with universities and students in WIL had much to do with previous experiences (Positive or negative) with WIL..." . This is further supported by Choy and Delahaye (2011:157) who have stated that employers "investing in university courses to develop workforce capacity predictably expect a quick return in the form of productive outcomes that rapidly progress identified strategic goals" . Hence universities are increasingly adopting WIL as an essential component of their

curriculum because industry is demanding productive graduates to fill skill shortages and recruitment needs (Choy & Delahaye 2011).

2.7.3 Student influence

While the Government ambitions for a more highly productive and professional labour force (as discussed above in section 2.7.1), and industry demands employable or work ready graduates (as discussed above in section 2.7.2), students are relying on universities to provide experiences that will lead to the development of their generic skills and give them an advantage over other students in the labour market; experiences such as those WIL can offer (Abeysekera 2006; Patrick et al. 2008). Research has found that students are pushing for more WIL oriented courses because they perceive WIL to be an activity that generates high quality learning, has "...the ability to make themselves more attractive as potential employees", and gives them a competitive edge over other students in the job market (Patrick et al. 2008:21). This suggests that the significant benefits reported for students from participating in a WIL activity makes WIL more desirable, thus pushing universities to develop WIL into their curriculum offerings. Benefits of WIL will be discussed below to provide an understanding of the possible reasons for student engagement in WIL.

Cooper, Orrell & Bowden (2010) have reported significant benefits in participating in WIL including but not limited to: students being competent and astute in applying knowledge to understand practical action, being confident in themselves as learners, as a member of a community, and as culturally aware civic minded citizens. Generally, they have stated that WIL programs "aim to develop students capacity to be proactive, adaptable, motivated and responsible" individuals (Cooper, Orrell & Bowden 2010:59). Another benefit of WIL programs is the capacity to develop further interpersonal and professional skills for the workplace. These work-related

learning skills include the ability to think critically, the ability to reflect, the ability to form and build professional relationships, and the ability to recognise the link between graduation and graduate attributes including the recognition of the importance and relevance of the degree content to their future career development (Cooper, Orrell & Bowden 2010). Therefore, the acquisition of these skills relevant to obtaining and maintaining a job as well as personal development benefits and career clarification may influence students to advocate and participate in WIL initiatives.

Similarly, Dressler & Keeling (2011) have found in their research that WIL placements can have significant benefits in clarifying for a student their career intentions or path. Other research has shown increased student engagement after the placement, as well as providing the opportunity for the student to understand the required needs and skills to become a professional in their chosen career (Zegward & Coll 2011) . On the other hand it has also been beneficial for students whom have found after their placement/ work based learning experience that they do not like their intended career in practice, and therefore proceed to transfer to another degree and or career path. Thus, an opportunity to clarify career intentions could be a motivation for students to engage with WIL.

An exemplar of students concern for employability and experiences like WIL offers is evident through online media. Online social media such as blogs, facebook, and websites such as the bored of studies website (www.boredofstudies.org) give students a platform to share opinions, thoughts, fears, motivations and educational resources with thousands of other students (iStudy Australia Pty Ltd 2002-2013). A dedicated tertiary education section on the bored of studies website has several discussion threads about the relevance of getting work experience while at university with reference to the capacity for experience to make you more employable

(iStudy Australia Pty Ltd 2002-2013). This suggests that it is apparent that students are aware of the necessity to gain experience at work while at university, thus motivating universities to develop this into their courses.

2.7.4 University education

More than a decade ago, the learning for life final report into higher education policy and financing simply stated that “a key requirement (of Australian higher education) is to equip our graduates to play a productive role in an outwardly oriented, knowledge-based economy” (West 1998:16). Now in the midst of the knowledge-based economy higher education in Australia is being re-shaped once again in order to provide work-ready or employable graduates sought by employers (Caballero & Walker 2010; Department of Industry Innovation Science Research and Tertiary Education 2009). Higher education institutions in Australia are currently being influenced not only by the recent changes in Government funding policy (discussed above 2.7.1); they are also being influenced by employers and their consumers, the students. In these turbulent times of change “Work integrated learning has provided universities with an opportunity to offer a best product that students will appreciate as a pay-off for their investment that will enhance their branding and will attract students by re-marketing of their traditional academic courses as vocationally oriented courses” (Abeysekera 2006:7).

WIL and its role within the university curriculum has been long standing for some disciplines and for others it has not yet been considered (Abeysekera 2006; McLennan & Keating 2008). As such there has been an impact on how universities approach their teaching and learning curriculum. Also relevant is the notion of a pathway to employability which is inherent in the acquisition of a set of graduate attributes or capabilities that attempt to ensure the work readiness and therefore employability of the student

(McLennan & Keating 2008; Oliver 2010). For example, according to McLennan and Keating (2008:2) “most Australian universities have recently strengthened their commitment to WIL through adding WIL to their strategic directions and re-shaping areas of the university to better manage and support WIL provision”. Often this means ensuring that the university’s graduate attributes or graduate capabilities are aligned with what the employer wants, essentially closing the gap on the work readiness of graduates.

WIL not only offers universities an opportunity to share knowledge and experience across disciplines (Brown 2010), it offers universities a means for responding to the needs of employers and students for more work ready relevant material to be developed into the degrees offered. Universities are using WIL as a way of differentiating themselves in the higher education market (Patrick et al. 2008). In the now market driven education sector WIL can be used to persuade students to choose the degree your university is offering over others. This is significantly important because students are increasingly more selective in their choice of universities as many now expect a pay -off from their investment in education (Abeysekera 2006; Orrell 2004; Rae 2007). The link between WIL programs and increased employability for students is forcing universities to compete in their offerings of WIL activities. In essence there is an opportunity for WIL to be a major differentiator as institutions compete by developing innovative ways of attracting students through meeting both their learning and career needs (Orrell 2004). Moreover, the Bradley report of higher education recommended that universities are going to have to “...demonstrate that their graduates have the capabilities that are required for successful engagement in today’s complex world” (Australian Government ComLaw 2011:4).

2.8 WIL in Business

Traditionally, WIL programs have been available for students enrolled in the degrees of sport, engineering, nursing, midwifery, medicine, law and education (McLennan & Keating 2008; Trigwell & Reid 1998). Recent changes in Government funding, and industry and student needs (see section 2.7) have influenced significant growth in WIL program development across disciplines more broadly, including the growth of WIL in Business degrees. The literature review sections above have addressed the research conducted previously in WIL generally in Australian Universities. It explores the range of WIL programs being developed, the reported outcomes of WIL (graduate attributes and employability), and the challenges and motivations for the development of WIL. It was identified in section 2.3.2 that although there is some research about the range of WIL programs in Business, there is a lack of research into the range of WIL programs in undergraduate HRM. This research will fill this gap by focussing on the design, development and benefit of WIL programs in undergraduate human resource management degrees.

Therefore, this section addresses the literature about WIL in Business (of which HRM is a subset) in more detail, and argues that the development of WIL programs in Business is becoming increasingly important.

Literature about WIL which is focussed on the discipline of Business has identified skills gaps in business graduates. Industry opinion has deemed Australian business graduates as not being 'job ready' and lacking essential soft skills or employability skills since the 1980s (Jackson 2009). So it is no surprise that more recent research continues to find dissatisfaction among employers with business graduates' ability to effectively apply disciplinary knowledge, and generic skills in the workplace (Freudenberg, Brimble & Cameron 2011; Jackson 2009, 2013a, 2013b; Jackson & Chapman 2012).

Current Australian research of 211 managers/supervisors of business graduates, and 156 academics teaching business units has identified that “although graduates are confident and proficient in certain non-technical skills, they are deficient in vital elements of the managerial skill set” (Jackson & Chapman 2012:95). The skills identified as lacking in business graduates included: leadership, critical thinking, self-reflection, conflict management and decision making skills (Jackson & Chapman 2012). The impact of these business graduate skill deficiencies is the development of an “inadequate cohort of future managers, potentially devastating in the face of beleaguered economies still recovering from the global financial crisis and growing competition from the east” (Jackson & Chapman 2012:109) .

Jackson (2009, 2013a) suggests that there are two ways in which universities are currently attempting to ‘bridge the skills gap’ in undergraduate management education; through industry input (WIL and guest lecturers) and the embedding of generic attributes. Engagement with industry by way of WIL initiatives and professional guest lecturing has been seen by many as invaluable as it give students insights, greater awareness and real life experiences in the world of work (Jackson 2009). Graduate attributes are discussed in section 2.4, and section 2.5.1 considers employability skills, a subset of graduate attributes. Universities are integrating generic attributes and or employability skills into the Australian curriculum including the business curriculum in an effort to demonstrate they are providing relevant education (Barrie 2006).

Research in disciplines other than business has found that WIL programs have several benefits including the capacity for students to develop their repertoire of skills and graduate attributes and increasing their employability (Collin & Tynjala 2003; Rhodes & Shiel 2007; Sleaf & Reed 2006). This strong connection between WIL, graduate attributes and employability (Smith et al.

2009) supports the notable increase in the development of WIL programs more broadly across all disciplines (Australian Learning and Teaching Council 2009; McLennan & Keating 2008). As discussed above, business graduates have been found to be lacking the essential skills for the workplace. It is suggested therefore that the development of WIL programs into the business discipline is significant because WIL has been suggested as a way of developing the essential skills and attributes needed for the workplace.

Research about WIL has been conducted in the discipline areas of other subsets of business degrees such as accounting (Abeysekera 2006; Oliver, Whelan, Hunt & Hammer 2011). However, this research has been unable to identify any previous research on WIL programs in the undergraduate HRM discipline. The identification of this gap was confirmed by several searches in the university library database and e-Journals. The databases searched include Google scholar, Scopus, ERIC, ProQuest, EBSCO, Emerald and Sage.

2.8.1 Human Resource Management undergraduate programs

University HRM educational programs have changed significantly over the last 100 years. HRM undergraduate degrees or programs of study are a subset of business degrees in most Australian universities. This section of the literature review explores the evolution of HRM programs in university for the purpose of providing an informative argument for the need for the identified gap in WIL and HRM research to be explored.

Kaufman (1999) reviews the evolution of university HRM programs. His work summarises the approaches taken in the curriculum of HRM degree programs and the strengths and weaknesses of HRM management as an intellectual subject area (Kaufman 1999). The first university course devoted to what was then called 'employment management' was established in 1915

(Kaufman 1999). From this, and the employment conditions created by WWI, there was a significant rush by organisations to expand their employment management departments (Kaufman 1999). As a result, new labels for the field began to appear. These included; labour management, personnel management and industrial relations (Kaufman 1999).

By the 1920s industrial relations became the popular term to describe the overall field and practice, and personnel management was viewed to have two approaches to labour management (Kauffman 1993; Kaufman 1999). The first perspective viewed personnel management as the 'employers solution to labour problems', while the second view equated with personnel management included a complementary role of what was then called 'workers solution' to labour problems (Kaufman 1999). The rise of mass unionism in the 1950s, and the emergence of the human relations movement originating from the Hawthorne experiments in 1930s, sparked considerable growth in university programs devoted to both industrial relations and personnel management from the period of 1945-1960 (Kaufman 1999). It was during this period that universities and colleges began to establish separate departments and schools devoted entirely to employment relations and labor issues (Kaufman 1999).

According to Kaufman (1999:106-107) from the period of 1960 to the late 1970s personnel management, soon to become HRM, underwent five significant developments that have helped to evolve the field further:

1. The rise to dominance in HRM of the behavioural and organisational sciences
2. The long term decline of the unionised sector of the economy in size and influence

3. The development of a new, largely non-union work system
4. Technological change, demographics and globalisation
5. Growth of employment law

The five trends listed above have had significant repercussions on the practice of HRM in organisations, and according to Kaufman (1999) university HR programs continue to exhibit the same mix of continuity and change.

In describing the late 1990s HR university program Kaufman (1999:109) points out that “There remains a significant gap between the skills and competencies provided to students in most HR/IR programs and those desired by business executives”. Moreover, he states that “Most business executives also believe HR/IR programs should provide opportunities for students to practice or observe what they learn in real-life business environments through internships and field study courses, but only a minority of universities provide such opportunities” (Kaufman 1999:109). This has reportedly widened the gap between the skills being taught to students in university HR programs and the needs and wants of business executives (Kaufman 1999).

Current research suggests that this is still the case today for many university programs, including business. Recent research has indicated that the proportion of Australian university students engaging in this type of learning is still relatively low (McLennan & Keating 2008). The result is similar, a gap persists between the graduate’s performance and the expectations of employers (Cleary et al. 2007; Jackson 2013a). Moreover, while most Australian universities are currently making substantial commitments to increasing WIL opportunities in most if not all disciplines,

there are significant variations in approaches (McLennan & Keating 2008). The impact of these variations in current day undergraduate HRM degree programs has not been explored. This research will aim to fill this gap by conducting research with relevant stakeholders about the range of WIL programs being developed in the undergraduate HRM curriculum in Australian universities. The literature review is summarised and the research questions are presented following.

2.9 Conclusion

This literature review has considered key theoretical developments relating to WIL in higher education. In considering the knowledge and learning literature relevant to WIL, it is argued that although individuals learn in different contexts, learning is not context specific. It is further argued that it is through physical and social experiences that mental models are developed, and these mental models have the capacity to influence an individual's actions. Therefore mental model identification is significantly important in order to understand the experiences and actions of individuals in WIL development.

In Australia graduate attributes are the building blocks of university programs. They are the listed education outcomes used to inform curriculum design and the provision of learning experiences at university (Barrie, Hughes & Smith 2009). The literature indicates that they can be understood differently by different people and this is impacting the way in which teaching and learning practices are implemented to achieve these outcomes. Therefore in order to understand the implications of a range of WIL programs in HRM, this research will examine the mental models of relevant stakeholders about graduate attributes.

Graduate employability is considered to be “the potential a graduate has for obtaining and succeeding in, graduate- level positions” (Knight & Yorke 2004:2). Literature suggests that a graduate’s potential for obtaining and succeeding in work sits with the graduate acquiring employability skills, and being able to transfer those skills to the workplace. However, employability is a contestable concept. Therefore, research has suggested that the concept of employability deserves further research. This research will look at the stakeholders’ mental models about employability.

A review of literature suggests there are many conceptualisations of WIL and a range of programs offered in Australian universities. In this research WIL programs can include a range of approaches and strategies designed within the curriculum that integrate theory and work (Patrick et al. 2008:iv). They aim to bridge the gap between tacit and explicit knowledge and can increase graduate employability through opportunities for the development of graduate attributes. The implications of a range of WIL programs in undergraduate Human Resource Management have not been addressed in the literature.

The literature cites many challenges associated with both developing and implementing WIL programs. Resource intensiveness was the main challenge identified in the literature (Lawson et al. 2011; McLennan & Keating 2008; Patrick et al. 2008). These resource intensive challenges included the limited access to WIL opportunities, and the increased workload for academics, students and employers. Other challenges cited were embedding WIL and managing stakeholder relationships (McLennan & Keating 2008; Patrick et al. 2008; Rowe, Mackaway & Winchester-Seeto 2012).

The Australian Government and industry, along with students are driving WIL development in university education. The Government has made

several recent policy changes that have and will continue to influence the focus of university education. This includes the stated ambition to increase the education attainment of the population and demand for a highly productive and skilled labour force. This places emphasis on the outcome of higher education to be a provider for the workplace. In addition to this there is new emphasis on providing funding to universities (student centred), and a regulatory body, TEQSA, who will monitor AQF standards. Industry is also driving WIL development through their demands for work ready graduates. Concurrently students are driving WIL program development through their desire to be viewed as employable. They are looking to universities to provide experiences that will lead to the development of their generic skills and give them an advantage over other students in the labour market. The Australian Federal Government and students are motivating the development of WIL programs in universities.

In summary, as a result of identified skills shortages in Australia, Government and industry agenda is motivating the recent increase of WIL programs in Australian universities. WIL in the form of practicums in areas such as nursing or engineering, has a long standing history (Cooper, Orrell & Bowden 2010). The renewed interest of integrating WIL into other areas, such as business degrees in higher education, is in response to the growing demand from employers and students to provide work-ready graduates with highly developed employability skills (Brown 2010; Patrick et al. 2008). Consequentially, a range of WIL programs are being offered to students with the perception that WIL can enhance learning and graduate skills, and increase a graduate's employability. This research aims to address the implications of a range of WIL programs through exploring the development of WIL programs in HRM. Specifically this research will address the following research questions:

RQ1- Why are there a range of WIL programs offered in the teaching of HRM undergraduates?

RQ- What is the impact of a range of WIL programs in the teaching and employability of HRM undergraduates?

Chapter 3- Methodology

3.1 Introduction

The purpose of this chapter is to provide an overview of the research methodology. An interpretivist perspective and complexity approach is identified and discussed as the guiding paradigm driving this research. For the purposes of providing a more robust and compelling argument, the research uses the ten principles of complex evolving systems established by Mitleton-Kelly (2003b) for applying complexity theory to organisational research. These principles, along with the view that individuals construct their own reality, are used as the guiding paradigm to analyse the data. The justification and benefits in using a qualitative case study methodology are then discussed. The significance of the research is explored through reliability, validity, and the ethical considerations. Lastly, the research methods employed, including sampling techniques, use of semi-structured interviews, and how NVivo 10 ® and the complexity principles are used to analyse the data, are described in detail.

3.2 Guiding paradigms

3.2.1 Epistemology

Epistemology deals with "...how knowledge is created, acquired and communicated..." (Scotland 2012:9). Epistemologically speaking, this research is concerned with subjective meanings of social phenomena. Therefore this research takes on an interpretivist perspective. In this view individuals construct their own reality, there is no truth waiting to be discovered, truth and meaning exists only through our engagement with realities in our world (Crotty 1998). Hence, it is the perceived reality and motivating actions of the participants involved in this research that are examined. This perspective has influenced the research topic and research

questions, as with an interpretivist perspective, it is the world of lived reality and the situation specific meanings of the actors involved that constitute the general object of investigation. Thus, for this research, it is the individual mental models of the different stakeholders involved in the collaborative process of Work-Integrated Learning (WIL) that will be identified and then compared.

3.2.2 Mental models

Mental models have been described and researched in many different contexts (Chen 2005; Harrison & Boyle 2006; Jensen & Rasmussen 2004; Kim 2004; Richardson & Pugh 1981; Senge 1990). The range of descriptions and contexts has resulted in researchers applying varying definitions and applications of the concept. Through a synthesis of the learning literature across and between disciplines, as part of my Honours degree (Murray 2010), a clear and specific definition of the concept of an individual mental model for organisation studies was developed. It was found that mental models are commonly described in the literature as being internally held, and having the capacity to affect how a person acts (Rook 2013). In acknowledging these common themes, an individual mental model was robustly defined as “A concentrated, personally constructed, internal conception, of external phenomena (historical, existing or projected), or experience, that affects how a person acts” (Rook 2013:42). This definition is used in this research, as a review of the literature in the field of WIL, reveals mental model research has not yet been undertaken. This is supported by the recent positive feedback received from two double blind referees on a conference paper submitted for the WACE 17th World Conference on Cooperative & Work-Integrated Education: “Historic challenges. Global Solutions” (Murray & Watson 2011). The feedback encouraged using mental models for identifying communication patterns in organisational relations, while also suggesting that information from the

identification of mental models could be used to better design work-integrated courses and provide practical ways for inducting industry supervisors into the work-integrated model.

3.2.3 Complexity

Complexity literature can be categorised in several ways (Alhadeff-Jones 2008; Castellani & Hafferty 2009; Mitleton-Kelly 2003b; Morin 2008). Mitleton-Kelly (2003b:23) views organisations as “complex evolving systems, co-evolving within a social ecosystem”. Drawn from the work of Kauffman (1993, 1995), Mitleton-Kelly’s (2003a, 2003b) work heavily emphasises the view that organisations are part of a larger ecosystem co-evolving, and being influenced by all other related elements. This view requires a new way of thinking about strategy and management in organisational operations. This different way of organising “...argues for the co-creation of enabling environments...” (Mitleton-Kelly 2003a:10) or ‘enabling infrastructures’ (Mitleton-Kelly 2003b:23) that facilitate rather than inhibit the co-evolving systems. As such, Mitleton-Kelly (2003b) has developed a conceptual framework of ten generic principles for exploring and understanding the behaviour of complex social systems from a complexity perspective. The work and framework referred to in this research, published by Mitleton-Kelly (2003a, 2003b) were developed with the London School of Economics complexity group (London School of Economics (LSE) Complexity Group 2013). In order to understand the range of WIL programs offered to students in undergraduate HRM degrees, Mitleton-Kelly’s conceptual framework of ten principles set out in Figure 3.1 following are used to understand the complex behaviour of the participants and the complex social system of the university.

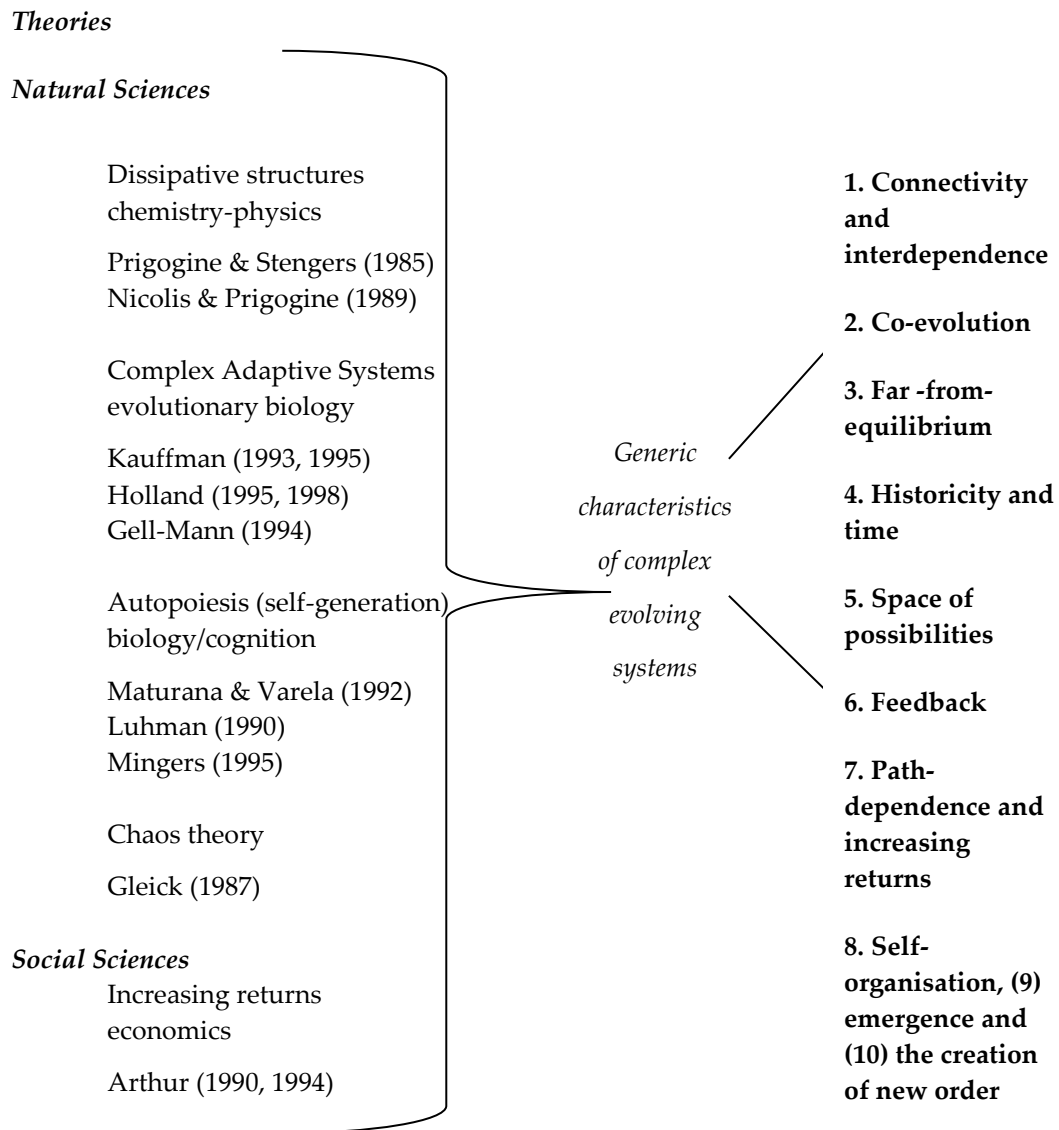


Figure 3.1 Complexity framework

Adapted from Mitleton-Kelly (2003b:24)

Figure 3.1 shows how the ten principles of complexity are produced from five main areas of research: dissipative structures, complex adaptive systems, autopoiesis, chaos theory and economics. Just as there is no universal complexity theory, the ten generic principles listed in Mitleton-Kelly's (2003b) figure are not the only principles of complex evolving systems (CES). The principles specifically listed above were chosen by Mitleton-Kelly

(2003b) as the most appropriate for the application of complexity theory to the management of organisations.

Figure 3.1 has been adapted to suit this research in several ways. Firstly, some of the authors Mitleton-Kelly (2003b) examined in each of the five main areas of complexity theory that have made up the ten principles have been added to Figure 3.1. Secondly, the order in which the ten principles on the right of the figure are listed and numbered has been altered from Mitleton-Kelly's (2003b) original figure. These alterations were made in order to represent the order in which this research will discuss its findings and to provide for ease of understanding for the reader. An explanation of each of the ten principles will now follow.

3.2.3.1 Principle 1: Connectivity and interdependence

Connectivity signifies the connectedness of individuals within the system, as well as the relatedness between human social systems (Mitleton-Kelly 2003b). The flow of information and knowledge through a system relies heavily on the level of connectivity and interdependence. In a human social system there are networks of relationships with varying degrees of connectivity. The level of connectivity determines these relationship networks and is an essential component in the feedback process (Mitleton-Kelly 2003b). Like biological co-evolutionary processes, a single entity depends upon all other individuals/systems within the ecosystem to contribute to overall fitness. In other words the individual systems do not contribute to overall fitness independently of each other. This can mean that to improve the overall fitness of an ecosystem all individuals and or systems depend upon the characteristics of the other to simultaneously adapt and change.

Interdependence denotes the extent to which any action or decision by an individual or group within the ecosystem affects related individuals and systems. Essentially, high connectivity may imply high interdependence and the greater the interdependence between related systems the wider the ripples of perturbation of a move by one entity on all other related entities (Mitleton-Kelly 2003b). That affect will obviously then "...vary with the 'state' of the individual and system at the time" (Mitleton-Kelly 2003b:27). Having high connectivity does not necessarily mean positive returns. Included in "the 'state' of the individual is its history and its constitution, which will in turn include its organisation and structure" and each of these have the capacity to impinge upon and influence each other (Mitleton-Kelly 2003b:5). Furthermore, it means that "if one entity tries to improve its fitness or position this may result in a worsening condition for others" (Mitleton-Kelly 2003b:5). That being said it is significant to highlight that "...the distinguishing characteristic of a CES is that it is able to *adapt* and *evolve* and thus *create new order and coherence*" (Mitleton-Kelly 2003b:5).

3.2.3.2 Principle two: Co-evolution

As briefly mentioned above, co-evolution is about the way each element in a system is influenced by all other related elements in an ecosystem. Kauffman and Macready (1995 cited in Mitleton-Kelly 2003b:29) state that co-evolution is "a process of coupled, deforming landscapes where the adaptive moves of each entity alter the landscapes of its neighbours". This can happen both positively and negatively. For example if one entity does not co-evolve the systems and procedures "...may become legacy in a sense that they are what has been 'left over'" (Mitleton-Kelly 2003a:4). In a positive light, if an individual or team learns to operate more efficiently, this can be propagated through the social ecosystem depending on the level of connectivity and interdependence (Mitleton-Kelly 2003b). With this dilemma eventuates the

long term objective of Mitleton-Kelly's (2003a:4) approach, "to help organisations become fitter and more sustainable by learning to co-evolve effectively with their changing environment, or to become aware of *co-evolutionary sustainability*".

Mitleton-Kelly (2003a:4) further suggests that although co-evolution is an ongoing process, it has the capacity to "...become reactive and change its emphasis from co-evolution with and adaption to a changing environment". The distinction between the two changes the way strategy is viewed as "When the emphasis is placed on co-evolution with, it tends to change the perspective and assumptions that underlie much traditional management and systems theories" (Mitleton-Kelly 2003b:29). To view change within the ecosystem as *adaption to*, places emphasis on the system and the environment being viewed as separate from each other. This causes strategy to be viewed as a response to the changing environment when we must remember that "in a social co-evolving ecosystem, each organisation *is a fully participating agent which both influences and is influenced by* the social ecosystem made up of all related business, consumers, and suppliers, as well as economic, cultural and legal institutions" (Mitleton-Kelly 2003b:30). It is therefore essential to view change in terms of co-evolution with rather than adaption to the changing environment.

Overall, co-evolution argues for a deeper understanding of actions and reactions as no individual or organisation is powerless in an ecosystem. Each action taken by an entity has the capacity to influence, and or resonate through the entire ecosystem by way of the "intricate web of inter-relationships" (Mitleton-Kelly 2003b:30).

3.2.3.3 Principle three: Far-from-equilibrium

When an open system exchanges information with its environment it can be pushed 'far-from-equilibrium' and new order and structures are created (Mitleton-Kelly 2003b). Mitleton-Kelly (2003b) uses the dissipative structure of the Bénard cell theory to describe the process of applying an external constraint (high heat in the case of the Bénard cell) to a stable homogeneous entity. The stable entity reaches a critical point (far-from-equilibrium) where structures begin to form a self-organised pattern. Essentially, the structures self-organise into patterns, a community, or living thing, thus forming a coherent motion. In essence evolution has occurred. Mitleton-Kelly (2003b:32) suggests that "This coherence at a macro level characterises emergent behaviour, which arises from micro-level interactions of individual elements".

Applying the Bénard concept to a social human eco-system means that when a constraint is applied and far-from-equilibrium is reached the system finds "...new ways of operating, because away-from-equilibrium (established norms) systems are forced to experiment and explore their space of possibilities, and this exploration helps them discover and create new patterns of relationships and different structures" (Mitleton-Kelly 2003b:34). Although the creation of new order has occurred from heat transfer in the Bénard cell theory, the direction in which the organisation self-organises is unpredictable and uncontrollable (Mitleton-Kelly 2003b). In other words, possible solutions or paths for the organisation to follow are boundless.

3.2.3.4 Principle four: Historicity and time

The possible paths for an organisation to follow are boundless except for the constraint of the person's current state and the state of the landscape the person occupies (Mitleton-Kelly 2003b). This means that the history of the individual and the landscape influences the decisions made by the

individual. Essentially "...the emergent behaviour of the person is not a matter of 'chance' but is the result of the person's selection among a finite set of perceived choices: as well as the past choices made (history) that have shaped that person's life path" (Mitleton-Kelly 2003b:34).

3.2.3.5 Principle five: Space of possibilities

Complexity theory indicates organisations be open to trying different strategies and exploring their space of possibilities in order to be sustainable entities (Mitleton-Kelly 2003b). This means that a single optimum strategy is not possible nor desirable as flexible adaption requires new connections and new ways of seeing the world (Mitleton-Kelly 2003b). Although it is suggested to be open to several possibilities and try different strategies, it is not possible to explore all possibilities (Mitleton-Kelly 2003b). Kauffman (2000 cited in Mitleton-Kelly 2003b:36) alternatively suggests to consider the 'adjacent possible'. In other words, use the readily available resources and put them together in a different way. This opens up a newer way of viewing things and the cycle continues creating "...ever expanding possibilities of the adjacent possible" (Mitleton-Kelly 2003b:37).

3.2.3.6 Principle six: Feedback

Feedback processes underlie the transformation of change and stability in complex systems (Mitleton-Kelly 2003b). In a human system, far-from-equilibrium conditions take place when there has been a change or external force put on the system which pushes the system into either self-organisation, the creation of new order or, into disorder. Fundamentally, "...positive (reinforcing) feedback drives change and negative (balancing, moderating or dampening) feedback maintains stability in a system" (Mitleton-Kelly 2003b:37). Therefore positive feedback processes are necessary for the effectiveness or reinforcing of change in an organisation.

There is also a link between the effectiveness of feedback and the degree of connectivity and co-evolution. The degree of connectivity will have an impact on the strength of feedback, as the degree of connectivity between individuals will determine how far reaching the feedback process goes (Mitleton-Kelly 2003b). The co-evolution of entities within an ecosystem "...may also depend on reciprocal feedback influences between entities" (Mitleton-Kelly 2003b:38). Furthermore, there is evidence to suggest that the structure of an ecosystem governs co-evolution in social eco-systems and that this structure of the ecosystem is influenced by the degree of connectivity and feedback processes (Mitleton-Kelly 2003b).

As such, when efforts to improve performance and market position continually fail for organisations, managers may take drastic measures and risks to produce a radical change (Mitleton-Kelly 2003b). These changes may also fail leaving the organisation locked in a constant cycle of restructuring because of an over-reliance on adjustment mechanisms based on negative feedback (Mitleton-Kelly 2003b). In order to change the failure cycle "new patterns of behaviour and new structures may need to emerge, and these may depend on or become established through new positive feedback processes" (Mitleton-Kelly 2003b:38).

3.2.3.7 Principle seven: Path dependence and increasing returns

According to Mitleton-Kelly (2003b:38), Arthur (1990) argues that conventional economic theory implies a single equilibrium point as it is based on the "...implicit assumption of negative feedback loops in the economy, which lead to diminishing returns" and a predictable outcome. However, he further argues that negative feedback does not always operate or dominate. Instead he suggests that "positive feedback magnifies the effects of small economic shifts" (Arthur 1990 cited in Mitleton-Kelly 2003b:39). Therefore "increasing returns from positive feedback makes for

many possible equilibrium points, depending on the negative feedback loops that may also operate in a system” (Mitleton-Kelly 2003b:39). The prospect that there is more than one possible equilibrium point is further argued by Nicolis and Prigogine (1989). Nicolis and Prigogine (1989) argue that the path that a system may follow also depends on its past history (Mitleton-Kelly 2003b). Essentially, “The point here is that past history affects future development, and there may be several possible paths or patterns that a system may follow” (Mitleton-Kelly 2003b:39).

3.2.3.8 Principles eight, nine, and ten: Self-organisation, emergence and the creation of new order

Self-organisation is the spontaneous order that occurs naturally within complex systems. From the interaction of the individual elements of a system, emergent properties, qualities, patterns or structures arise and “...they are greater than the sum of the parts” (Mitleton-Kelly 2003b:40). In an organisation self-organisation can be described as the coming together of a group to perform a task where “...the group decides what to do, how and when to do it and no one outside the group directs those activities” (Mitleton-Kelly 2003b:41-42) . While, emergence in a human social system “...tends to create irreversible structures or ideas, relationships and organisational forms, which become part of the history of individuals and institutions and in turn affect the evolution of those entities” (Mitleton-Kelly 2003b:41). Therefore, “emergence is the process that creates new order together with self-organisation” (Mitleton-Kelly 2003b:40).

Mitleton-Kelly (2003b) summarises complexity theory into five main areas from which ten principles of complex evolving systems were developed for the application of complexity theory to organisations. This research will use Mitleton-Kelly’s framework on complexity because it offers a way of

applying complexity theory to organisations. The way in which the principles will be used in this research is discussed in section 3.5.3 following.

3.3 Case study methodology

Case study research is a qualitative approach to research that aims to provide an in-depth description, interpretation and understanding of an event or series of events that occur in an organisation over a period of time (Gordon 2007). A case study approach to the research was chosen as this research poses a “why?” question in which an in-depth analysis of the social phenomenon is required in order to gain a meaningful understanding of the real life event (Yin 2009).

According to Yin (2009), in case study research the semi-structured interview is one of the most important sources of information, as they focus directly on the related case study topic, and can provide perceived causal inferences and explanations. Furthermore, this type of interview allows the researcher to guide the conversations using predetermined questions or themes, while allowing enough flexibility for the interviewee to propose their own insights or understandings about the topics raised in the interview (Wahyuni 2012).

In this project a case study methodology is used in order to examine and understand the individual mental models of the different stakeholders involved in the collaborative process of WIL. Each of the four stakeholder groups represents a single case that is then compared and analysed in reference to understanding WIL programs in undergraduate Human Resource Management (HRM) programs. This is discussed further in section 3.5.1 following.

3.4 Reliability and validity

In general, reliability is concerned with whether the results of the study are replicable, while validity is concerned with the veracity of the conclusions generated or whether the data measures what the research intended to measure (Bryman & Bell 2007; Neuman 2006; Silverman 2006; Walter 2010). Several theorists (Bryman 2004; Bryman 2012; Guba & Lincoln 1989, 1994; Wahyuni 2012) have debated, that qualitative research operates in a completely different domain, seeking to produce knowledge from interpretations and understandings on organisational processes, and as such reliability and validity should not be viewed separately. Therefore terms such as credibility, transferability, dependability and confirmability are used to assess the reliability and validity of qualitative research (Bryman 2004; Golafshani 2003; O'Leary 2010; Roberts & Priest 2006). The way in which these terms apply to this research will now be discussed.

3.4.1 Credibility

According to Wahyuni (2012) credibility parallels internal validity and establishes how accurately the data reflects the social phenomenon being studied. This research establishes credibility by making available the transcript of the semi-structured interview to the participant for confirmation that the researcher has understood correctly that particular person's mental model. This allows for inaccuracies to be identified and addressed. The relaxed, informal and open ended structure of an in-depth interview allowed the participants to feel comfortable in their surroundings. The informal structure of the in-depth interview increases the likeliness of the information given to be a representation of the participants' mental model about the topic. In addition to this, Richards and Morse (2013) have stated that validity is increased through keeping track of coding decisions by using memos to track changes in the development of coding categories and through

continually recoding and relabelling the nodes as often as required. This research does this through NVivo 10 ® (section 3.5.3).

3.4.2 Transferability

Transferability refers to the level of applicability of the research to other situations and settings (Wahyuni 2012). Transferability can be enhanced through ensuring the research context and assumptions that were central to the research are provided (Trochim & Donnelly 2008). This research achieves transferability through “providing a detailed description of the research setting and methods, so that applicability can be determined by those reading the research account” (O’Leary 2010:39).

3.4.3 Dependability

Dependability parallels reliability and in qualitative research emphasises the need for the researcher to consider the ever changing environment in which the research is conducted (Trochim & Donnelly 2008). This research establishes dependability through ensuring that complete records of all phases of the research are kept, including any changes that were made throughout the research. Specifically, the research methods have been “designed and developed in ways that are consistent, logical, systematic, well documented and designed to account for research subjectives” (O’Leary 2010:37). Using NVivo 10 ® has assisted in the systematic documentation of the data analysis (3.5.3). Dependability in this research is increased also by the recognition and acknowledgement of the paradigm guiding the research and the researcher. This forthcoming design of the research means that research subjectivities can be accounted for.

3.4.4 Confirmability

Confirmability concerns the degree to which the results of the research could be corroborated by others (Brown & Rodgers 2002; Trochim & Donnelly

2008). Confirmability considers the objectivity of the research and is enhanced through the rechecking of data throughout the study and ensuring any potential for biases are addressed (Trochim & Donnelly 2008) . Confirmability in this research is ensured through the establishment of a chain of evidence. Maintaining a chain of evidence is discussed by Yin (2009) to be a way of increasing the reliability of the information in a case study. Maintaining a chain of evidence is achieved through keeping detailed records of all of the original evidence so much so that an external observer would be able to trace the steps from initial research questions to the case study conclusions. Again, using the NVivo 10 ® coding software, and through extensive documentation of the processes followed throughout this research, the reliability of the information in the research is achieved, thus another person could confirm the findings of the research.

3.4.5 Ethical considerations

In research with human participants several ethical considerations need to be addressed. These ethical considerations include confidentiality and anonymity of respondents, and guaranteeing there is no risk of injury or harm to participants. In addition, the participants must be fully informed about the research including its purpose, what is involved in participating, the proposed way of disseminating the results, noting any conflict of interest and the assurance that participation is voluntary (Broom 2006). The way in which these ethical considerations were managed is discussed below.

Firstly, the participants were informed of the research via an information letter (Appendix A), which provided details about the research including its purpose, proposed future publications and what was involved in participating in the research including that the interviews were to be recorded for accuracy. All identifying information about the participants was stored only until the transcripts had been confirmed for accuracy by the

participant. Secondly, a letter of consent (Appendix B) was sent, which reiterated that their participation in the research is confidential and should they choose to withdraw from the research, they can do so freely at any time without consequence. In addition to these processes, before the interview commenced the participants were reminded that there are no right or wrong answers to the questions being asked, that it is their opinions, ideas, feelings and or experiences about the topic that was being studied. The protection of participants was ensured through ethical approval by the Human Research Ethics Committee (HREC). This ethical approval was obtained prior to data collection. The approval number for this research is H9354. The following section describes the research methods used to obtain the data in this research.

3.5 Research methods

3.5.1 Sampling

The way in which participants for this research were targeted, selected and studied can be divided into three phases. Each phase discussed below describes the process undertaken to finalise the participants and case studies under examination for this research.

3.5.1.1 Phase one

The research question specifically and purposefully proposes to investigate people who are involved in the process of providing or being a participant in WIL programs in the undergraduate HRM discipline. Therefore, finding participants for this research began through a preliminary review of curricula on Australian university websites of undergraduate HRM programs. This aided in identifying four key stakeholder groups (academics, careers advisor, professionals and students), and ten Australian universities

relevant to understanding the design, and development of WIL programs in HRM undergraduate degrees.

The universities that agreed to participate in the research were chosen not only because they agreed to participate but because they each have some form of WIL program in their HRM related courses which is interesting for comparative reasons. Universities from around Australia were chosen as there is much to be learnt from the range of models universities within Australia are using to engage students, and the implications these programs are having on the graduates and business education programs.

It was intended that the Ten Australian Universities be used as case studies in this research. This case study range was selected because this range remained within the constraints of time and funding of postgraduate research. According to Eisenhardt (1989) this range works well and as it has been set above four, the possibility of being unable to generate theory is avoided. Furthermore, it was proposed that multiple cases be used as opposed to a single case study because it is recognised that evidence from multiple cases is often considered more compelling and therefore the research more robust (Yin 2009).

Purposive sampling was then used to identify between 1-2 participants from each stakeholder group within the related WIL experience from within the ten relevant Australian universities. Purposive sampling is a form of non-random sampling that involves the selection of a sample with a particular purpose in mind (O'Leary 2010). This meant that there would be a minimum of twenty participants to interview. Through using university websites, participants were targeted as a result of their significant characteristics making them part of a particular stakeholder group. The four stakeholder groups and the selection criteria are presented in Table 3-1.

3.5.1.2 Phase two

As the research was conducted it became difficult to try and match people within each WIL experience as many people did not respond. To overcome this, industry references were followed up on, as most of the already active participants were happy to refer someone else suitable for the research. This meant that snowball sampling was now considered as an option for finding participants. Snowball sampling is where participants already involved in the study recommend or refer other people to become participants in the study (Richards & Morse 2013). Both purposive and snowball sampling were now being utilised in this research. Purposive in that the participants needed to belong to one of the identified stakeholder groups relevant to the study, and snowball because potential participants were also contacted through references from current participants.

Limited access to participants not only influenced options for sampling, it also influenced the way in which cases were selected in this research. As it became difficult to match WIL experiences with relevant stakeholders in relevant universities, representing the each of the 10 universities as a single case was no longer a viable option for the research. As a result it was decided that each of the four stakeholder groups be represented as the cases for consideration in this research.

3.5.1.3 Phase three

A total of 38 individuals participated in this research. This number comprised of 12 academic, 8 careers advisors, 10 professionals and 8 student stakeholder participants. Participants were drawn from nine Australian universities as there is much to be learnt from the range of models Australian universities are using to engage students, and the implications these programs are having on the graduates and business education programs. Potential participants were given an information letter (Appendix A),

consent form (Appendix B), and invited to participate in the research. This meant that the individuals were given a choice to participate in the research and withdraw from the project at any time. Table 3-1 below defines the selection criteria and number of participants involved in this research from each stakeholder group.

Table 3-1 Selection criteria and number of participants

Title	Selection criteria	Number of participants
Academic	Be co-ordinating, lecturing or tutoring in HRM relevant units which include the assessment of students WIL experiences.	12 Participants
Careers advisor	Participants in this group are involved in the program coordination and managing of the relationships between students, professionals, employers and the university.	8 Participants
Professional	Be involved in the process and management of undergraduate students undertaking Work-integrated Learning placements while studying a HRM related degree.	10 Participants
Student	Be enrolled at university in a HRM related undergraduate degree and have experienced a form of WIL.	8 Participants

3.5.2 Semi-structured interviews

The primary method of data collection used in this research was a semi-structured interview. This type of interview allows for a set of guiding questions (Appendix C) to be used as prompts to increase the continuity of the conversations, thus helping narratives to develop. The mental model definition offered in section 3.2.2 was used to inform the structure of the interview questions, and as the narratives unfolded the participants' individual mental model was revealed. Originally, it was planned to conduct all of the interviews via Skype, however some participants requested phone or face to face interviews. All interviews were recorded and transcribed for accuracy.

3.5.3 Analysis of the data: applying the principles

This research uses NVivo 10 ® for categorising the themes and general findings of the research, and the paradigm and principles of complexity theory developed by Mitleton-Kelly (2003b) for analysis.

NVivo 10 ® is a Computer Assisted Qualitative Data Analysis System (CAQDAS) used by researchers to aid in the coding of data. A CAQDAS offers the researcher the possibility of a more efficient way of storing, coding and managing data. This is done through the use of nodes. Coding your data therefore means to gather all the references to a specific theme or topic and store them at a node (Daws 2012). The most significant benefit of using a CAQDAS like NVivo 10 ® is that it allows for faster coding of data, and the generation of more nodes (Marshall 2002). This was significantly beneficial for use in this research because a substantial number of interviews were conducted.

Mitleton-Kelly's (2003b) ten principles of complex evolving systems have previously been described: they will now be discussed in terms of how they have been applied, or used, in this research.

3.5.3.1 Principle one: connectivity and interdependence

Connectivity in this research is explored through investigating the connectedness within the stakeholders' mental models about WIL. This included critically analysing the connectivity within the individual stakeholders' mental models about what constitutes WIL, employability and an employable graduate, as well as their mental models about the role of the university. Secondly, connectivity is explored through considering the stakeholder group relationships or relatedness between the human social systems: the academics, careers advisors, students and professionals. Interdependence is linked to the degree of connectivity between individuals. This research will identify the level of interdependence exhibited through the mental models about work integrated learning between stakeholder groups and consider the possible implications.

Parts of the participant interviews coded at this principle through NVivo 10[®] included the nodes: WIL defined, WIL models, graduate attributes, employability defined, interconnectedness, miscommunication, WIL employability link, current development process of WIL, role of WIL in universities. Understanding connectivity between stakeholders through these nodes helped to clarify why there is a range of WIL programs offered in the teaching of HRM undergraduates. This is because the mental models about the elements of designing and developing these programs (such as the nodes above) can influence how an individual and or stakeholder group acts (the end result- WIL program).

3.5.3.2 Principle two: co-evolution

In this research the actions, reactions and the intricate web of relationships between the individuals and within the stakeholder groups were studied closely to understand and determine the influence of each entity on one another. In other words, the adaptive moves taken by one stakeholder group in this research will alter or influence the fitness landscape of the other stakeholder groups. This research will further identify the current emphasis of co-evolution: co-evolution with or adaption to.

To assess the co-evolving nature of the system the nodes used in assessing the connectivity and interdependence (principle one) of the system were considered. This included WIL defined, WIL models, graduate attributes, employability defined, interconnectedness, miscommunication, WIL employability link, current development process of WIL, role of WIL in universities. Other nodes included in understanding the co-evolving nature of the system included: Drivers of WIL, challenges implementing, resource intensive, self- organisation and bureaucracy.

3.5.3.3 Principle three: far-from -equilibrium

This research assessed whether the CES is in a state far-from-equilibrium. In other words this research aimed to address whether the CES of WIL has reached a critical point of change where when exchanging information with its environment new ways of organising and structuring has occurred. The nodes used in addressing this concept included: role of WIL, role of the university, benefits of WIL, drivers of WIL, self-organisation, strong university-TAFE link.

3.5.3.4 Principle four: historicity and time

In application of this complexity principle to this research, the emergent behaviour of the stakeholder groups, in particular the academic stakeholders' mental models have been considered in the light of historicity and time. The nodes used in addressing historicity and time included: Role of the university, Weak university-TAFE link, Strong university-TAFE link, bureaucracy, competitiveness in universities, analogies, higher education support amendment act.

3.5.3.5 Principle five: space of possibilities

This research established what strategies for sustainability had been considered in the CES space of possibilities. Using the 'adjacent possible' principle, reflection on the readily available resources for the development of WIL programs was carried out. The nodes considered in addressing the concept space of possibilities included: WIL models, recommendations, recommendations for WIL, self-organisation.

3.5.3.6 Principle six: feedback

The process of feedback was analysed in this thesis. Feedback processes underlie the transformation of change and are closely linked with the far-from-equilibrium principle and the degree of connectivity in the system. The level of positive and negative feedback currently present in the system as well as the level of positive feedback needed to destabilise the system is discussed. The nodes used to address the concept of feedback included: nature of HRM, role of the university, Weak university-TAFE link, Strong university-TAFE link, and bureaucracy, competitiveness in universities, analogies, higher education support amendment act, graduate attributes, mental models about academics, and mental models about employers.

3.5.3.7 Principle seven: path dependence

This principle is based upon the notion that negative feedback implies a single equilibrium point, and positive feedback makes for many possible equilibrium points. The data is considered in terms of what is enabling future developments of WIL related activities. The nodes used to address path dependence were: Role of WIL in universities, Role of the university and the nature of HRM.

3.5.3.8 Principle eight, nine, and ten: Self- organisation, emergence and the creation of new order

The self-organising and emergent properties evident in this research are highlighted. The data is analysed for evidence of the stakeholders' self - organising both within and between their groups. As the stakeholder participants self-organised the emergence of themes from their mental models are identified. Self-organisation along with emergence has the capacity to create new order. As such whether new order was created has been determined through considering the self-organising, emergent properties of the system. The nodes considered for the application of these principles included: employability defined, bureaucracy, resource intensive, recommendations for WIL, student perception of the value of experience, benefits to employers.

In summary, section 3.5 has detailed the research methods used to obtain the data. Snowball and purposive sampling were used to target potential participants from each of the four stakeholder groups. A total of 38 Semi-structured interviews were conducted. NVivo 10 ® software was used for its fast and efficient application in categorising the findings into themes. Lastly, Mittleton-Kelly's (2003b) principles of complexity have been detailed for their application to the data. The following chapter presents the findings of the research.

Chapter 4– Presentation of findings

4.1 Introduction

This chapter explores the themes relevant to understanding the development of Work-Integrated Learning (WIL) programs in undergraduate HRM degrees. The research questions addressed are:

1. Why is there a range of Work-Integrated Learning programs offered in the teaching of Human Resource Management graduates?
2. What is the impact of a range of WIL programs offered in the teaching and employability of HRM undergraduates?

To account for the diversity of perspectives influencing the design of WIL programs in HRM, qualitative interviews were conducted with relevant stakeholders. As indicated in the methodology chapter, 38 individuals were interviewed, consisting of 12 academics, 8 career advisors, 10 professionals and 8 students. These participants were drawn from nine Australian universities and were selected for their involvement in coordinating, managing or participating in WIL programs in the discipline of HRM (as discussed in 3.5.1.3). The mental model definition offered in 3.2.2 was used to inform the semi structured interviews, and as the narratives developed the stakeholder mental models were revealed. The academics' quotes will be labelled as A1-A12, the careers advisors C1-C8, the professionals P1-P10 and the students S1-S8.

The chapter is structured first by theme and then by stakeholder group so that similarities and comparisons can be made between individuals and across stakeholder groups. Significantly, at the end of each theme a synthesis of the stakeholders' mental models is provided. The chapter begins by describing definitions of WIL followed by the participants' mental models

about graduate attributes. Next the participant's mental models about employability are identified followed by their mental models about the motivation or drivers of WIL. The role of WIL, challenges faced by participants implementing WIL and the nature of HRM is then deliberated. Lastly, the participant's recommendations for WIL implementation in HRM are offered. The chapter will then conclude by outlining the main findings of the research.

4.2 Conceptualisations of WIL programs

The literature review established that there are many ways of viewing WIL. For the purpose of this research, a WIL program is an umbrella term for a range of approaches within the curriculum (Patrick et al. 2008:iv). The stakeholders' mental models about WIL programs are explored following in order to examine the applicability of Patrick and colleagues (2008) definition to WIL programs in HRM. It was further identified in section 2.3 and reiterated in 2.8 and 2.9 that there is a lack of research into WIL in undergraduate HRM degrees. In addition, Bennett's (2009) research revealed that when a specific definition and typology of WIL does not exist within a discipline confusion among the faculty arises. Therefore, through identifying the individual mental models of the participants of this research about WIL, their definitions of WIL programs in the context of HRM were revealed. Furthermore, these mental models describing WIL can provide insight into what activities at university are considered by the stakeholders' to be a WIL program in undergraduate human resource management degrees.

4.2.1 Academics

More than half (9 out of 12) of all academics mental models reveal that WIL programs in HRM are a broad approach to learning and teaching. Their statements emphasise that WIL is a range of initiatives that use the workplace as the context.

I would see it as creating an environment where abstract thinking or theory can be put into practice during the learning phase or during the time that the person is learning the theory.¹

I think it is a very broad term, they often use it as an umbrella term and I think it does cover a lot of different ways of integrating the workplace into the curriculum...²

I am just looking for ways in which students can get work experience or some sense of what happens in the real world whilst they are here at uni [sic] so that they are on a better career path when they graduate³

On the other hand, academics 4 and 6 express that a WIL programs are a work placement where the student gets the opportunity to gain discipline relevant work experience while studying, referred hereafter as a curriculum-based placement. For example, academic 4 notes:

It's when you start to integrate some of the theoretical concepts and constructs that you've developed at university, and you get an opportunity to work in an industry related area and you can start to integrate some of the theory with the practice of whatever profession you're studying in.⁴

¹ Interview with A8

² Interview with A12

³ Interview with A11

⁴ Interview with A4

4.2.2 Careers advisors

Similar to academics 4 and 6, most career advisors (7 out of 8) define WIL programs as curriculum- based placements.

*Work-Integrated Learning is really when there is some work experience components as part of the course... to call it WIL it really needs to be integrated within the course.*⁵

*Work-Integrated Learning for me is really about getting that real world work experience while studying at university.*⁶

4.2.3 Professionals

All of the professional participants in this research define WIL programs as curriculum- based placements.

*I would think just off the top of my head that it would be a marriage of the theoretical framework that you learn as a student, married with operation aligning it, putting it into place in the workforce, a work placement.*⁷

*Well I guess it is about having a real world experience in the workplace while you are doing your university degree.*⁸

However, half of all professionals (5 out of 10) also made reference to WIL programs being more than a placement; rather that WIL programs can be quite broad and include different activities.

I suppose it's like an aggregation. You can have case studies on one level, and then you could have group projects, where you have limited interactions on

⁵ Interview with C3

⁶ Interview with C6

⁷ Interview with P4

⁸ Interview with P7

*another level, and another level where you're actually working with your organisation.*⁹

This broad understanding connects with the academic participants who also made reference to WIL programs being a broad approach to learning and teaching by encompassing a broad range of activities.

4.2.4 Students

Most students (6 out of 8) define WIL programs as curriculum-based placements. The view that a WIL work placement must be curriculum based is strongly expressed by student 4. Although student 4 views WIL as a curriculum-based placement, they have expressed that in reality curriculum-based placements are not always available to students. As such, student 4 participated in a work experience external to the curriculum, an internship. As the internship did not integrate theory with what she was practicing in the workplace, student 4 perceives her internship to not be a WIL program.

*Well my understanding of Work-Integrated Learning which to be honest I don't think my internships were... is where they match work experience with what you are learning so that they're kind of interrelated so that what you are learning at uni [sic], which is quiet theoretical I would say, umm you get the opportunity to put those sorts of things into practice in your work experience.*¹⁰

On further analysis of the student participants' experiences, only 3 out of 8 students had participated in a curriculum-based placement. This means that although most students perceived WIL programs to be a curriculum-based placement, this was not always what happened in reality.

⁹ Interview with P1

¹⁰ Interview with S4

In summary, stakeholders' perceive WIL programs to be either a broad approach to learning and teaching by encompassing a broad range of activities, or a curriculum-based placement. Most academics view WIL programs as encompassing a broad range of teaching and learning activities that use the workplace as the context. On the other hand, the majority of careers advisors, professional and student stakeholder groups all share the mental model that WIL programs are curriculum-based placements. This does not mean that the academic participants view curriculum-based placements to not be a WIL program, just that WIL programs are a broad range of activities for teaching and learning. It also does not suggest that the careers advisors, professional and student stakeholders' view WIL programs to be solely curriculum-based placements as participants from each group also stated that WIL programs can include a range of activities. In general, it means that WIL programs in HRM are perceived by the stakeholder of this research to be either 1 subject (a curriculum-based placement), or many subjects (broad range of activities which can also include a curriculum-based placement).

As the stakeholders' mental models of a WIL program include both curriculum-based placements and a range of activities, it is argued that the stakeholders' mental models conceptualising WIL align with the definition of a WIL program by Patrick et al. (2008). This definition provides for a range of approaches and strategies that integrate theory with the practice of work to be called WIL programs.

Although the participants mental models about WIL align with Patrick et al. (2008) definition of WIL, their understanding of the relationship between the individual elements within WIL better aligns with the classification offered by United Kingdom (UK) authors Knight and Yorke (2004). Knight and Yorke (2004) classify WIL in two ways, **work-related learning** and **work-**

based learning (embedded and external). A broad approach to learning and teaching is similar to Knight and Yorke's (2004) term work-related learning and the participants' definition of WIL as a curriculum- based placement is similar to Knight and Yorke's (2004) term work-based learning (embedded). The difference between the participants' mental models and Knight and Yorke's (2004) model is that the participants in defining WIL as work-based learning have specifically stated that for the placement to be defined as WIL it must be curriculum based. Knight and Yorke (2004) on the other hand, also include in their classification of work-based learning, external accredited placements.

Knight and Yorke (2004) establish in their model that work-based learning is a special subset of work-related learning and blending the two is imperative for student learning. The participants' mental models support this articulation of blending work-related learning and work-based learning. This is evident in that those participants that define WIL as a broad approach to learning and teaching include curriculum- based placements (work-based learning) as a subset of their definition. The participants below have referred to the need to blend both generic practices such as team work in the university with learning through a work-based placement.

Trying to give the student as much exposure to the real world, and participate in different types of internships, vacation programs, anything that puts them in a real work situation so that they can relate this area to practice and bring the practice back to the learning situation as well.¹¹

¹¹ Interview with P6

I think it is a bit of both, having an internship or experience and bringing the workplace into the classroom... I like the fact that you might do something in the workplace and take it back to uni [sic] and learn from it more there...¹²

Figure 4.1 below depicts the participants' definition and classification of WIL as it was expressed through their mental models. The text outside the figure relates the literature (Knight & Yorke 2004; Patrick et al. 2008) the participants' conceptualisation aligns with. The joining arrows in the figure represent the linkages and relationship of the classifications.

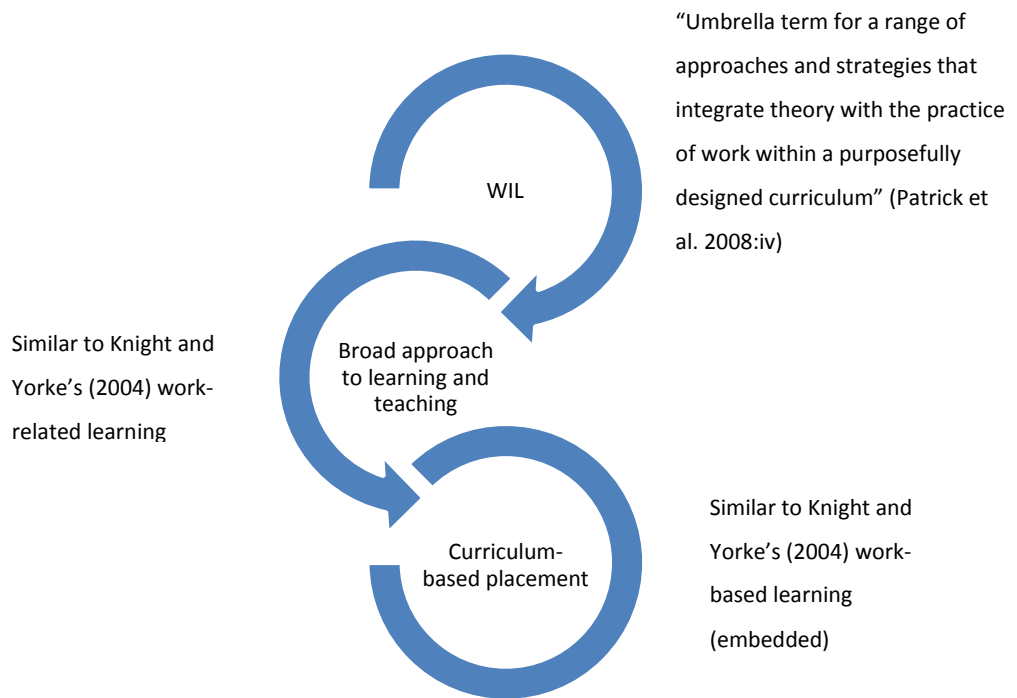


Figure 4.1 Participants definition and classification of WIL

¹² Interview with P2

The next section reviews the current operating WIL programs in HRM. These have been identified by the stakeholders' from the nine participating Australian universities.

4.2.5 WIL models in HRM

The section above has outlined how WIL programs are conceptualised by each of the stakeholder groups. It was found that the mental models of stakeholders' align with the definition used in this research developed by Patrick and colleagues (2008). According to stakeholders' mental models WIL programs in HRM are perceived to be either a broad approach to learning and teaching by encompassing a range of activities that use the workplace as the context, or a curriculum- based placement.

This section reports the way in which WIL programs have been incorporated into the HRM discipline within the nine participating Australian universities. The participants' have referred to 1 subject within the HRM discipline at their university of which they consider to be a WIL program. This suggests that although there is a range of WIL programs offered in the teaching of HRM undergraduates across universities, within each individual university there is only 1 identified subject in which the participants consider to be a WIL program. In the following table these subjects have been categorised by the context in which the student participates in the WIL program. As such, four models of WIL programs in HRM have emerged. Represented in table 4.1 below are four models of WIL being taught across the discipline of HRM.

Table 4-1 WIL models in undergraduate HRM

Model	Context	Brief description	HRM subjects that align with this model
Model 1	Workplace comes to the university	Organisation/s (any sector-private, NGO, public etc.) are brought to the university to provide and discuss current issues. The aim is for the student to develop solutions to discussed issues. Students may present solutions directly or indirectly to organisation/s. Students receive feedback.	2
Model 2	Students go into the workplace (curriculum- based placement)	Students complete a discipline relevant curriculum- based industry placement. Activities can include work experience, project based work, and research based work.	5
Model 3	Reflection on past workplace experiences	Students use their current employment to reflect on issues during class. Students reflect on the synthesis between workplace experiences and theory.	1
Model 4	Online simulation	In groups students complete online exercises at beginning of subject. After weeks of theory provided in the subject, students are asked to complete online simulation again. Students then reflect on their experiences	1

It is observed from table 4.1 that the common operating model of WIL in HRM within the participating universities is model 2, a curriculum- based placement. Although it has been identified that 5 out of 9 universities offer a curriculum- based placement as their WIL program offering in HRM, the participants also express that this model is less prevalent in HRM as compared to other disciplines. Half (19 out of 38) of all participants have indicated that there is a lack of or less prevalent presence of HRM placements being offered in both the context of the curriculum and external to the curriculum. It is significant to note that this was not a question asked of the participants; rather it was something the participants have brought up on their own. Therefore, this suggests that it is a concern of the stakeholders' of this research, as it was demanding enough for them to discuss the issue without being prompted to consider the subject.

4.2.6 Synthesis

The majority of academics conceptualise WIL programs as a broad approach to learning and teaching that encompasses a range of activities that consider the workplace as the context. The other three stakeholder groups, the careers advisors, professionals and students view WIL programs to be curriculum-based placements. A comparison of the currently operating WIL programs in HRM through analysing the mental models of the stakeholders has revealed that there are four models of WIL in HRM (refer to table 4.2). Of the four WIL models identified, the model commonly being implemented in the teaching of undergraduate HRM students is a curriculum-based placement. This same model, a curriculum-based placement was also identified by the participants as being less prevalent in the teaching of HRM as compared to other disciplines.

4.3 Graduate attributes

As stated in section 2.4 graduate attributes are the “skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable to a range of contexts” Barrie (2004:262). In Australia graduate attributes have come to be accepted as an orienting statement of educational outcomes used to inform curriculum design and the provision of learning experiences at university (Barrie, Hughes & Smith 2009). However, research has indicated that defining and measuring graduate attributes is difficult and contestable, and because of their ambiguous nature they are often open to misinterpretation (Barrie 2006; Green, Hammer & Star 2009). It is for this reason that this research sought to identify the individual mental models of stakeholders about graduate attributes so as to understand their role in the development of WIL programs in undergraduate HRM.

4.3.1 Academics

Academic mental models of graduate attributes were significantly disparate. Each participant defined graduate attributes as something different to the other academic participant, with mental models overlapping only occasionally. While some academics made recommendations for the structure of graduate attributes (see section 4.9), other academics described graduate attributes as generic (A8), common sense (A1) and soft skills that are transferrable (A4, A5). As a result of this generic view it was suggested that universities merely provide the opportunity for the development of the skills, acquiring or developing them is not a guarantee (A8, A12).

I think the university can only provide experiences which can potentially foster those capabilities but I think the idea that people can be rubber stamped

on the way out and said that their critical, creative and ethical and able to do their job is not possible.¹³

Academic 7 further supports this by expressing their concern for the measurement of graduate attributes.

My judgment is that universities in the end will throw away graduate attributes because they are too generic. One of our graduate attributes is to enhance life-long learning. Well where is the evidence that you have enhanced life-long learning? How can you prove it? They are not something that you can say, "Look, I've got 100 students that have done this therefore that ticks off." It's almost impossible to actually test some of those graduate attributes.¹⁴

This is an exemplar of where the higher education sector is at. Universities are being encouraged to review their graduate attributes statements to ensure that they are measurable (Donleavy 2012).

Several academics have also revealed their perceptions of the most important attributes for students to have developed throughout their university course in preparation for the workplace. This includes the ability to communicate both verbally and in writing (A4), the ability to deal with ambiguity, and have both critical thinking and reflection skills (A5, A8). Additionally, some academics specifically mention attributes that require further development or at least consideration in the development of HRM subjects.

I think there is a new attribute to be coming out. Which is a good company to work for? And this is making a decision. I think this is the new attribute that we need to talk to students about and I think that with work integrated

¹³ Interview with A12

¹⁴ Interview with A7

learning we can start to look at organisations themselves and say do I want to work with this firm?'.¹⁵

The one thing that anyone looks at for example the graduate attributes that my course looks at is numeracy and the fact that in HR we struggle. We almost have no numeracy. That's why the business component of it is critical.¹⁶

When explored further academic 5 expresses another dimension to the importance of students understanding graduate attributes. Academic 5 states that when a student participates in a placement a student is not only mentored in developing their own attributes, they are being made aware and learning of their future role in the process of WIL where they may be in a position to develop positive attributes in others.

I think they [students] really need to understand them. I think they need to get the students to join the dot... there is two ways of looking at this, a lot of our students go out in their time and exemplify the graduate attributes in the job, but also on the job they have to see the flip side as well to understand they are going to be in a position when they graduate from university, where they are inducing those types of attributes in others.... It's not all about them. It's about some of the staff they have to supervise and deal with and that particularly fits in with your area of human resources.¹⁷

Furthermore, academic 5 suggests WIL be used as an avenue for the development of attributes for students.

The hard skills aren't the problem. They can be taught. It's those other skills that need to be promoted...the critical thinking skills, the people skills, the

¹⁵ Interview with A5

¹⁶ Interview with A1

¹⁷ Interview with A5

*team leader skills and what have you... I think that needs to be worked on with WIL as a preparation.*¹⁸

Academic 5's statements support recent research about career development learning and WIL (McIlveen et al. 2008). It was suggested that WIL is a tool for the development of graduate attributes and that "Australian universities have taken the development of graduate attributes within students as a vehicle to address graduate employability" (McIlveen et al. 2008:21). Academic 5 supports the use of WIL as a vehicle for the development of graduate attributes in order to address graduate employability.

4.3.2 Career advisors

Similar to academics, career advisors mental models about graduate attributes typically diverge. Career advisors have stated that graduate attributes are useful in developing employable graduates (C5, C7), lead to social contribution and or citizenship (C7), and are like a mission statement for employers (C1, C2). Three career advisors have referenced that graduate attributes are viewed differently depending on whether you are an academic or employer. This may suggest that graduate attributes are so general in nature that they are often open to misinterpretation.

*Graduate attributes are part of the university. Employability skills are for organisations. There's no reason for us [universities] to have just one generic thing. I think it is fine to have graduate attributes and employability skills.*¹⁹

At least they would have to be generic but the faculties will give their own definition so that's when the discipline specifics come in because like for example in accounting creativity would be defined very differently to

¹⁸ Interview with A5

¹⁹ Interview with C3

*creativity in arts. Yes there are discipline interpretations depending on the academic too.*²⁰

*I think it's an attempt to articulate the skills a student will exit a course with, it's in a way that employers will be able to latch on and sort of say its ok, it's not just theoretical.*²¹

Careers advisors 1 and 2 have recommended that graduate attributes be contextualized so that the relevance of them can be seen by each stakeholder.

*I think they [graduate attributes] are a good thing but I think they need to be contextualized and I think that they are probably not standard across all degrees and industries and I think there needs to be more work in to making them relevant to a particular degree.*²²

4.3.3 Professionals

Professional participants define graduate attributes as being soft skills such as communication skills, team work and organizational skills, being flexible, courteous, respectful, adaptive and eager to learn (P4, P5, and P6). Additionally, professionals 7 and 9 below argue that graduate attributes are generic characteristics of a person that can be developed through education.

*...the attributes that I require of an employee are all fairly genetic [sic]... So the attributes that I think make a person more employable are not uniquely academic in nature, so a degree tells me one thing, it tells me that you are clever enough to know how to study hard enough to regurgitate information.*²³

²⁰ Interview with C8

²¹ Interview with C1

²² Interview with C1

²³ Interview with P7

I know that I would not pay attention to graduate attributes if someone said to me these are my graduate attributes because I attended university and got them. I think they are more within the person themselves, and everyone is going to be really different.²⁴

It was reported by half of all (5 out of 10) professionals that graduate attributes should be general for reasons such as increased flexibility and transferability of soft skills from job to job.

I think that if people have got strong generic skill sets across those sorts of things, organisational skills, and communication skills and so on if they're strong. You can always learn knowledge. You can pick up in an area and you can gain knowledge. If you've got a strong set of generic skill sets then you're more employable I think. I'm looking for people who are flexible and adaptable. I think if you made it unique to a discipline you narrow the focus and you actually may limit.²⁵

On the other hand professional 3 states that re-developing graduate attributes so that they are discipline specific "...gives a better idea, a more accurate picture" of what skills the graduate has. This view was reinforced by professional 6:

I think there is probably room for both general and discipline specific attributes so that the student can see the relevance of them if they are discipline specific and general for employers.²⁶

This quote supports careers participant 3's quote below in that it suggests that not only do students and employers have different mental models, but

²⁴ Interview with P9

²⁵ Interview with P4

²⁶ Interview with P6

for each stakeholder group to see the relevance of graduate attributes they must be discipline specific.

Graduate attributes are part of the university. Employability skills are for organisations. There's no reason for us to have just one generic thing. I think it is fine to have graduate attributes and employability skills²⁷

4.3.4 Students

Each of the students expressed a frustration or lack of understanding with graduate attributes. In general over half (6 out of 8) of the students stated that they had not heard of graduate attributes or did not know what they consisted of at their university. As a result of this view it was further stated by another student that graduate attributes are deficient in making someone more employable, while another student expressed:

...I do not have anything to do with them.²⁸

Furthermore, the two students who had heard of graduate attributes stated that they should be discipline specific so that others may see the relevance of them. This indicates that those students who see the relevance of graduate attributes understand that most other students do not.

Other significant comments were that the assessment of graduate attributes are not fair, as those students who complete their degree through relying on others such as in group work, will still be measured as having these attributes (S1) and that the attributes are vague and dependent on what you put in (S4,S8).

²⁷ Interview with C3

²⁸ Interview with S7

Consequentially, this lack of understanding exhibited by the students naturally lead to several recommendations for improving the way graduate attributes are viewed, developed, and integrated. Students 1 and 4 suggest:

I think they should have them but make them more realistic.²⁹

...it [graduate attributes] needs to be more than just a couple of paragraphs in the learning guide. I think they need to change the way they are being developed, in every degree and in every job and obviously working as recruitment assistant taught me this. You are looking for the same things in every student, you want them to be able to write and communicate well. You need to be organised in every job you do but just saying those things and not integrating them into everything you do throughout university renders them useless.³⁰

4.3.5 Synthesis

To sum up, academics and career advisors mental models diverge within their own stakeholder groups. Academic participants were able to identify the attributes which they considered to be important and those that need developing within HRM degrees. Some careers participants suggested that graduate attributes are too general and as such are open to misinterpretation. In contrast to both, professionals define graduate attributes as soft skills, while students lacked an understanding of graduate attributes altogether.

Ultimately, all stakeholder groups when compared do not exhibit a similar mental model about graduate attributes. There is a general lack of understanding of the role and purpose of graduate attributes. Despite this, an underlying theme emerged from the discussions about graduate attributes. All stakeholder groups have suggested in one way or another that

²⁹ Interview with S1

³⁰ Interview with S4

graduate attributes need improving or re-developing. Academic participants state that the way graduate attributes are viewed needs changing, because they currently are hard to measure. They further recommend implementing WIL programs into HRM degrees so that students understanding of the attributes will increase through practical application of graduate attributes and the fostering of these attributes in colleagues. Careers participants recommend contextualising the graduate attributes so that they become relevant to specific degrees. Professional participants suggest developing both general and discipline specific attributes at university, while students recommend that graduate attributes be made more realistic and relevant to their studies by integrating them into everything that is taught at university.

All students will have attributes when they graduate from university, whether they have been developed by the university courses or not. Universities are specifying the attributes their courses provide the development of, thus what their students should graduate with. Despite this, the participants of this research state that currently the graduate attributes listed by universities are too general and as such are ambiguous. Therefore they suggest that making them discipline specific may provide clarity. The lack of understanding of graduate attributes exhibited by all student stakeholders' is exemplary of this ambiguity. Additionally, the measurement or assessment of the graduate attributes was a concern for students, academics and professionals. Can graduate attributes be assured and can WIL assist in the development and measurement of graduate attributes.

4.4 Employability

Various literatures argues that a significant benefit of WIL in terms of curriculum- based placements, is the capacity for the experience to increase a student's employability through the development of graduate attributes (Bridgstock 2009; Cranmer 2006; Freudenberg, Brimble & Vyvyan 2010;

McLennan & Keating 2008; Patrick et al. 2008; Smith et al. 2009). Clarke (2008) suggests that employability deserves further exploration in terms of what it means to be employable and the link between theory and practice. Moreover, Speight, Lackovic and Cooker (2013) have stated that for the curriculum to progress there needs to be open debate on the meaning of employability, while Jackson (2013a) states that research into stakeholders' perceptions of employability other than employers is less common. This research has therefore sought to understand the stakeholder mental models about employability and the proposed link between WIL and employability in order to understand further why there is a range of activities. Firstly the participants were asked to discuss their understanding of employability. Secondly, they were asked to explain whether or not they could see a strong link between WIL and increased employability for graduates. It is significant to note here that rather than defining employability, the responses from the participants predominantly describe what characterises an employable person.

4.4.1 Academics

Half of all (6 out of 12) academic participants described an employable person as someone with soft skills. The specific soft skills cited by participants included a positive attitude (A1, A11), good communication and networking skills (A11, A12), interpersonal and problem solving skills (A5) being honest and caring (A3), and having reflection skills (A6).

It's a soft skill.... I think if you are employable you are work ready and by work ready I mean that you have some labour mobility, you can access work in different locations.³¹

³¹ Interview with A1

On the other hand, academics 7 and 8 define employability rather than characteristics of an employable person. They define employability as connecting theory with practice through learning in the workplace. By stating that employability is about connecting theory with practice through learning in the workplace they are reinforcing that a strong link exists between employability and WIL.

4.4.2 Career advisors

Similar to academics, career participants characterise employability as an individual with specific soft skills. The most dominant (5 out of 8) skills cited by participants were good communication skills and team work skills. Other skills cited by the participants included the ability to read and understand the labour market (C7), the skills to obtain and maintain work and transferrable skills such as negotiation, interpersonal skills, problem solving skills and leadership skills (C7).

4.4.3 Professionals

Professionals exhibited similar mental models when asked to define employability. Half of all professional participants (5 out of 10) defined employability as the property of someone with the right attitude and soft skills.

*... Often we will employ someone based on their attitude rather than their knowledge and experience...*³²

*Employability is a person's suitability for the position in terms of knowledge, skills and attitude.*³³

³² Interview with P1

³³ Interview with P4

Professionals 4 and 8 further explained their understanding of employability by making a point about an employable person having the right balance of attitude, skills and knowledge; specifically a balance of past work experience, cultural fit, qualifications and good marks. Professional 7 indicated that they had done some research on the topic of employability and found the term to be vague and that the ambiguity of the term compounded the issue of the measurement of employability.

4.4.4 Students

Student mental models about employability vary within their own stakeholder group. There are however some similarities with the professionals individual mental models about employability. Like the other stakeholder groups, students also describe the characteristics of an employable person rather than providing a definition of employability. Students describe an employable person as someone who is viewed as desirable to an employer (S1), the work readiness of the individual (S4) and having work experience (S6).

It's how desirable the person is when it comes to an employer.³⁴

Student 3 views employability as a person with determination and initiative to learn and further themselves in their job.

I think that employability is where the person might not necessarily have the skills that are needed for the job but they have the personality and the willingness to obtain the skills even if they don't have them yet.³⁵

³⁴ Interview with S1

³⁵ Interview with S3

Students 2 and 5 as well as student 8 express that employability is having a good attitude and being able to fit with the organisations culture and criteria of what they are seeking in an employee.

My understanding of it is just upon graduation where you fit as a candidate.³⁶

Just how employable you are I guess like... if you fit their criteria.³⁷

This is similar to the professionals (P4, P8) view that an employable person is someone with the right balance of attitude, past work experience and cultural fit with the organisation.

4.4.5 Synthesis

When defining employability, all groups describe characteristics belonging to an employable person, rather than defining employability generally. The academics, careers advisors and professionals have similarly described an employable person as someone with soft skills. However the students have varying and different mental models about employability including, someone with work experience, cultural fit and determination. This convergence of models was unpredicted for the careers, academics and professionals because their views of one another as mediated through their language, indicates that they do not think the other groups really understand them or that they have opposing views. For instance academic 5 stated:

I can sort of talk their [industry] language, whereas often there is a bit of a divide between the languages that educator's use and the terms that are generally used in industry.³⁸

³⁶ Interview with S5

³⁷ Interview with S8

³⁸ Interview with A5

And professional 4 states:

I suppose the agenda for the university and for the student is to finish the course and meet the required points or whatever...³⁹

This similarity of mental models about employability being someone with soft skills between the careers advisors, academics and professionals was also unpredicted because of their diverging mental models about graduate attributes. The literature indicates that there is positive link between acquiring graduate attributes and enhancing a student's employability. Therefore, it could be assumed that having different and or diverging mental models about graduate attributes, their understanding of employability would differ, however this was not the case. Based on this same understanding, it could be assumed that the student participants would not have an understanding of employability because they did not have an understanding of graduate attributes. Students however have described an employable person as someone with work experience, determination and cultural fit. Table 4.3 presents the relationship or lack of, between graduate attributes and employability per stakeholder group.

³⁹ Interview with P4

Table 4-2 Relationship between graduate attributes and employability

Stakeholder group	Graduate attributes	Employability
Academics	Generic characteristics Transferrable soft skills Ability to deal with ambiguity	Someone with soft skills
Careers advisors	Misinterpreted Too general	Someone with soft skills
Professionals	Soft skills	Someone with soft skills
Students	Had not heard of them Did not understand them	Varying and different mental models: <ul style="list-style-type: none"> • Desirability to employer • Preparedness • Someone with work experience • Willingness to learn skills

Through a comparison of the mental models across stakeholder groups, it was revealed that only 53% of the participants reported WIL as having a positive impact on a student's employability. It could be suggested that this has impacted on the range of WIL programs being offered in courses, as if only half of all the participants reported WIL as being beneficial to a student's employability, their reasons for developing WIL courses may be different. In addition, many may be unwilling to make the investment of time and resources. For an analysis of the results of the motivations or drivers of WIL see section 4.5 following.

4.5 Drivers of WIL

Throughout the interviews the participants revealed that they viewed the Australian higher education sector as competitive. It is through these discussions that the participant's mental models about what is driving the development of WIL in universities were revealed. For example academic 7 quotes:

They [universities] will compete with each other...Look what we do. We not only get you learning but we also give you some experiences in applying your learning. I think that the more universities will see themselves as having some advantage in that space the more likely they will see it having what you call a competitive advantage.⁴⁰

4.5.1 Academics

Academics expressed the greatest need to identify and discuss what they perceived to be driving WIL in university. Academic 2 made several references to what is driving WIL. This included Government influence on student places offered, parental influence over student choices, the global financial crisis, money including education costs, the disposition of generation Y, and the changing nature of the role of university.

If we want to get to the crux of the issue lifting the cap on uni [sic] places is why everyone's rushing towards Work-Integrated Learning. It's a strategy. Global financial crisis, young people and their parents are shaking in their boots, there's now a trend back to more conservative degree

⁴⁰ Interview with A7

selections...Therefore parents are evaluating this when they are guiding their children on their career choice.⁴¹

You have some parents come up to you and this happens, not often but it happens, and they say, "You know that HECS payment?" and you go "Yes", they go, "If he dies do we have to pay it?" That is their decision of whether they will send their child to uni [sic] or not.⁴²

Academics 6 and 7 also expressed that there are strong external forces influencing the increased development of WIL in higher education. This included the demand from students, and the implementation and influence of the employability skills framework on university funding:

I have had students say that my unit was one of the reasons why they chose to do the degree that we offer...⁴³

I think as we talked earlier, the expectations of universities are quite different now, umm and we are going to be assessed on the employability skills, I think that's how we are going to get funded in the future, why not do it.⁴⁴

An additional driver of WIL is stated by academics 4 and 5. They state that there are a lot of poorly skilled students graduating from university without the capacity to *hit the ground running*⁴⁵. Academic 4 quotes:

We [universities] have consultant committees and we have HR representatives who we talk to and a lot of this stems from discussions that we've had with them [Industry representatives] that they say we get these graduates and they weren't talking to us just about our university, they were

⁴¹ Interview with A2

⁴² Interview with A2

⁴³ Interview with A6

⁴⁴ Interview with A11

⁴⁵ Interview with A5

*talking about graduates in general and they were saying they can't do any of these things.*⁴⁶

4.5.2 Career advisors

Career advisors mental models (5 out of 8) contained a strong connection between industry needs, technological advancement and the development of WIL courses at university. Career advisor 5 cites:

*I think probably it is [increased demand for WIL] the demand of industry and technological advancements making us change the course design.*⁴⁷

On the other hand, careers advisor 4 has stated that the feedback they receive from their placements has indicated that students are driving WIL opportunities because they wish to confirm their degree and career choice.

*The student feedback says they want to know where their careers are going and that their course is actually leading somewhere.*⁴⁸

Careers advisor 7 supports this suggestion that students are driving the incidence of WIL opportunities, as he has stated that the more students get to put real world context into their learning, the more they understand the relevance of their studies to their chosen career. In addition to this, careers advisor 8 suggests that an individual's purposes for attending university are changing.

Higher education to me, and time is changing so this could change to, but its more about critical thinking or theoretical orientations, challenging the status quo, so probably that's why people are trying to shift back to the more practical side but with the new generation coming to university I do not

⁴⁶ Interview with A4

⁴⁷ Interview with C5

⁴⁸ Interview with C4

know if this is why they are coming to university. Some people come to a university purely because everyone goes, everyone from school goes to university and it would be very strange not to go to university it's just like the extension of high school now and it is the extension of their prolonged youth, it is a lifestyle choice in a way rather than a job focus⁴⁹

The participant above suggests that attending university is now considered an extension of high school, and the current generation of prospective students consider university a lifestyle choice.

4.5.3 Professionals

Professional participants have expressed several drivers of WIL including skills shortages (P3), recruitment strategy (P1, P2, P5), and a need to gain a new perspective from graduates who are up to date with the current knowledge in an area (P8, P9).

We realised there was an awful lot of value in having them [students] there. They really achieved a lot more than we thought they might. I'm getting a bit off the topic but it got to the point where those interns you could actually employ them now, going forward post university. I'd say certainly the skill shortage might have been the first prompter though.⁵⁰

...it's a good way for us to get to know the up and coming talent.⁵¹

Furthermore, other professional's state that participation in WIL placements gives companies an opportunity to have work done that otherwise would not have been completed. For example professional 5 states:

⁴⁹ Interview with C8

⁵⁰ Interview with P3

⁵¹ Interview with P5

Also we had some projects that were research projects that would have been very good for an intern to do but we didn't have the time to do them ourselves...⁵²

4.5.4 Students

Students have cited several benefits from participating in WIL opportunities. These benefits can be interpreted as what students believe is driving the development of WIL programs in university. Over half of all student participants (6 out of 8) state that work placements give you an advantage when applying for jobs after graduating from university.

Well for one it [work experience] made me heaps more competitive in the workforce so I have just finished my exams and I'm already in a permanent full time job which I highly doubt would have been nearly as possible...⁵³

On the other hand, student 3 suggests that it is not just about trying to find a job, that there are significant personal benefits gained from participating in a WIL placement.

I think just personally what you get out of it. Just knowing that you understand the concept and you can integrate your learning really. It's not just trying to find a job all the time. It's just personal gain.⁵⁴

4.5.5 Synthesis

The academic and career advisors mental models express that there are external forces outside the university motivating the development of WIL. The suggested drivers include Government and student influence, the economy, industry needs and technological advancements. This supports the literature set out in section 2.7 which argues industry, Government and

⁵² Interview with P5

⁵³ Interview with S4

⁵⁴ Interview with S3

students are driving the increased development of WIL programs. These stakeholders' are driving WIL through demands for employable or work ready graduates and the need to fill skill shortages, policies governing legislation of industry and workplaces, and the students demand for experiences that will lead to the development of their generic skills, giving them an advantage over other students in the labour market.

The professionals and students have suggested rather internal or personal benefits were determining factors for participating in WIL subjects. Professional participants have stated that their need to fill skill shortages and get projects completed were reasons for taking on a student placement. Students state that placements can increase their employability, and personal development.

4.6 Role of WIL

Participants were asked to communicate their understanding of the current role of WIL in university. When answering this specific question some participants not only revealed their mental models about the current role of WIL in university but also their mental models about the role of the university as an educational provider.

4.6.1 Academics

Some academic participants were doubtful as to whether WIL fits within the role of universities, while also expressing that it is not a necessary thing, arguing the university has lost its purpose (A11, A5). Furthermore, it was suggested that WIL (when perceived as linked to and increase in employability) is beneficial for students, for their personal confirmation that what is being taught at university is useful to their future careers (A11). Two other academics (A7, A12) proposed that WIL is growing in importance at

university and as such every university will eventually have a form of WIL activity to offer their students.

As far as we're concerned we see it as important as other initiatives like internationalisation of the curriculum, as the important future teacher, that not only do we want to embed in programs that already do it but in all our programs.⁵⁵

...we have suddenly gone from Work-Integrated Learning being sort of boutique... or only in certain pockets in universities and suddenly we have gone to an enterprise model where every university in the country wants to have this big push for Work-Integrated Learning and there has suddenly been a massive interest in it and I think a very quick push to put things into place.

⁵⁶

Overall, most academics cited that the role of the university has changed over the years or that it is currently in a state of change.

...students are there [at university] to learn how to work. They are not there just for a liberal education which might have been the rightful role of the university 40 years ago, but we have to get real. The same as we tell our customers to get real. The world has shifted.⁵⁷

I'm not convinced it's a necessary thing because I think universities have lost the reason that we [universities] were here for, we are here to be at the cutting edge of technology change or of innovations, well actually we are catching up if we are using the community to serve us, and I think that that's the role of TAFE or when we used to have the college, colleges of advanced education,

⁵⁵ Interview with A7

⁵⁶ Interview with A12

⁵⁷ Interview with A8

maybe that where the vocational stuff is at, I don't know that it really does sit at university...⁵⁸

When discussing the role of the university, a link between higher education and vocational institutions like Technical And Further Education (TAFE) surfaced. Through discussing the growth of WIL programs at university, some academics voiced their concern that universities may have lost their original purpose by providing practical experience, thus becoming more 'TAFE like'.

We're becoming more work focused and that makes us look more like a training institute... I think some people may perceive that if we're doing things like making students work ready then we're no longer a university, because universities are perceived as being thinking institutions.⁵⁹

Simultaneously, discussion arose about TAFE or vocational institutions becoming more like a university:

TAFE will just keep moving into this space anyway. They are already offering degrees and graduate certificates. So they are saying great we'll just keep moving into your space. I think the nature of vocational education has changed. It is no longer the trade. Vocations now are knowledge. The definition I think has changed.⁶⁰

This discussion between the academics about the role of WIL in university, and in turn the role of the university surfaced the idea that higher education and vocational education were becoming more alike. This may lead to a dilemma of differentiation. Academic 10 suggests however that there is a

⁵⁸ Interview with A11

⁵⁹ Interview with A4

⁶⁰ Interview with A8

place for both university and TAFE education in the higher education market:

*There is a lot of challenge here. The challenge is striking a balance in education. What is university supposed to teach? What is TAFE supposed to teach? TAFE have a lot of emphasis on preparing students for workplace, whereas university is not just about preparing students for workplace but teaching them about thinking process, critical thinking, conceptualisations, cues and a lot more.*⁶¹

4.6.2 Career advisors

In contrast to academics, career advisors' mental models revealed that WIL has a strong role within universities and that it is essential for every student to participate in a WIL program (C1-C4). Careers advisors 7 and 8 have explicitly highlighted that the relevance and role of WIL in university is to enhance students' understanding of the real world of work and provide confirmation that what is being taught at university is useful.

Like some academic participants, when discussing the role of university careers participant 8 cites that higher education is changing. However, they expand on this by stating that the change in higher education is a result of the changing perceptions of student, including peer pressure and lifestyle choice. This suggests that the reason why the university is changing, along with a growth in WIL, is because the purpose for attending university is changing.

In contrast to the academic participants, careers participants express that TAFE and University are different and despite university providing WIL

⁶¹ Interview with A10

opportunities there is a significant difference in what each of the institutions provide in terms of education.

...it's very different [universities to TAFE], I think. The assessments have to be academically rigorous.⁶²

4.6.3 Professionals

Professionals, like career participants also cite that it is necessary for WIL opportunities to be integrated into every course. Professional participants suggest that this is because of the general principle behind a WIL program. Four out of ten professionals suggest applying real world concepts and theories in practice gives students a more realistic expectation of what it is they are going to be doing when they graduate.

Look, ideally it would be an integral role, such as in nursing and education students with placement programs. It would be lovely if it was a compulsory aspect of work placement within all university degrees, and giving the students that practical experience.⁶³

4.6.4 Students

When asked about the role of WIL in universities students advocate for WIL opportunities to be increased. Students suggest this be achieved through both increasing the range of disciplines offering work based WIL placements to include non-traditional disciplines, like HRM.

I feel if it was offered more, like if at the start of a session they [universities] said, "This is available to you. You can apply for it if you want to." I feel

⁶² Interview with C5

⁶³ Interview with P6

like a lot of people would apply for it and take it only because it would give them an advantage when they go to get a job straight after uni [sic].⁶⁴

If you look at it from the university side they don't seem to put too much of an emphasis on it because it is an elective subject. I reckon it's quite important in terms of really taking that step from university into work.⁶⁵

4.6.5 Synthesis

For academics, discussing the role of WIL in universities surfaced tensions about the role of the university and its place within the higher education sector. Academics expressed that they are doubtful as to whether WIL fits in universities. In general, academics perceive the university has lost its purpose in terms of using the community to serve the university, expressing that in providing more practical experiences universities are becoming TAFE like. Additionally, it was stated that the focus of education within universities has changed and as such the role of university is changing. The careers advisors, professionals and student stakeholder groups, in stark contrast to the academics have stated that WIL has an extremely strong role within the university, so much that it is essential for every student and that more should be done to integrate WIL opportunities into every course.

The discussion of the role of the university that arose as a result of the question about the role of WIL in university suggests that there is a strong link between the developments of WIL programs and the state of the university as an institution. This could further suggest that WIL programs and their place in university are changing the structure of the university and perhaps its role within the higher education sector.

⁶⁴ Interview with S1

⁶⁵ Interview with S2

4.7 Challenges implementing WIL

4.7.1 Academics

Academic participants identify an overwhelming number of challenges that they have encountered when designing, implementing and managing WIL activities. The challenges can be categorised into three areas of concern: design, ethical and legal issues, and resource intensity.

Five out of twelve academics have expressed concerns with designing WIL courses. The challenges identified include knowing the right time for a placement to be integrated into the curriculum (A1) and knowing what an effective WIL program looks like and or knowing which types of WIL programs to implement (A8, A12, A7). Academics 7 and 11 are concerned with how best to engage students so that they do not view WIL units as just another subject and working out how to get academics on campus to think more clearly about the WIL experiences they can construct. Academic 1 expressed a concern about not knowing what opportunities to provide students that may already be working in their relevant career field (A1). For example academics cite:

*We had a large portion of students who were already working in the field. We said what are we going to do with our evening students because they're working? They can't go and do a placement somewhere. They've got a job. Now do we allow them to have their own workplace?*⁶⁶

*My worry is in the rush to implement things people might not be designing it to its fullest potential for the student experience.*⁶⁷

⁶⁶ Interview with A1

⁶⁷ Interview with A12

Ethical and legal issues are the second category of issues that academics identify with. The challenges in this category are associated with the selection process for placements (A1) and the lack of experience and knowledge most academics have in designing placement type forms of WIL (A11), the issue of failing students and whether they should be sent out into the workplace (A1), how to effectively deal with bad or inappropriate student experiences (A1, A4, A8, A7) and legality issues such as insurance and workers compensation (A1, A8).

We [academics] are doing all the work here, so we are advertising it, doing the short list, and once again I am not skilled in this area, but I work it out, there is an ethical issue I have with that, becoming a recruitment agency for organisations.⁶⁸

We were very conscious of equity and how do we equitably select people... a lot of our students work but also if it's done on credits and credit average, like GPA, is that the best way to do it? ⁶⁹

We had an ethical issue about potentially placing people in unpaid work where they were making coffee and we're teaching people that there's no such thing as unpaid work. It's against the law not to be paid to work and yet we're expecting that our students engage. ⁷⁰

The third category of challenges identified by academic participants is associated with resource intensity. All 12 academic participants have cited that there is a lack of resources available for designing and managing WIL programs. Additionally, seven out of 12 academics have cited that there are limited industry placements available and that this has put increased

⁶⁸ Interview with A11

⁶⁹ Interview with A1

⁷⁰ Interview with A1

pressure on their workload, especially as they begin to try and accommodate larger student cohorts. Academic 12 states:

Companies and organisations obviously have a limited number of students they can take on at any point in time, so if they [organisations] have built up a relationship with one university with having student placements I don't think they are necessarily going to find the time or resources to suddenly to take an influx of more student placements.⁷¹

Three academics provided insight into why it may be difficult to place a large cohort of students in to the work place. They suggested that some companies may view WIL placements as burdensome and significantly time consuming; therefore they may be reluctant to take on students.

I think it's a time factor. I think people are quite time poor...we've got very high levels of skill shortages in many organisations and people just don't have time to commit to helping to develop lots of students. They see it as a burden taking on students. That it's just something else that they have to do. I don't think that culture exists in all organisations anymore.⁷²

Academics 1, 2, 7 and 9 have stated that more staff are needed and that training of staff may ensure the expectations of students are clear and not misinterpreted (A1, A7, A8 and A11). Lastly, it was stated by half of all (6 out of 12) academics that developing and managing WIL programs is significantly more time consuming because of the essential process of having to build and maintain good relationships with industry.

⁷¹ Interview with A12

⁷² Interview with A4

4.7.2 Career advisors

Career participants agree with academics by stating that one of the major challenges implementing a WIL program is that it is resource intensive. Some career participants (C4, C7, and C5) also agree that legal and ethical issues are often considered to be a hindrance on the development of WIL programs.

On the legal side, there are resource problems. There's the tension. There's a natural tension of exploitation v experience and I think that balance is always there.⁷³

In addition to these challenges, career participants 3, 7 and 8 state that when organising a work placement finding the correct match between a student and employer is just as challenging. Moreover, they suggest that this is a result of a clash of agendas between stakeholders.

Probably the most difficult thing is making the correct match or link between the student and the employer...it is about making that match that is very important because if it doesn't work out then the employer may not come back again so that is a huge risk, you have to find the right student to fit into that context, you really have to understand the requirements of what the employer wants, it's just not about sticking a student into this HR place and see what happens, there needs to be... they have to get that right, that matching point for the two, understanding what their needs are, the workplace environment, the workplace culture and does that fit in with what the student wants, does the employer like what the student is doing etc.⁷⁴

4.7.3 Professionals

Half of all (5 out of 10) professional participants cite that the biggest challenge when managing a work placement WIL program is the time

⁷³ Interview with C4

⁷⁴ Interview with C7

needed to be devoted to managing placements. The second most significant challenge faced by professionals is the ability to manage expectations.

... You have to make sure that managers don't expect too much because the student is still at university and still learning... I guess managing interns expectations would be the other side of that so you know making sure the student knows that we expect them to look and behave a certain way and we expect you to know when you are operating outside your level of competence or authority and where to draw the line.⁷⁵

Other challenges cited by professional participants were a lack of guidance (P10), the duration of the placement (P4, P9), insurance costs (P6) and budgeting and planning for placements (P8).

I mean I have my own business and we haven't had students in it because of privacy, confidentiality, insurance, and just the time it takes to train someone up.⁷⁶

Yes the challenges are that it is time consuming and it takes about 3 months to get them where they need to be and then they leave after 3 months, so that is a bit of a problem with the current model we have with the university.⁷⁷

4.7.4 Students

Student participants have cited several different challenges faced when undertaking a work placement, including struggling to get a placement, lack of supervision, and the structure of WIL subjects.

I guess making it a subject that people have to do. You'll find a lot of people will not want to do it. If you made it as an elective a lot of people choose the

⁷⁵ Interview with P6

⁷⁶ Interview with P6

⁷⁷ Interview with P9

*same elective because everyone's doing it at the same time and they always choose the easiest one.*⁷⁸

*I'm very proud of my credit distinction averages and to see a satisfactory was like yes I know I passed it, and I know I did well but god I wanted a good mark. I like seeing what my marks are because the only passes I got were in accounting and quantitative methods. Everything else was credits and distinctions.*⁷⁹

*I was kind of left on my own, just doing my own research, getting used to the environment.*⁸⁰

4.7.5 Synthesis

In brief, academics, careers and professional participants have all cited that a major challenge with WIL is the lack of, or limited resources available. This included the challenge of not being able to find an organisation willing to take on students for the experience. Other significant challenges cited were the lack of supervision or guidance given throughout a WIL program (professionals and students), ethical and legal issues (academics and careers), and the ability to manage expectations (professionals) and or find a correct match between the student and the employer (careers). Students also identify with the challenge of being able to find willing employers for a work placement, however have identified several other challenges relating to the delivering and design process of WIL in the curriculum.

Significantly, all academics cited that the process of designing and implementing WIL is resource intensive. This has a huge impact on their workload. As a result some academics have suggested that due to a lack of

⁷⁸ Interview with S1

⁷⁹ Interview with S2

⁸⁰ Interview with S6

resources made available they are improvising and developing alternatives to the curriculum-based placement model that their institution wishes to implement. For example academic 11 below notes:

How do you find places for like just in this faculty alone that is my responsibility and I have 2500 students each year, now that means that 2500 students each year I have to find placements for. It's not resourced... So what I have done then to be creative, I have said I cannot sustain this model the way it is running so let me think of more creative ways of having a community engagement type of activity built into the units where the community comes here instead of sending the kids out.⁸¹

This suggests that the challenge of not being able to find resources to design and implement WIL curriculum-based placements is influencing the development of alternative models of WIL. Essentially academics are faced with a lack of resources and this is shaping current and future WIL models. This provides partial explanation for why there is a range of WIL programs offered in the teaching of HRM. Academic 11 further suggests that in attempting to overcome resource issues, academics may be overlooking the true value offered through curriculum-based placements, instead providing less valuable and or less engaging types of WIL experiences:

So it's a creative way of solving my numbers problem without being resources, but to me it's watering down the intent and outcome of a WIL based placement, but I have had to do a work around because I am not getting resourced.⁸²

⁸¹ Interview with A11

⁸² Interview with A11

It can't be as engaging if you have got 500 in the room, it can't be that personal touch, whereas they are touched by their placement experience.⁸³

4.8 The nature of HRM

As identified in Table 4.1 and discussed in section 4.2.5 there are a range of WIL opportunities and models offered to undergraduate HRM students. It was also identified that although the dominant HRM model in table 4.1 is that of a curriculum- based placement, according to the participants, in practice WIL curriculum- based placement directly in HRM are less prevalent. This section outlines the mental models about the cultural history and profession of HRM in terms of its impact on the development of specific WIL model types in undergraduate teaching.

4.8.1 Academics

Academic 1 gives insight into possible reasons why a curriculum-based placement in the field of HRM is less common than in other disciplines. This participant suggests several reasons including the lack of resources in terms of availability of placements and design, the large size of student cohorts and balancing a placement with what the university needs to achieve academically for the profession.

As I said I don't know if it is and maybe we're wrong to say it's too hard, but we've just found that when we've thought about it or tried to do it for our [HRM discipline] numbers, our size, our cohorts, the resources available to us that we've had to design and also what we've wanted to achieve academically.⁸⁴

Academic 1 also suggests that the cultural history of the profession of HRM does not comprise of placements for graduates, and as such the systems to

⁸³ Interview with A11

⁸⁴ Interview with A1

effectively implement and support this model are not yet in place. Additionally, this participant suggests that the demography of Australia's corporate sector is that it is comprised of many small to medium enterprises. These small organisations do not have the time, money or resources to take on a student.

But the thing is as a profession [HRM] we don't have a cultural history of this. We are not like health where doctors anticipate having students coming in and sitting with them in the office. That's part of the culture and the traditions in the histories of those professions which we just don't have...all these sorts of areas have these expectations and system, have set-up schools to have student placements designed into their curriculum, into their staffing, into who will take them on.⁸⁵

We are a new profession. We are a new area. Literally if you look at HR it's only been around 25 years. Do all organisations have it? No. In Australia small/medium organisations often don't have HR. They might have a payroll person or they might have OH&S people or they'll just have line managers.⁸⁶

I think the other reason ... often HR departments are pretty small...⁸⁷

Academic 1 further suggests that the nature of HRM in that it deals with confidential information may cause organisations to be reluctant to put someone from outside the organisation into an area where they will be exposed to information about the operations of the business and its employees. Academic 5 states:

⁸⁵ Interview with A1

⁸⁶ Interview with A1

⁸⁷ Interview with A1

...The other thing of course about HR is the big issue, the big issue of confidentiality and employer privacy and the sorts of materials that people could get exposed to.⁸⁸

4.8.2 Career advisors

Career advisor 7 agrees with academic 1 in that they have suggested that the issue of privacy and confidentiality may be making organisations reluctant to offer HRM placements.

I don't think there is enough offered in HR and probably the reason is ethical, privacy, confidential issues and sensitive kind of subject matter...⁸⁹

4.8.3 Professionals

Some professional participants have also identified that privacy, confidentiality and insurance as possible reasons why the field of HRM has limited placements available.

Well in HR you are definitely considering this [privacy, confidentiality and insurance] because in HR you are getting exposed to personal details... if they are an employee of yours and they are on the payroll it is just a bit more of a wield, because you have no control what a student might go and say about your workplace, or the people within it socially.⁹⁰

Other participants suggested that HRM professionals put the business before their own department, that HRM is undervalued, and that there is a lack of succession planning going on in organisations.

I don't think HR people think in that space though, I think it's because HR people just like every other manager are too focused on the day to day and

⁸⁸ Interview with A1

⁸⁹ Interview with C7

⁹⁰ Interview with P6

*don't succession plan, it is the last thing on their mind sometimes, and I think succession planning is critical but it is always the last minute thing.*⁹¹

*I think for your research... other industries are doing it and it is HR that is driving it for other industries so why are they not doing it for themselves. I think HR puts the business first before they put HR first, because from my experience I always think about the business first, I don't think about myself.*⁹²

*Yes I think that is because HR is seen as a very wishy washy degree, even from the university it is taught very wishy washy, and I guess that means that it is not valued and it's not like in a law degree where you can do a moot.*⁹³

4.8.4 Students

Student participant 2 views the current demographic of HRM professionals as lacking an understanding of the difficulty in gaining relevant work experience because they acquired their jobs in a time when HRM was growing and so there was a gap in the market that had to be filled.

*I think that a lot of HR managers started back a couple of years ago when HR really was just growing in popularity and so a lot of them have started there with no experience. Because HR was such a new thing and it was quite popular and it was quite easy to get into because there wasn't many in the way of HR graduates and things like that so it was easier for them to get into it than it is now where the market has got quite a lot of HR graduates.*⁹⁴

⁹¹ Interview with P8

⁹² Interview with P8

⁹³ Interview with P10

⁹⁴ Interview with S2

4.8.5 Synthesis

The participants in this research have identified that curriculum-based placements are less common in the teaching of undergraduate HRM. Academics have suggested that this is the case because the profession of HRM is relatively new and as a business role it is not always in every organisation. Academics also state as a result of the cultural history of HRM not having curriculum-based placements as commonplace there is no systemic support system for such offerings. This along with large cohorts of students and an already overcrowded curriculum makes it almost impossible to offer placements to every student. Careers advisors view that the nature of HRM being that those in this area deal with personal employee information makes it an issue of privacy and confidentiality when bringing a student into the workplace. They perceive that organisations may be concerned about the information the university student gets access too. Professionals also view that privacy and confidentiality is a concern privy to the HRM profession when taking on a university students, however it was also suggested that due to the role of HRM always putting the business first before their own department, that succession planning becomes a last minute task. Students on the other hand believe the reason why academics find it hard to source placements for their curriculum-based placement subjects is because the current group of professionals working in HRM are not aware nor understand the difficulties in getting a job after university, or gaining the relevant work experience needed to get that job after you graduate because they entered the profession at a time when there was a significantly large gap in the market that had to be filled. Therefore according to students current HRM professionals did not find it hard obtaining their job in HRM.

Although each of the stakeholder groups have provided varying mental models about the nature of HRM and its implications on the available

curriculum-based placement, there is a common theme. Each stakeholder group perceives in one way or another that it is difficult to access placements in the field of HRM, and that this is a result of specific HRM structural and professional elements. It could be suggested that there is a range of WIL programs offered in the teaching of HRM graduates, as a result of the participants perceiving there to be a lack of placement opportunities available.

4.9 Recommendations

4.9.1 Academics

In general, academic participants make several recommendations for the implementation of WIL programs. The recommendations relate to the development and structure of the degree, course or unit of WIL. Academics 5 and 8 recommend improving the view and functionality of graduate attributes through teaching practices that make them relevant to students.

Its [graduate attributes] a good framework for students to use when they are going for interviews. When we mention that about getting a job the students prick up their ears so I've used that lever to sort of bring them to life a bit.⁹⁵

I think graduate attributes are embedded within the student, but I think we should teach in a way that elicits the development of those attributes.⁹⁶

Academic 8 further suggests that lecturers integrate the teaching of various units, so that students do not view them as siloed courses.

We [academics] don't integrate the teaching of the various units. So students actually see siloed courses and they don't see the connections between OLD [organisational learning and development] and management of change and

⁹⁵ Interview with A5

⁹⁶ Interview with A8

organisational behaviour and strategy because they learn about strategy in one context with one lecturer and one tutor in a room...and we don't spend enough time when they go say to OLD saying okay now let's look at what you did in strategy and how does that integrate with what you're about to learn in OLD or management of change.⁹⁷

Academic 2 recommends that career resume workshops be integrated into a student's degree. Additionally, academic 2 state that it is important for the success of the WIL program that the needs of employers are taken into consideration. This may include allowing the employer to give feedback to the student on their work during their time in the workplace.

Academic 7 recommend that WIL activities be scaled. For example, a placement would be rated as a high level WIL activity whereas a case study would be rated further down the scale. Academic 7 is also apprehensive about a curriculum-based placement, instead suggesting academics need further education and collaboration with other academics so that other WIL models are being developed and utilised. Additionally, academic 7 expresses concerns about the risks associated with work placements for students and the university, such as negative repercussions on the university's reputation and students being exploited. Academic 1 reiterates these concerns in a discussion of their personal experience implementing a WIL unit.

There were a few things we learnt... One thing was that our students, their presentation skills left something to be desired and we learnt from that point on that we would not expose anyone from outside of the university to our students unless we had previously audited them because we just thought yes we'll put them all up, we'll invite people for maybe a two hour thing, we'll have groups and perhaps we'll have about three of these nights and that

⁹⁷ Interview with A8

*would be great. No, it was embarrassing. We had students mumble, spelling mistakes, non-professionally attired, didn't know what they were talking about.*⁹⁸

Academic 1's quote above highlights that there it is necessary to prepare students for WIL programs, particularly when there is direct contact with industry professionals. It also indicates that WIL programs must be sequenced.

Academic 11 makes several recommendations or suggestions for both developing and implementing an effective WIL unit. Academic 11 suggests placements should be in the first year so that students are able to use the placement as a clarification they are following the right career path. She expresses a concern with the lack of available guides and or manuals or training courses for academics to gain an understanding about developing WIL courses effectively. Academic 11 also suggest that the graduate attributes be discussed with students before they undertake their placement so that when they have finished their placement, they can reflect on the attributes that they feel were developed.

In contrast to the other academics above, academic 12 is concerned with the conceptualisation and objective of WIL. Academic 12 believes that the overall purpose of WIL be extended beyond ensuring graduates are work ready to include graduate attributes about citizenship and values.

I don't think or see anything wrong with students being work ready but umm my worry is that it is [WIL] not just about ready for the world of work I think

⁹⁸ Interview with A1

*there is more ideas about citizenship and values that need to be promoted concurrently with this and I think Work-Integrated Learning can do that.*⁹⁹

4.9.2 Careers advisors

Career advisor 3 talks about their experience with online work related modules. From their personal experience they find them beneficial to students and suggest that this could be an alternative way to gain skills associated with WIL that could be introduced into the curriculum.

*There are online modules that students can complete... we tell academic staff about them and a number of academic staff make it compulsory for students to complete those modules... it takes 9 and a ½ hours to complete and that way the student gets skills like resume writing offered to them in the curriculum.*¹⁰⁰

Career advisors 1 and 2 have commented on their role in terms of finding a placement for a student rather than the learning that takes place within the workplace. Career advisors 1 and 2 have suggested that there is additional value to be gained from giving students the tools to help organise their own placement.

*I don't think there is a lot of value [for the student] in finding a placement for a student; I think a better model is giving the student the tools to help them find their own placement with an organisation...*¹⁰¹

This quote is referring to the valuable learning experience associated with gaining a work placement rather than the valuable learning gained from being on the actual work placement. Careers advisor 7 recommends students be given a preparation class where they are taught appropriate workplace

⁹⁹ Interview with A12

¹⁰⁰ Interview with C3

¹⁰¹ Interview with C1

behaviour such as etiquette and respect before beginning their curriculum-based placement.

*If they [university] didn't give the students a bit of pre coaching as to what the expectations of them [students] was, respect in the workplace, etiquette and those kind of things would go on into the workplace it just wouldn't work out, they didn't know how to behave or what to expect or they might have found it a little stressful or employers would say they are not really prepared or they are not really sure what they are doing. So I think now most Work-Integrated Learning programs would have that component in, that sort of pre placement and probably post placement evaluation as well.*¹⁰²

Career advisor 7 also shows concern for determining a match between the student and the employer or manager that will be monitoring the student in the workplace. Career advisor 7 cites:

*It is about making that match that is very important because if it doesn't work out then the employer may not come back again so that is a huge risk, you have to find the right student to fit into that context...they have to get that right, that matching point for the two, understanding what their needs are, the workplace environment, the workplace culture and does that fit in with what the student wants, does the employer like what the student is doing.*¹⁰³

This challenge was highlighted by the professional participants also in section 4.7. Therefore a tool developed to alleviate the concern of matching student to employer may prove to be beneficial when developing a WIL program.

¹⁰² Interview with C7

¹⁰³ Interview with C7

4.9.3 Professionals

Professional participants have suggested several different recommendations to the development of WIL units at university. Professional 3 has suggested that placements should be integrated into all stages of the student's degree, year one to year three, while professional 9 recommends that the ideal placement is 6 months.

With Work-Integrated Learning I see it as really important all the way through a course of study really early on to give the student that perspective of, "Do I want to do it" and later on it's really preparing them for the job itself.¹⁰⁴

The question cited below by professional 1 demonstrates that the participant is concerned with the management of competing, and sometimes conflicting expectations of WIL.

Maybe we need to discuss out in the open what the student perceives the experience to be versus what the agency perceives the experience to be?¹⁰⁵

While professional 7 highlights the importance of involving the university human resources department in the development of WIL activities:

There would be a simple question I would ask every university who is looking to develop one of these opportunities and that is, has your HR team been involved in the design of your student internship? And if it hasn't, why not? Because if this is a HR internship that you are looking at, surely you are using your own HR to have an insight into it... and I actually haven't found a university that does that.¹⁰⁶

¹⁰⁴ Interview with P3

¹⁰⁵ Interview with P1

¹⁰⁶ Interview with P7

This quote is articulating the professionals concern for the way HRM placements are developed. The professional views that the HRM department has more knowledge to offer in the way of developing WIL programs than the HRM academic has to offer. The professional is highlighting a disconnection between the university HRM department and university HRM academics, and suggesting that HRM placements be developed through collaboration of the two departments.

Professional 7 also suggests the way in which employers and or organisations are approached by the university needs improvement. As such professional 7 recommends universities should be clearer in the use of their terminology, in their intentions and or requirements for a placement, in that the university should be upfront in their expectations for the students.

The issue for me about that is that it is a very vague term [employability]. So if the students and the universities were more concrete about that it would be easier, so they could say 'in making our students more employable the experiences we hope that they will gain will be'... it might be participating in cross dimensional teams or in team decision making, it might be participating in or undertaking research in relation to their discipline area. I would find it easier as an employer if the university said we have 5 or 55 students who are looking for an internship which means they have got 6 months and of those 55, 20 of them are looking to develop skills in... so that skill set might be simply understanding organizational life and hierarchies, it might be about international tax regulations around transferring employees between China and Chile, whatever. It makes it much easier for us then to say well I can't give you that but I can do something like it and I can do this.¹⁰⁷

¹⁰⁷ Interview with P7

.. So I think there should be two things the university could provide us about potential internship students... The student's interest area and what the student would benefit more from exposure to...¹⁰⁸

Professional 9 indicates that students are not receiving decision making experience or skills from their studies and this is showing in their placements. As such professional 9 spends time getting students to build their decisions making skills while on their placement.

I use question technique to say well what happens if we do this and this is the result and I try and get them [students] to think of it themselves. I don't think they are used to that, they are not getting it from their university studies, they are not coming up with the decisions on their own, I guess they are waiting to be told. So I like to involve them in the decisions as if they were the person in charge so that they could learn these skills.¹⁰⁹

Professional 9 suggests above that decision making techniques need to be integrated into the curriculum prior to WIL. The quote may also suggest that employers need to be aware of and competent in reflection techniques so that they themselves are getting the full benefits of the internship, as well as the students

Professional 10 also suggests that there are specific techniques and or skills not being addressed at university. Professional 10 perceives students are not being taught several important things at university including the role of HRM and how to perform simple HRM tasks such as writing a HRM report. As such he suggests that the curriculum be more focused on measurement, human behaviour and supply and demand and making the connection between theory and practice explicit.

¹⁰⁸ Interview with P7

¹⁰⁹ Interview with P9

So even if just say one subject 'introduction to HR' and then teaching it as HR is there to drive business results like any other, coz at uni [sic] they tell you that first you need to make people happy in the workplace first so they work better, but that is only half of it. HR should be more focused on measurement as well, where you have to measure human behaviour with supply and demand. Even skills like how to write a HR report, these interns are not taught or they are and not getting it. University teaching needs to directly make the connection between theory and how that theory is used in the workplace; this can easily be done in the classroom.¹¹⁰

4.9.4 Students

Student 6 recommends that a mentor /supervisor be provided to the student when participating in a work placement. Student 2 suggests that an Employment Relations (ER) and Industrial Relations (IR) approach needs to be stronger needs to have a stronger focus in the HRM degree. Student 4 suggests a new model of WIL to be introduced into the curriculum where you are provided with a real life case study from an organisation and you work on it over the course of your degree, then in the final year you become a consultant for that organisation and are given a problem to find solutions for.

Even something on a smaller scale or providing you with the case study and making you work on it but not actually doing the consultancy bit til the final year would be beneficial. You feel like you're are working on something real rather than just putting together an essay on theory you have just read about.¹¹¹

¹¹⁰ Interview with P10

¹¹¹ Interview with S4

Student 4 also recommends that written communication skills are fundamental to the employability of a student and that universities should be addressing this issue more often through the marking of students work.

A degree is great in that it provides you with the basic knowledge of the industry that you're going into and the sort of work you might be doing and it gives you that bottom line understanding but when you go back to that basic employability, writing skills and communication skills are fundamental... they could be the one thing that puts a big cross on your resume as it sits on the desk. I think it should be picked up when the students work is marked, so the issue is dealt with.¹¹²

Student 8 states that lecturers need to use real life examples in their teaching, as it enables students to make the connection between theory and the workplace. Furthermore, student 8 discusses their frustrations with the degrees on offer in HRM in two prominent Australian Universities. This student moved from one university to the other because she felt that the latter had a more modern and practical view of HRM and therefore would provide her with the experiences she would need to transition from the university to the workplace.

It feels like private colleges offer more experience than universities and I found that at [University A] when I was doing their HR subjects, they are so behind in the way that they structure their learning and at [University B] in terms of learning, they are so much more eager to understand...I just feel that some universities have different perspectives, like [University A] must have had a very philosophical theoretical perspective about getting a uni [sic] degree, whereas [University B] has a more practical, engaged and modern

¹¹² Interview with S4

*perspective...I just realised for HR you need experience and practicality so that's why I moved.*¹¹³

The above quote suggests that universities need to be aware of the degrees offered by other universities to ensure they remain competitive and offer students what they want from their degree.

4.9.5 The process in WIL programs

Through reviewing the mental models of the recommendations made across stakeholder groups, it is revealed that WIL is perceived as a sequence and or process. This supports the work of Kolb & Kolb (2005) and McNamara et al. (2012) whom advocate that WIL be viewed holistically rather than a single unit in its own right. Generally, there is a sense that WIL programs in HRM need to be developing as a university program, a process where students are gradually exposed to different models and activities of WIL over the course of their degree at university. The stakeholders' mental models reveal activities that should be implemented or taught to students prior, during and post participation in curriculum-based placements, and during the course of a university degree overall. Each recommendation is categorised into the 4 phases below, prior, during and post placement and overall integration of WIL related skills into the curriculum over the course of the student's degree.

The following elements of WIL activities are recommended to be developed in students prior to participation in a curriculum -based placement:

- Decision making techniques need to be integrated into the curriculum prior to WIL placement (P9).
- Be taught the role of HRM and how to perform simple HRM task such as writing a HRM report (P10).

¹¹³ Interview with S8

- Attend preparation classes where you are taught appropriate workplace behaviour such as workplace etiquette and respect (C7).
- Graduate attributes be discussed with students before they undertake their placement (A11)
- Match between student and employer needs to be done (C7)
- Open discussion between students and employer about the perceptions and expectations of either party about the placement (P1)
- Universities should be clearer in their use of terminology, in their intentions and requirements of a placement, and in their expectations of students while on the placement. This includes discussing the student's interest area and what the student would benefit more from exposure to (P7).
- University HR department to be involved in the development of HRM placements (P7)

The following elements of WIL should be developed during a curriculum-based placement:

- Employer to give feedback directly to student on their work during their time in the workplace (A2)
- Employers to get students to develop their decisions making skills (P9)
- Students to have a mentor or supervisor (S6)
- Placements should be 6 months (P3).

The following elements of WIL should be developed post a curriculum-based placement:

- Students should reflect on the graduate attributes they feel were developed during the placement (A11)

- Employer to give feedback about the overall performance of the student (A2)
- Post placement evaluation of what was achieved during the placement (C7)

The following elements of WIL should be developed during the course of a students' education at university:

- Lecturers need to use real life examples in their teaching (S8)
- Introduced to an organisation case study at the beginning of the degree and you work on it over the course of your degree. Final year you become a consultant for the organisation (S4).
- Teach in a way that elicits the development of graduate attributes (A5,A8)
- Use teaching techniques that link graduate attributes to post graduate outcomes of getting a job (A8)
- Integrate the teaching of various units, so that students do not view them as siloed courses (A8)
- Integrated career resume workshops into the curriculum (A2)
- Further development of students presentation skills (A1)
- Online work related modules- an alternative way to gain skills associated with WIL (C3)
- Resume writing to be integrated into the curriculum (C3)
- Give students the tools to organise their own placement (C1,C2)
- Curriculum to be more focussed on measurement of human behaviour and supply and demand and making the connection between theory and practice explicit (P10)
- Employment relations and industrial relations to have a stronger focus in the HRM degree (S2)

- Placements should be integrated into all stages of the students degree (year 1 to year 3)(P3)
- Written communication skills need further development and should be addressed through marking of students work (S4)

The recommendations listed above have been categorised into four phases. This suggests that the development of WIL curriculum- based placements and WIL related activities are an integrated process where one compliments the other. The other recommendations made by participants refer to academics requiring further education so that WIL programs are developed effectively. These recommendations include the development of a WIL guide for academics (A11), the need for academics to work across faculties to develop new WIL models (A7) and the process for approaching host organisations to be improved (P7).

4.9.6 **Synthesis**

Academics recommend changes to the development and structure of a WIL degree, course or unit. This includes integrating teaching of units, and improving the practical application of graduate attributes. It was further argued that the education, training and or development of a guide for all academics to follow when developing a WIL based activity be developed. On the other hand, professionals want students to have opportunities to participate in placements more frequently, acquire better decision making skills and for the university to be clearer in the expectations and or intentions and terminology of the university/student. Careers advisors suggest that online work modules could be developed as a more flexible alternative form of WIL. They further suggest the need for students to be developed, not the courses or units. They view it significantly important for students to develop the tools to access their own work experiences and further their career

independently of structured units. However, they do recommend that basic workplace etiquette classes be provided to students as a compulsory entry into the workplace. Students on the other hand request workplace supervisors for guidance, ascertain that ER/IR and written communication skills need a stronger focus in the university HRM curriculum.

The stakeholders in this research have recommended changes to different areas of the curriculum, however overall a process to WIL emerges. The stakeholders' recommendations can be categorised into four phases: prior, during and post a curriculum-based placement and overall recommendations for integration into the curriculum during the entirety of the student's education at university. In addition to viewing WIL as a process, it is evidenced throughout the participants' interviews that graduate attributes need improving in terms of clarifying the definitions and relevance to the workplace, as well as re-development in terms of the development of attributes in students. Academics recommend teaching practices elicit the attributes relevant to students, while professionals recommend that both general and discipline specific attributes be used. Careers advisors also recommend that graduate attributes be contextualised as they are currently too ambiguous. Students mental models support the other stakeholders' comments as students when prompted about the attributes had no idea what they were, thus reinforcing the need for re-developing them. Students recommend that graduate attributes be more realistic so that the university can integrate them into everything that the university does so that students can understand, and be aware of them throughout their studies.

4.10 Conclusion

This chapter has presented stakeholder mental models about the development of WIL programs in undergraduate HRM degrees. The stakeholders understand WIL to be a range of curriculum based activities

that integrate theory and practice of the workplace (Patrick et al. 2008). The stakeholders' mental models reveal that WIL is perceived to be a broad approach to learning and teaching activities and a curriculum-based placement. This was found to be similar to the categorisation of WIL offered by UK authors Knight and Yorke (2004) (see Figure 4.1).

There are four models of WIL currently being implemented in undergraduate HRM degrees. From the four models identified, model 2 a curriculum-based placement (see table 4.2) was identified as the dominant model in use. However, the stakeholders have stated that curriculum-based placements are less commonly offered in HRM than in other disciplines. Additionally, out of the 8 students whom participated in this research, only 3 had participated in a curriculum-based placement, the remaining 5 sought internships and work experience external to the university curriculum. This highlights that WIL in terms of the work experience is viewed as sufficiently important that they were willing to participate in work experiences that are additional to their program of study. On another level inconsistency was found to exist within the stakeholders' mental models. Participants view WIL as both a broad range of activities to teaching and learning activities and a curriculum-based placement, however participants almost always are referring to WIL in terms of a curriculum-based placement throughout the interviews.

The academics, careers advisors and professional's mental models about the composition of graduate attributes varied both within and across groups. On the other hand, students had either not heard of them or did not understand them. It was found that participants across each stakeholder group expressed the need for graduate attributes to be re-developed. It was suggested that there should be generic and discipline specific attributes, and, or, they be contextualised. Additionally, it was argued that the way they are viewed

should be improved by bringing them to life within the university day to day activities.

Rather than defining employability generally, the participants described characteristics of an employable person. The academics, careers advisors and professionals all described an employable person as someone with soft skills. Soft skills identified include good communication and networking skills, team work and negotiation. Students on the other hand, provided varying responses including the need for an employable person to have determination, work experience and a cultural fit with the organisation. Just over half of all participants have reported a link between WIL and employability, however further research is recommended in order to determine the strength of the relationship.

Career advisors and academics have indicated that the needs of students and employers are driving WIL opportunities in university. In support of this, professional and student stakeholders' identify self-seeking reasons for contributing or participating in curriculum- based placements. This supports Ernst and Young's (2011) argument that the higher education sector is operating like a consumer driven market. Another influencing factor driving WIL, or more so shaping WIL models are the challenges faced by stakeholders when implementing WIL. A lack of resources in terms of designing units and gaining access to placements was identified as the universal concern, as it is forcing academics to design alternative WIL models. It was further identified that the implication of this is that less engaging models of WIL are being offered, where a student does not receive the personal experience of a curriculum- based placement.

It was reported by the participants that there is a concern for the role of the university as they perceive WIL to be influencing the role of university as an

educational provider. Participants expressed that a concentration on WIL activities, may have an impact on the universities differentiating factor within the higher education sector. On the whole, it can be argued that the presence of WIL in universities is shaping stakeholder mental models about the role of the university in the higher education sector.

Lastly, the HRM profession and degree structure was suggested as being a reason for a lack of curriculum- based placement WIL activities. There is the perception that the nature of the profession of HRM restricts the available opportunities for real work experiences. Training is necessary to increase WIL activities in HRM because WIL is not part of the normal training of a HRM academic. Through a comparison of stakeholders' recommendations it becomes apparent that WIL implementation into the curriculum is viewed as a process. Recommendations were made to be integrated prior, during and post a curriculum-based placement as well as to the curriculum across the entirety of the students education at university. Additionally, stakeholders recommend communication across groups to be enhanced so that intentions and expectations are clarified, and there is no ambiguity in the development of the program and attributes that need to be focussed on in the student in the workplace.

The following chapter considers these findings from the view of complexity using Mitleton-Kelly's (2003b) principles of complex evolving systems.

Chapter 5- Complexity analysis

5.1 Introduction

It was established in the literature review that there are many conceptualisations of WIL as well as a range of WIL programs offered by Australian universities. As such the research explored the mental models of stakeholders' involved in the process of designing and implementing WIL programs in undergraduate Human Resource Management (HRM) degrees. The findings presented in the previous chapter revealed that stakeholder mental models about the development of WIL programs in HRM are often contradictory and in conflict between and across groups. The findings established that WIL is changing the way the university is viewed in terms of its role as an educational provider, and that the higher education sector is perceived to be operating as a consumer driven market. Additionally, the restrictive and sensitive nature of the profession of HRM and the challenges identified when implementing a WIL program are influencing the models of WIL being developed in universities.

This chapter will discuss and analyse the findings of this research using the complexity principles developed for organisational research by Mitleton-Kelly (2003a, 2003b). Firstly, the mental models about WIL are explored for elements of connectivity and interdependence. This is followed by an evaluation of the connectivity and interdependence of the stakeholder relationships within the system of the university. Next, the larger social ecosystem that encompasses the development of WIL in HRM in universities is presented and discussed in terms of its co-evolving nature. An examination of the impact of the development of WIL on the far-from-equilibrium state of the sampled universities follows. This is explored whilst the historicity and time of the sampled universities and larger ecosystem is

considered. This is then followed by an exploration of the space of possibilities. The principle of feedback is addressed in terms of its positive or negative effects on stabilising, destabilising and or changing the system, while the path dependence of WIL is also addressed. Lastly, the self-organising and emergent properties of this research will be analysed and assessed for their capacity to create new order. The 11th principle of fractality is then introduced and discussed in terms of its application to this research.

5.2 Context

Theories of complexity can offer new ways of viewing and managing organisations. Mitleton-Kelly (2003b) offers one way of viewing organisations where they are considered to be complex evolving systems (CES). Viewing organisations as CES requires appropriate tools for studying and analysing them. As such Mitleton-Kelly (2003b:41) provides 10 principles that serve as “an explanatory framework that helps us understand the behaviour of a complex social (human) system”. These 10 principles are connectivity and interdependence, co-evolution, far-from-equilibrium, historicity and time, space of possibilities, feedback, path-dependence, self-organisation, emergence and the creation of new order. Through considering organisations as complex systems in their own right, Mitleton-Kelly’s (2003b:43) principles are viewed as ‘transitional objects’ that “help the transition in our thinking when faced with new or difficult ideas or concepts”.

In this research there are several open systems interacting with each other, all having a degree of influence over the development of WIL in HRM degrees in Australian universities. WIL in HRM is embedded within the CES of a university which is in turn part of a larger ecosystem (see Figure 5.1). Each individual university that participated in this research has as part of its environment other universities of the same and different kind. Figure 5.3

presents the larger social ecosystem of WIL in HRM degrees of which an individual university is located in the centre. This is a representation of how each individual university in the Australian higher education sector interacts and operates within its environment. Therefore, based on the above articulation, each of the nine participating universities are individual systems co-evolving within the larger social ecosystem. Although there are individualities that characterise each university, overall there is sufficient homogeneity in the evolution of the participating universities to argue they be viewed as a subset. Through Mitleton-Kelly's framework which emphasises the co-creation of enabling environments, an analysis of the interacting and interdependent elements within the larger ecosystem of WIL and HRM is provided. It is important to note that "complex characteristics tend to be scale invariant and could apply at all scales from an individual to a whole system as well as to systems at different scales" (Mitleton-Kelly 2003b:44). This will be addressed throughout the chapter's analysis through consideration of the 10 principles at different levels such as stakeholder group, university or organisation level and at the level of the external environment.

Mitleton-Kelly (2003b:40) argues that through enabling and encouraging appropriate social-cultural and technical conditions, new ways of working and relating are facilitated. If organisational design teams were to allow "new patterns of relationships and ways of working to emerge, new forms of organisation may arise that would be unique and perhaps not susceptible to copying" (Mitleton-Kelly 2003b:52). This would mean that these new forms, being unique and not reproducible, "may be more robust and sustainable in competitive environments" (Mitleton-Kelly 2003b:52). This argument for enabling appropriate conditions is carried throughout this chapter through the analysis of the data using her principles.

5.3 Connectivity and interdependence

Connectivity and interdependence must be understood for a CES to be successful (Mitleton-Kelly 2003a). Connectivity and interdependence in a human CES such as a university can be analysed by studying the interconnectivity of the individuals within the system, and the relatedness between the CES and its environment. In order to answer the research questions posed, the CES (university) of which WIL programs in HRM are developed is explored. The mental models critically analysed in terms of connectivity and interdependence have the capacity to influence stakeholder actions in the development of WIL programs in HRM. Therefore, levels of connectivity and interdependence are identified across and between stakeholder groups. It is argued that views about what should be considered WIL, what is employability or an employable graduate, as well as views about graduate attributes, and the role of the university dramatically affect how a university course is shaped and delivered.

5.3.1 Inter-relatedness of individuals within a system

In this research each of the sampled universities are a CES of which WIL programs in HRM are developed. Therefore, to assess the interrelatedness of individuals within the system the inter-relatedness of the four stakeholder groups is explored. Figure 5.1 represents what is examined in terms of the inter-relatedness of individuals within the system.

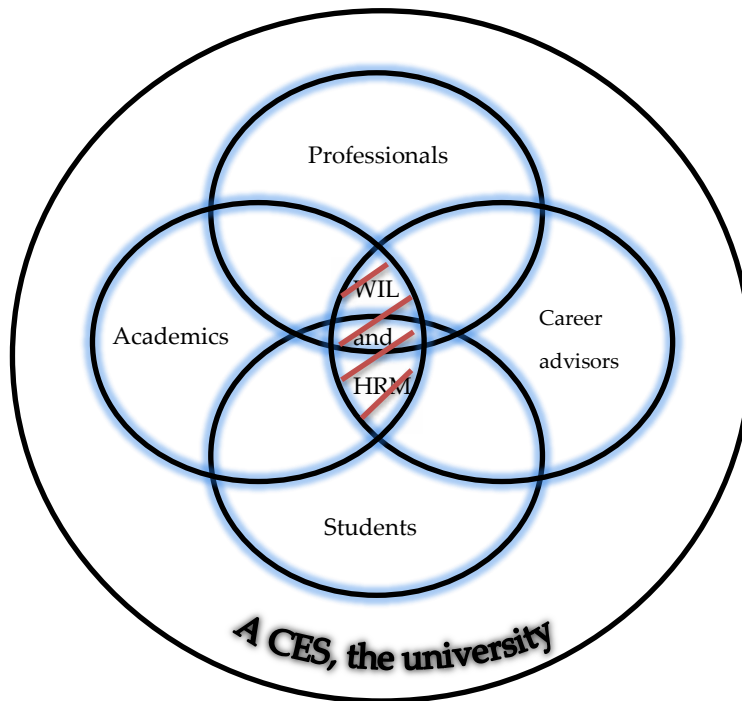


Figure 5.1 Inter-relatedness of individuals within the system

The inner ellipse or lined area presented in Figure 5.1 above is the focal point of this research. Through studying this area the mental models about the development of WIL programs in HRM degrees were revealed. The inter-relatedness of stakeholders in terms of their mental models is analysed beginning with WIL and including graduate attributes and employability.

5.3.1.1 Work-Integrated Learning

Within the stakeholder mental model models describing WIL there are several different levels of connectivity. A comparison of mental models across stakeholder groups reveals that the stakeholders are highly connected in terms of understanding and describing WIL. This is evident through the emergence of two common views of WIL; a broad approach to learning and

teaching, and curriculum- based placements. This aligns with the definition of WIL offered by Patrick et al. (2008:iv) where WIL programs are viewed as a range of approaches designed within the curriculum that integrate theory and the workplace. Additionally, the stakeholders' understandings of WIL also align with the categorisation of WIL offered by UK authors Knight and Yorke (2004) (refer to Figure 4.1).

The inter-relatedness between stakeholder groups is also observed through the shared acknowledgement of the value of curriculum- based placements to students enrolled in HRM degrees. Across stakeholder groups it was articulated that curriculum-based placements are less commonly offered in HRM in comparison to other disciplines. This was argued to be the result of the complex nature of the HRM profession. As such the stakeholders of this research recommend expectations between participating parties be made clear, and the careful consideration of developmental issues such as privacy, when designing WIL activities so that curriculum-based placements in HRM may be increased. In addition to this recommendation, it was found that five out of eight student participants of this research sought internships or work experience external to the university curriculum as a result of there being a lack of curriculum- based placements being offered. These strong recommendations made by stakeholders and the initiative of HRM students to voluntarily find work experiences emphasise the shared understanding of the value of curriculum-based placements in the HRM curriculum. In essence, these arguments reveal a level of high connectivity across all stakeholder groups' mental models in the sense that WIL in terms of the curriculum-based placement model is viewed as significantly important for HRM students.

Complexity theory does not always encourage high connectivity. This is because "high connectivity implies a high degree of interdependence" and a

high degree of interdependence between related systems may result in worsening conditions for the entire ecosystem (Mitleton-Kelly 2003b:44). This means that greater the interdependence between related systems and or individuals the greater the influence a move or action by one entity will have on the other, and this may not always produce a positive outcome. However, the high connectivity exhibited between stakeholders when describing WIL in this research should be viewed as a positive connection. This is because a common understanding of WIL assures that when a WIL program and or unit is being developed each of the stakeholders' have a shared understanding of the program they are developing. Bennett's (2009) research supports this shared articulation of WIL as when an understanding does not exist confusion occurs. This may therefore mean that all parties are working towards the same goal. Additionally, the high connectivity evidenced through the shared view of curriculum- based placements having significant value in the HRM curriculum, implies that the stakeholders have a preferred structure for the development of a WIL unit into HRM degrees. The acceptance of a preferred structure and a shared understanding of WIL among stakeholders will be beneficial for the future development of WIL activities as it means the individual are highly connected and open to collaboration. The connectivity between stakeholder mental models about graduate attributes is discussed following.

5.3.1.2 *Graduate attributes*

The literature review (2.4) established that graduate attributes are university statements which list outcomes or skills that students attending that particular university are exposed to, and encouraged to develop throughout their degree. It was also discussed in the literature review that research has found graduate attributes to be understood differently by different people (Barrie 2006). Barrie's (2003, 2006) research was conducted with academics.

This research supports and expands his work by including three other stakeholder groups, students, professionals and careers advisors and finding that the mental models about graduate attributes across all stakeholder groups are different.

The stakeholders' mental models describing graduate attributes when compared do not exhibit a common view. The careers, academics and professionals each expressed varying views about graduate attributes, while the students' alarmingly stated that they had not heard of graduate attributes or did not understand them. This shows that in regards to understanding graduate attributes the stakeholders are not highly connected. It could be suggested that the varying understandings and disconnect among the first three stakeholders (careers advisors, academics and professionals) in regards to graduate attributes could be having a negative effect on the students perceptions of graduate attributes. This is because the careers advisors, academics and professionals are those that have some role in the development, design and delivery of graduate attributes. Therefore, a varied understanding among these stakeholders may be causing the confusion perceived by students.

Although previous research would suggest that different understandings of graduate attributes are expected, the different mental models about graduate attributes were an unexpected finding in this research. Graduate attributes are considered to play the role of informing curriculum design and provision of learning experiences at university (Barrie, Hughes & Smith 2009). This includes the design and provision of WIL activities. Additionally, it has been stated that WIL is a vehicle for graduate attributes and employability (McIlveen et al. 2008; Smith et al. 2009). It was predicted that because a shared understanding of WIL across stakeholder groups was evident, the mental models about graduate attributes which underpin the development

of WIL activities would also exhibit a common understanding. It was found however that each stakeholder group in one way or another recommended the improvement or re- development of graduate attributes so that they become less ambiguous and are more relevant and practical for students. This demonstrates that although there is no connection between the stakeholder groups' views in relation to describing graduate attributes, they are highly connected in that they have expressed a concern for their current development, and in recommending they be improved in the future.

5.3.1.3 Employability

Through a comparison of the stakeholders' mental models about employability the careers advisors, academics and professional display high connectivity. In general careers, academics and professional participants defined employability as the possession of a specific set of soft skills such as a positive attitude, good communication, networking and team work. On the other hand, students have different and varying mental models about employability. This indicates a level of disconnect not only within the student stakeholder group, but also between the students and the other three stakeholder groups when it comes to understanding employability. As previously discussed, this level of disconnect was also apparent when it came to defining and determining the relevance of graduate attributes to enhancing students learning. The student group in this instance lacked awareness of the graduate attributes and expressed that they were vague and not relevant.

In brief, the stakeholders within the CES are highly connected in terms of conceptualising WIL and understanding its value in HRM degrees, however there is a level of disconnect evident in regards to their mental models of graduate attributes and employability. This disconnect provides an understanding about why there are a range of WIL programs beings offered

in the teaching of HRM undergraduates. This is because WIL has been stated as being a vehicle for graduate attributes and employability (McIlveen et al. 2008; Smith et al. 2009). Therefore, if graduate attributes along with employability are viewed differently by each stakeholder group, the actions or decisions when developing WIL programs will be varied, thus leading to alternative models and or programs of WIL being developed in HRM degrees. The implications of having a range is addressed in section 5.5 following.

5.3.2 Relatedness between human social systems

Another component of assessing connectivity is the relatedness between human social systems. This means to address the relatedness between the university and its environment. In this research the relatedness between the sampled universities and the environment is explored. This includes the human social systems of the Australian Government, the community and industry and the higher education sector. Figure 5.2 represents the human social systems that will be examined for relatedness.

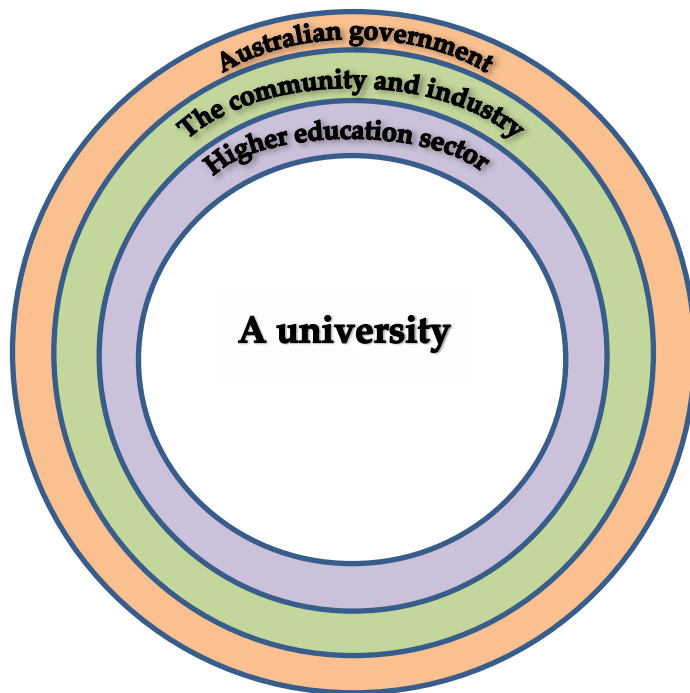


Figure 5.2 Relatedness between human social systems

There is a strong connection between the related human social systems of universities, the higher education sector, industry and the Australian Government. The Australian higher education sector is managed by both national and state Government policy, while "...Australian universities have the authority to accredit their courses and are also responsible for their academic and quality assurance standards" (Pont, Figueroa, Zapata, Fraccola & Yelland 2013:14). Therefore, universities have to adhere to specific standards in order to be eligible for funding (Higher Education Support Act 2003, recently amended to the Higher Education Support Amendment Act 2013) and are managed by threshold standards overseen by the Government agency, Tertiary Education Quality Standards Agency (TEQSA). This relationship between the Government and Australian universities displays a high level of connectivity and interdependence between the related systems.

However, high connectivity and high interdependence do not always lead to positive outcomes. Mittleton-Kelly (2003b) states that high connectivity and high interdependence between related systems leaves the entire system open to wider ripples of disturbance, as when one entity makes a move this affects all other related entities. For example the recently enacted Australian Federal Government legislation (Higher Education Support Amendment Act 2013) prompting student centred funding, along with the ambition to increase the educational attainment of the population, places emphasis on universities to find new ways to be competitive in the now consumer driven market (Ernst & Young 2011). This will affect universities by increasing student enrolments, and by giving students more flexibility in university choice. Therefore, universities will need to be more flexible and sensitive to the needs and wants of students when designing and developing their programs.

Australia's higher education system is also highly connected with society by contributing to the future of the nation's prosperity. This is achieved through a strong value for learning, and promotion of the pursuit and transmission of knowledge, by enriching individuals so that they may maximise their potential "both in a personal sense and in terms of their capacity to make a productive contribution to society" (Nelson 2002:1). This close connection with the community also suggests a level of high interdependence between the higher education system and society. This will mean that when one system (higher education sector or community) takes action, this will affect the other closely connected entity (higher education sector and community).

Through viewing the Australian higher education system as a closely connected system that provides for the future of society, as suggested above, can have both positive and negative repercussions. For example, the reliance of society on the quality of education offered in universities, places an emphasis on the need for funding and training, as well as the assurance that

universities are providing quality education. This interdependence flows on to the connection at the level of universities and Government, as in order to contribute to the fulfilment of human and social potential, Government funding and policies are needed for assessing academic quality standards. Academic 7 explains below the connectivity between universities and the community in a discussion about graduate attributes.

These are the ways you will think about life and the universe, and the way to be part of a successful part of your work environment and your social environment and your community environment as a successful outcome from your university experiences¹¹⁴

It is argued that the CES (sampled universities), which is part of and participates in the wider higher education sector, is highly connected with the Australian Government and the community. The strong connection implies a high interdependence, thus making it easier for information and knowledge to flow between these related human social systems. However, this interdependence also causes the entire system to become vulnerable, as when one related system makes a move all other systems are affected.

5.3.3 Summary

It has been suggested that WIL offers universities the opportunity for staff to collaborate, and share knowledge and experience across disciplines (Brown 2010). However, the sampled universities of which WIL programs in HRM are developed and implemented exhibits varying levels of connectivity and interdependence. On one level the inter-relatedness of the stakeholders within the system demonstrates coherence when conceptualising WIL, however in terms of graduate attributes and employability there is substantial disconnect in the stakeholders' mental models. In contrast, when

¹¹⁴ Interview with A7

assessing the relatedness between the human social systems, the environment surrounding the CES, high connectivity and interdependence were evident. This high connectivity could leave the system open to wider ripples of perturbation, as when one entity makes a move; all other related entities are affected.

On the whole, through assessing the connectivity and interdependence of the data in this research it is evident that at the level of the university, and the stakeholders within the university, there are varying levels of connectivity. Externally there is a strong base of connectivity between the human social systems in the university's operating environment. This varying level of connectivity and interdependence provides an explanation of why there is a range of WIL programs being offered in the teaching of HRM undergraduates. This is because varying levels of connectivity evident within the CES suggests that the stakeholders are operating in different ways, thereby increasing variety in WIL activities being developed. In addition to this, the strong interdependence identified by stakeholders between related systems denotes that when different models of WIL are developed by the university the related systems may be affected. The implications of this relationship are discussed in the next section, where it will be determined whether the co-evolution of the entire ecosystem of WIL in HRM is occurring within the CES, and between the university and the external environment.

5.4 Co-evolution

Mitleton-Kelly (2003b) refers to the work of Kaufman (1993) to describe and analyse organisations in terms of an ecosystem. In this sense organisations are viewed in terms of organisms that evolve or adapt with, or to, the other organisms that are part of its environment. Mitleton-Kelly (2003b:48) states that "An ecosystem is defined by the interdependence of all entities within it" and that "the notion of ecosystem applies both within the organisation

and to the broader environment, which includes the organisation under study". In application of the notion of ecosystem to this research, each of the sampled universities are considered an ecosystem as well as the combination of each of the universities with the broader environment. It is within these social ecosystems that co-evolution can take place. Co-evolution is considered in this research in order to highlight the evolving nature of universities. In applying the concept to the findings of this research the way in which universities are influenced, and influences all other entities within the social ecosystem is assessed. This furthers our understanding of the development of a range of WIL programs in HRM.

Co-evolution is the way in which "each element influences and is influenced by all other related elements in an ecosystem" (Mitleton-Kelly 2003b:46). Co-evolution must be facilitated within an ecosystem so that processes and systems do not "...become legacy in a sense that they are what has been 'left over'" (Mitleton-Kelly 2003a:4). To describe coevolution Kauffman and Johnsen (1991:468) use the example of a frog and fly where "...the development of a sticky tongue by the frog alters the fitness of the fly, and what changes it must now make to increase its fitness: given the frogs sticky tongue, the fly should now develop slippery feet". In this research the actions, reactions and the intricate web of relationships both within the stakeholder groups and across the external environment were studied closely. This was done in order to understand the influences of each entity on one another. Figure 5.3 illustrates the large social ecosystem that WIL programs in HRM degrees are developed. Fundamentally, it demonstrates that the university, a public entity with all its processes and stakeholders, operates within a much larger social ecosystem. In Australia universities work within and with the community and industry, the higher education

sector, and the Australian Government, thus influence and are influenced by that environment in one great reciprocal process.

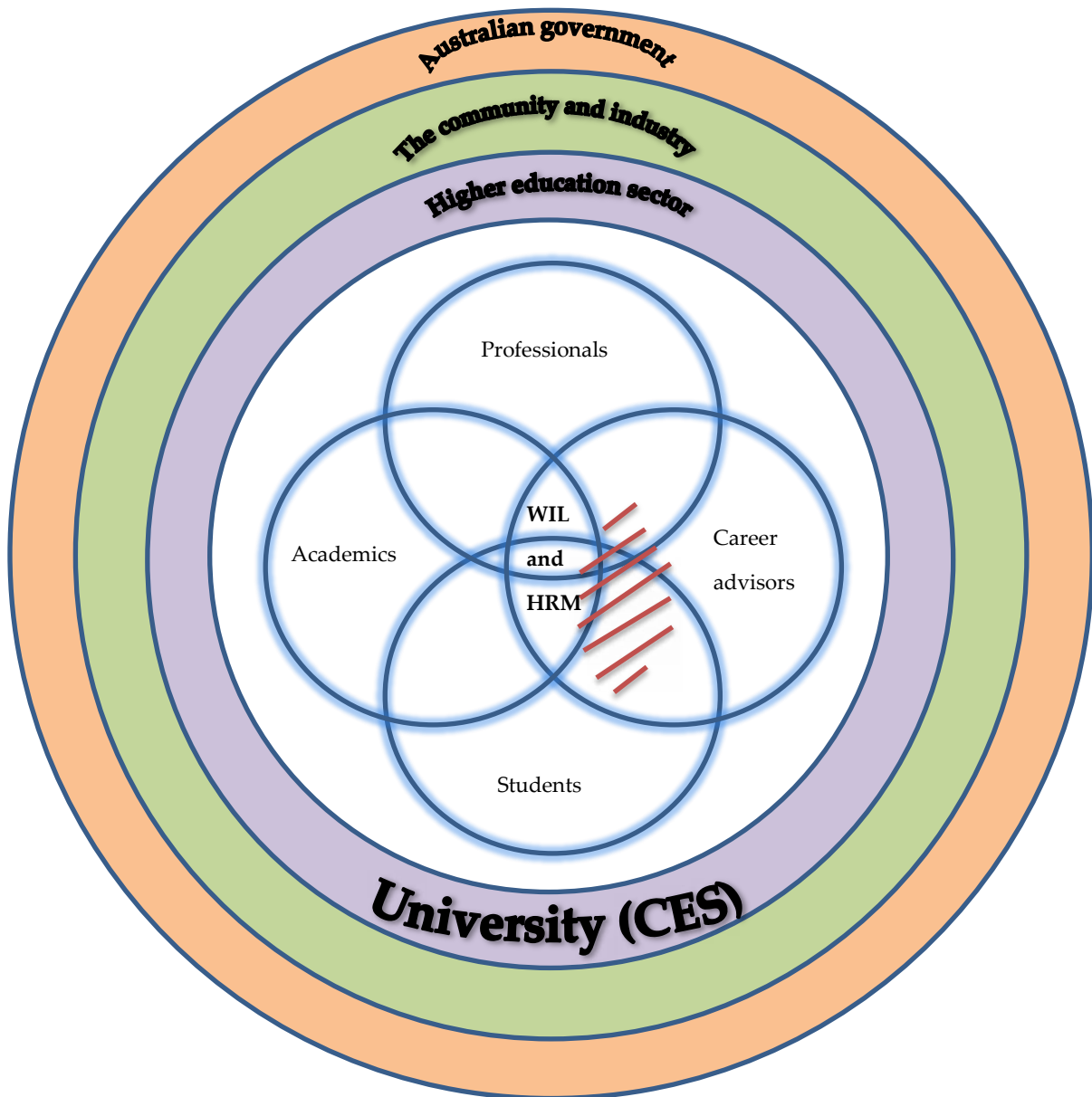


Figure 5.3 The human social ecosystem of WIL and HRM

Co-evolution affects both individuals, and systems, and can occur at many different levels of the ecosystem. This means that co-evolution can affect both stakeholder groups within the CES, and between the university and the external environment. Co-evolution can also depend on the level of connectivity and interdependence. In this research, co-evolution is examined at two levels, within the social system of the sampled universities (endogenous co-evolution) and in terms of the interactions and interdependencies between the universities and their wider operating environment (exogenous co-evolution). These two types of evolution do not necessarily occur separately, “as the endogenous and exogenous processes are necessarily interlinked, and the boundaries between the organisation and its ‘environment’ may not be clear cut and stable” (Mitleton-Kelly 2003b:48).

Exogenous co-evolution is examined by viewing the interactions between the university and the broader ecosystem. The Australian Federal Government has and continues to have influence over the higher education sector. This influence has been in the form of new funding legislation (Higher Education Support Amendment Act 2013) and through the development and management of policies such as the Australian Qualifications Framework, the Employability Skills Framework, and the new appointed Government agency TEQSA. These policies can be viewed as drivers of change for university curriculum including the increased development of WIL activities in disciplines such as Business and HRM. Ernst and Young (2011:6) have identified these drivers of change as the ‘democratisation of knowledge and access’ and, ‘the contestability of markets and funding’ arguing that these key drivers will transform the higher education sector.

The community and industry expectations of universities are evolving. With increased market and talent mobility, along with advances in technology, the labour market and education market are becoming more competitive (Ernst

& Young 2011). This is placing extra pressure on universities to conform to the needs and wants of the labour market in which students are now conceived as 'paying customers' (Star & Hammer 2008). Australian businesses aspire to be innovative and sustainable organisations, thereby demanding graduates who have the necessary technical, and non-technical skills to understand the dynamics of the workplace and engage with the organisation and its goals (Cleary et al. 2007). In addition to the demand for work ready graduates, it was found (section 4.5) that the purpose for attending university is changing, university is now considered an extension of high school (C8), and that current generation Y is considering the views of their parents when deciding to attend university (A2). Several other participants (A4, A6, A8, S1, and S5) support these arguments. Consequentially, industry and community expectations are influencing universities to adapt their learning and teaching practices.

As the higher education sector transforms, "universities will need to build significantly deeper relationships with industry..." so as to gain a competitive advantage in the now increasingly globally mobile and volatile market (Ernst & Young 2011:11). This increase of industry based learning (WIL) is a result of the moves of the Australian Government and Australian community and industry influences and strong connection with the university and the higher education sector. Jackson & Chapman (2012) describe succinctly this interdependent relationship between curriculum development in higher education and industry as largely reactive. They state that "Industry actively dictates required graduate outcomes to universities through professional association accreditation criteria and, in Australia, the development of learning and teaching academic standards for undergraduate programs"(ALTC 2009 in Jackson & Chapman 2012:109). As a result of the needs of the external environment of the Government, and the

community including industry peak bodies in the higher education sector, universities are being forced to adapt their current courses to the new demands. Therefore, it could be argued that as a result of the Australian Government policy changes such as the student centred funding system, universities are using WIL activities as a way of differentiating themselves (Patrick et al. 2008). In addition to this, WIL activities have been suggested as being able to provide a best product that students will connect with and appreciate as a payoff for their investment in money and time to enhance their future careers prospects (Abeysekera 2006).

The result of this increased interest in developing curriculum-based placements is that employers are being inundated by universities pursuing host organisations for work experiences. Academic 11 and 12 put this difficulty into perspective:

“How do you find places for so many students... in this faculty alone that is my responsibility and I have 2500 students each year, now that means that 2500 students each year I have to find placements for”¹¹⁵.

“...we have suddenly gone from Work-Integrated Learning being sort of boutique or sort of in or sort of really hidden or only in certain pockets in universities and suddenly we have gone to an enterprise model where every university in the country wants to have this big push for work integrated learning...”¹¹⁶

Consequentially, some academics have stated that they have adapted their WIL courses and developed alternative WIL models. Academic 11 states:

¹¹⁵ Interview with A11

¹¹⁶ Interview with A12

“They [university] are not going to throw any resources at it. So what I have done then to be creative, I have said I cannot sustain this model the way it is running so let me think of more creative ways of having a community engagement type of activity built into the units where the community comes here instead of sending the kids out.”¹¹⁷

This strategy is in response to the increased size of student cohorts, the limited resources available, including the lack of businesses willing to host students in their organisation and the need to remain competitive within the higher education market. However, alternative models of WIL have been suggested to be problematic. According to academics 11 and 12 alternative models of WIL are less beneficial to the students learning experience.

“So it’s a creative way of solving my numbers problem without being resourced, but to me it’s watering down the intent of Work-Integrated Learning, but I have had to do a work around because I am not getting resourced”¹¹⁸.

“...there has suddenly been a massive interest in it and I think a very quick push to put things into place so I think it has good intentions but my worry is in the rush to implement things people might not be designing it to its fullest potential for the student experience”¹¹⁹.

“I know there are a lot of academics that are trying to design it very thoughtfully and to think about the repercussions and the context and so forth but there is the pressure to just push these WIL components out so I

¹¹⁷ Interview with A11

¹¹⁸ Interview with A11

¹¹⁹ Interview with A12

think a course shouldn't have WIL for the sake of having WIL, it should only have WIL to enhance the student experience"¹²⁰.

Academics 11 and 12 are suggesting that some alternative WIL activities do not carry the same benefits that curriculum-based placements claim to provide.

As this is a co-evolving exogenous system, there will be implications for the development of less beneficial forms of WIL. It is suggested that the alternative less beneficial forms of WIL that do not provide a placement and or community engagement project will affect enrolment numbers for that university. For example a combination of the student centred funding system that gives increased power in university choice for students and the alternative 'watered down' (A11) subjects being offered by a particular university may negatively affect that particular university's competitiveness.

Co-evolution can also depend on the level of connectivity and interdependence within the ecosystem. In this research, endogenous co-evolution is in reference to the co-evolution of the individuals and groups within the CES. Through the evaluation of the connectivity and interdependence of the four stakeholder groups it was found that there are varying mental models about WIL in HRM. The stakeholders were found to be highly connected in terms of conceptualising WIL and understanding its value in HRM degrees, however a level of disconnect was evident in terms of describing graduate attributes and employability. This suggests that the stakeholders within the social system of the university are not co-evolving in the sense that their mental models exhibit a disconnection. This is problematic as co-evolution within an ecosystem must be facilitated so that processes and systems do not become legacy. Therefore, connectivity within

¹²⁰ Interview with A12

the university needs to be fostered. This is important for the process of developing WIL activities into the HRM curriculum, as it is a new endeavour and any processes and or developed systems for doing so should be valued. The benefit of this will be that the relationship between the stakeholders will become stronger so as when teams learn to operate more efficiently this can be disseminated throughout the entire system, thus improving the overall performance of the larger ecosystem.

Co-evolution can become a reactive process and change its emphasis from 'co-evolution with' to 'adaption to' a changing environment (Mitleton-Kelly 2003a). When viewing change as 'adaption to' emphasis is placed on the CES and the environment being viewed as separate entities, thus strategy is viewed as response to the changing environment (Mitleton-Kelly 2003a). In this research change is viewed as an adaption to the changing environment. This is evident through the participants' mental models. Additionally, the co-evolving nature of the exogenous system is reactive, thus the moves by the university are an adaption to the changing environment. Academic 2 describe a sequence of events that has led to the adaption of the 'strategy' of WIL in their particular university as a result of external changes in the environment.

If we want to get to the crux of the issue, lifting the cap on uni [sic] places is why everyone's rushing towards work integrated learning. It's a strategy. Global financial crisis, young people and their parents are shaking in their boots, there's now a trend back to more conservative degree selection. If you look at trending they are going back to the basics. A colleague of mine explained it to us in the faculty the other day that if you are in the business of left handed basket weaving you are not going to have students anymore. They are going to come back to the core disciplines where they feel assured that they will achieve work. Therefore, parents are evaluating this when they

*are guiding their children on their career choice. The students themselves are looking around and thinking ok what lifestyle can I achieve? Most people are starting to say do I get a job at the end. When I went to uni [sic] I didn't ask that.*¹²¹

The connectivity within the university needs to be fostered, and the emphasis of the changes being made between related entities and within the university needs to change from 'adaption to' to 'co-evolution with'. Through the fostering of stronger connections within the CES, the relationships between the stakeholders will develop. As a result of the development of relationships between stakeholders across disciplines, team collaboration and sharing of ideas can occur, which may mean that the challenges identified by stakeholders will be lessened. In addition, when the connectivity within the system increases, more sustainable models of WIL may be developed through input from all the stakeholders. This would mean that students will benefit from having quality WIL models being offered in the teaching of HRM. Additionally, when the emphasis is placed on co-evolution with, the perspectives and the assumptions that underlie much traditional management and system theories may change (Mitleton-Kelly 2003b). This would be beneficial for the university system as it was identified by many of the participants that bureaucracy and the traditional management structure of the university is having an impact of the evolution of the courses being developed. Academic 1 notes:

*What happens is that we [universities] still continue on with these traditions but as the numbers grow and as certain bureaucracies kick in, what I experience anyway is we [academics] are always blocked*¹²²

¹²¹ Interview with A2

¹²² Interview with A1

To conclude, it is evident that the changes happening at the level of the university is a short term adaption to the environment. Long term co-evolution will only occur when the connectivity within and between stakeholder groups increases so that they may work together to produce the optimal outcome for all parties. This includes influencing the positive co-evolution of the ecosystem of WIL in HRM. Therefore, in order for the ecosystem of WIL to co-evolve, become fitter and more sustainable connectivity needs to be encouraged so that systems and procedures do not get left behind. The concept of co-evolution considers the internal and external influences on the university. The following concept, far-from-equilibrium, will address the university's established ways of working and its capacity for maximising potentiality for success.

5.5 Far-from-equilibrium

The foregoing chapters argue that there are varying levels of connectivity and interdependence within the university but a strong connection between the university and its external environment. Through adapting to changes in the external environment, the system presents itself as not co-evolving with its environment. The impact of this level of connectivity and co-evolution emphasis on the whole larger ecosystem is now addressed. The stabilising and destabilising properties of the ecosystem will be discussed, as they further influence the complex behaviour within the CES. The concept is addressed in this research in order to understand how WIL programs in HRM are being developed, and whether universities are maximising their potential for success.

When an organisation is pushed far from its established ways of working by an external constraint (for example Government policy or industry demand), it reaches a point where the organisation can maximise its potential by being open to exploring new structures and ways of working. In an open system

information is exchanged with the environment. In this process the system may be pushed far-from-equilibrium by an external constraint or perturbation. Far-from-equilibrium refers to the point in an open system where the system is pushed far from its stable state or established norms where new structures and order are created (Mitleton-Kelly 2003b). Throughout this process several distinctive properties of a complex system ensue. When the external constraint puts pressure on the system, the system spontaneously self-organises into right or left handed ways of operating. From this chaos “the system has emerged as a higher level system with order and structure” (Mitleton-Kelly 2003b:49). Although we know that the external constraint will instigate the change, the direction of which the system self-organises is unpredictable and uncontrollable (Mitleton-Kelly 2003b). Therefore many possible solutions can occur. When the individual elements of the system interact and behave in a coherent manner, this is exemplary of emergent behaviour. This emergent behaviour where micro level elements of the system have interacted in a coherent manner, to create new order, is a distinctive feature of a complex system.

It was established in section 5.4 that the emphasis of the co-evolving ecosystem of WIL programs in HRM is of ‘adaption to’ the exogenous (external) environment. It was also discussed that Australian Federal Government legislation, community and industry expectations, and the competitiveness of the higher education sector, along with the increase in globalisation and technology, are having an impact on the types of courses being developed by universities, including the increased development of WIL placements in disciplines such as HRM. In this regard, WIL is the result of the university being forced on to the edge, the far-from-equilibrium state where the constraint applied is the exogenous environment. The co-evolving external environment has increased the interest of the development of WIL

broader than the traditional disciplines in which WIL is an established part of the curriculum (nursing, engineering, midwifery and teaching) (McLennan & Keating 2008). Fundamentally, universities are being forced to adapt to the changing external environment by finding new ways of operating.

The way in which the external constraint creates new order is unpredictable and uncontrollable. This is because the external constraint instigates the change, and within the university self-organisation occurs. Self-organisation happens when a change pushes the system (university) into chaos and the individual elements within the system behave in a coherent manner to create new order. In this regard, self-organisation can be described as the coming together of a group of individuals to complete a task where they decide what to do, and when to do it, and no one external to the group has influence over the task (Mitleton-Kelly 2003b). In this research self-organisation between individuals within the different departments of each university and through the coming together of external advisory committees has resulted in the development of WIL related subjects. This self-organisation is evident through the discussions of the WIL HRM related subject that has been developed in a university. For example academic 11 states:

So we have a marketing manager, a business development manager, there is me who is participation manager [academic] and then I have a faculty manager, so between the 4 of us we are always looking for opportunities and we will help each other and sometimes we go to a meeting altogether, or we go to separate meetings and we feed the information through to each other, so there is a lot of other things that come good from that one interaction between us. ¹²³

¹²³ Interview with A11

The example given above describes the coming together of a group of individuals from within the university that have organised to share information and ideas on exciting opportunities for course development. This is different to External advisory committees. External Advisory Committees are a standard operation in developing courses, and therefore not self-organising in the sense that they are a requirement for university course development. External advisory committees are discussed further in section 5.9. Ultimately, in academic 11's quote above, the micro level elements of the system (stakeholders) have interacted in a coherent manner within their respective university to create new order in the form of HRM WIL related subject unique to that university. This demonstrates not only self-organisation within each participating university (complex evolving system) but also emergent behaviour, a distinctive feature of a complex evolving system.

Simultaneously, the increased pressure to develop and implement WIL into all education areas in universities is forcing the system to operate far-from-equilibrium. Mitleton-Kelly (2003b:51) states that "when a social entity (individual, group, organisation, industry, economy, country) is faced with a constraint, it finds new ways of operating, because far-from-equilibrium (established norms) systems are forced to experiment and explore their space of possibilities, and this exploration helps them discover and create new patterns of relationships and different structures". It is on the edge far-from-equilibrium that self-organisation and emergence can occur. A robust organisation is argued to have a high degree of self-organisation, and is comfortable with the uncertainty which emerges from the self-organisation within the organisation (Mitleton-Kelly 2003b). In essence, "It (a robust organisation) can live with this type of uncertainty and does not find it threatening" (Mitleton-Kelly 2003a:3).

Through applying the concept far-from-equilibrium in this research, it is observed that Kuhn's (2009) complexity metaphor edge of chaos- chaotic edge applies. Traditionally, the edge of chaos in complexity literature is described as the point in an organisation where complex self- organising systems support organisational adjustment and development, thus viewing their environment full of potential (Kuhn 2009; Lewin 1999). However Kuhn, Woog and Hodgson (2003) have found it useful to discern an edge of chaos attitude from chaotic edge thinking. Chaotic edge thinking describes a situation where people being at the edge of chaos can feel they are in a potentially dangerous and anxiety provoking situation (Kuhn 2009). The careers advisors, professionals and student stakeholder groups view WIL as being "full of potential". They are comfortable with the uncertainty that is being experience by universities as a result of the increased development and implementation of WIL in universities, thereby supporting the far-from-equilibrium state that universities are operating in. Careers advisor 8, student 3, and professional 8 note:

The benefit of WIL is gaining practical experience so that it is an opportunity for them [students] to practice what they have learned in real life... but a bigger thing for me is actually to just go into the unknown, uncertainties, so sometimes students will ask a lot of questions all about trying to make sure things are going this way or that and I try to turn them around and tell them there are going to be a lot of uncertainties you face in life and you can either be scared or you can embrace it... try to embrace uncertainty because then you will feel a greater sense of control. ¹²⁴

I think that you gain personal value out of it. Not the fact that by learning this you will be able to get a better job... Just knowing that you understand

¹²⁴ Interview with C8

*the concept and you can integrate your learning. It's not just trying to find a job all the time. It's so much more.*¹²⁵

*The more you have been exposed to different elements, the wider your knowledge base is.*¹²⁶

These quotes are examples of how the careers advisors, students and professionals view WIL. It is clear that they view WIL as being full of potential in terms of the personal learning experiences you gain, the ability to be comfortable with uncertainty and change, and the opportunity for exposure to many different elements for learning.

Although most academics' view WIL as being full of potential, they also express through their mental models that WIL is a threat to the role of the university in the higher education sector. This chaotic edge thinking has "organisations perceiving themselves as being under threat from almost any change or perturbation and behaving in ways designed to minimise the threat of catastrophe"(Kuhn 2009:60). Academics identify that the system (university) is in a state of change as a result of the increased development and implementation of WIL more broadly in education. Academic 8 quotes:

*...students are there [at university] to learn how to work. They are not there just for a liberal education which might have been the rightful role of the university 40 years ago, but we have to get real. The same as we tell our customers to get real. The world has shifted.*¹²⁷

Generally, the academic stakeholder group discussions about the role of WIL express that WIL is having a negative impact on the role of the university as

¹²⁵ Interview with S3

¹²⁶ Interview with P8

¹²⁷ Interview with A8

an educational provider. As a result of the increased enactment of WIL within universities the role of universities in the higher education sector is threatened. Academics 4, 5 and 11 quote:

We're becoming more work focused and that makes us look more like a training institute¹²⁸

I think some people may perceive that if we're doing things like making students work ready then we're no longer a university, because universities are perceived as being thinking institutions. They are not designed. Most courses weren't designed to help people to be work ready.¹²⁹

Of course this is not the tradition [WIL activities]. Education is a very conservative industry. These sorts of changes would have an impact on self-seeking organisations like universities that do not wish to change too rapidly. This is too radical for them but quite beneficial to students, quite beneficial to industry.¹³⁰

I think universities have lost the reason that we were here for, we are here to be at the cutting edge of technology change or of innovations, well actually we are catching up if we are using the community to serve us, and I think that that's the role of TAFE or when we used to have the college, colleges of advanced education, maybe that where the vocational stuff is at, I don't know that it really does sit at university.¹³¹

These quotes express a negative view of WIL in universities. It is argued that a robust organisation embraces the potential in uncertainty and change, thus the perception of WIL as a threat expressed by academics will have an effect

¹²⁸ Interview with A4

¹²⁹ Interview with A4

¹³⁰ Interview with A5

¹³¹ Interview with A11

on the actions taken when operating far-from-equilibrium. The negative shared mental model about the role of WIL in universities will affect the system in that the stakeholders may resist the new ways of operating, and design ways of minimising the perceived threat. This is because the established norms and ways of operating are significantly stronger; therefore the system may remain stable and cease to explore its space of possibilities and operate far- from -equilibrium.

In summary, two far-from-equilibrium points have been identified and self-organisation within the system is enabling emergent behaviour. WIL is the result of the forces in the external environment influencing universities to operate far-from-equilibrium and consider new ways of operating, in order to satisfy and adapt to the changing expectations of the community. This point has influenced a second far-from-equilibrium point where WIL is pushing the system to explore the space of possibilities surrounding its traditional ways of doing things and role in the higher education sector. Universities will continue to operate far-from-equilibrium, embrace uncertainty and eventually learn to co-evolve with the changes in the external environment if the elements within the system continue to explore their space of possibilities. However, the second equilibrium point and the potential benefits derived from operating far-from-equilibrium are threatened by the negative discourse of the academic stakeholders'. It was established that the academic stakeholders' view WIL as a threat to the role of universities as higher education providers. The implication of this is that the negative discourse may stabilise the system and the full potential of the uncertainties brought by the implementation of WIL may never be realised.

5.6 Historicity and time

Historicity and time refers to the constraint of the person's current state and the state of the landscape the person occupies. Mitleton-Kelly (2003b:51)

states “In a social context, it is the series of critical decisions each individual takes from several possible alternatives that may determine a particular life path for that individual”. However, it is beyond the scope of this research to determine each person’s current state and past choices that have shaped that person’s life path. Therefore, the state of the landscape that the stakeholders occupy will be explored. This means the current state of the universities as perceived by the stakeholders in this research will be examined.

Academics’ mental models portray the landscape of the university as bureaucratic, rigid, competitive and inflexible. Academics 6 and 7 states that the higher education sector has always been competitive and that differentiation has, and will, continue to be a strategic direction for university course development. This includes the increased implementation of WIL into universities. Academic 7 quotes WIL is gradually being considered as a competitive advantage for some universities.

I think it always has [competitiveness influencing course design] because different universities have reputations for different things. Like I said before our university has a lot of students that come from families that don’t have any academic history, so we offer things that perhaps are a bit more practical or perhaps a bit more support in the academic skills areas. Whereas people who go to [University A] are likely to be doctors and lawyers and come from families full of doctors and lawyers, and they are coming from private schools mostly so there is a different market I think. I know that is why students have picked our IR degree in the past, because they got that practical opportunity so I think it is something that differentiates organisations or has the potential to.¹³²

¹³² Interview with A6

They will compete with each other. Come to [University A] or come to [University B]. Look what we do. We not only get you learning but we also give you some experiences in applying your learning. I think that the more universities will see themselves as having some advantage in that space the more likely they will see it having what you call a competitive advantage.¹³³

Academics 1 and 11 describe the landscape of the university as providing little or inadequate support for course development and lacking the financial flexibility to support new ways of operating such as WIL development.

No assistance, we had very little support from the college because the person running engagement was kind of doing a report for the two years they were employed in the job and that was it.¹³⁴

Yep well how can he throw resources at it, we are down on student numbers, our internationals are way down, they are down by 30%, and international is where this faculty survives so feeds the rest of the faculties, coz we are the cash cow so if that's down we lost 80 academics last year, 30 from science, we are losing 120 admin people at the end of this year so you tell me how can the VC then give money to this sort of initiative when you can't even run the basic needs of the university.¹³⁵

The university landscape has been described primarily as bureaucratic, rigid and traditional. Academic 1 describes the bureaucracy of the system as having restricted their choices for course design. In addition to this, academic 1 has stated that the rigid university environment is having an impact on how they interact and communicate with industry.

¹³³ Interview with A7

¹³⁴ Interview with A1

¹³⁵ Interview with A11

In all honesty constructing the degree in that way was a terrible idea. It wasn't my idea so I can say that. But whoever did construct it had no idea of the university's bureaucracy.¹³⁶

I couldn't call it an external advisory committee. I created an industry advisory panel. The advantage of actually having it as an industry advisory panel was that I didn't have to conform to the university's rules anymore. The rules that I had to have, this person and that person and all these other people didn't matter because it wasn't a formal external advisory committee. This was something I was doing for the benefit of the programme. I didn't have to have a host of representatives from academia.¹³⁷

The only way they knew to do it was to put it into graduate attributes and therefore at some point every course has to address it or else the course would not be approved. That's an institutional bureaucratic way of getting people to do something that we want our students to have.¹³⁸

Not only is the university landscape affecting course design and collaboration with industry, the university landscape is influencing the teaching practices of academics. Academic 8 and 11, and careers advisor 8 have suggested that it is also the expectations of the community and the Government in the landscape surrounding the university that is further influencing the decisions and new ways of operating. This point was addressed in section 5.4 where it is also argued that communities are expecting work-ready graduates and this is pushing undergraduate degrees to structure WIL programs into the curriculum against the traditionalism of academia.

¹³⁶ Interview with A1

¹³⁷ Interview with A1

¹³⁸ Interview with A1

If we're hoping to get good results and good learning from these students then we might have to artificially force that. We know there's a correlation between good performance and attending lectures, attending tutorials and readings. They're not going to do it through any self-motivation. 10% will. They're the ones that get the HDs... The rest of them are not going to do it because they're not self-motivate, they're not self-managing...We look at the current generation and say instant gratification, so great, if you want instant gratification we'll give you a mark every time you turn up to a tutorial.¹³⁹

Universities really have to think what we are here for... once again it is [University courses design] driven by Government agenda, by the year 2020 they want 60% of students from high school to have a degree, so that means 40% wont and that is wrong, that's not normal. So what is going to happen, we are dumbing down our degree. I have been here for 10 years and I have seen that, I have seen the students that used to come and what we have now and we are lowering our standards all the time. So whilst the published data may be 83 I see lots of transcripts with 60 on them.¹⁴⁰

Higher education to me, and time is changing so this could change to, but its more about critical thinking or theoretical orientations, challenging the status quo, so probably that's why people are trying to shift back to the more practical side but with the new generation coming to university I do not know if this is why they are coming to university, some people come to a university purely because everyone goes, everyone from school goes to university and it would be very strange not to go to university it's just like the extension of high school now and it is the extension of their prolonged youth, it is a lifestyle choice in a way rather than a job focus.¹⁴¹

¹³⁹ Interview with A8

¹⁴⁰ Interview with A11

¹⁴¹ Interview with C8

In summary, the current state of the university has been identified by the academic stakeholders' as bureaucratic, rigid, competitive and inflexible. They conclude that this is having an effect on course design and collaboration with industry. It was further established that the expectations of the community and the Government in the landscape surrounding the university are restricting the decisions and possible new ways of operating. As previously discussed (section 5.5), the concept far-from-equilibrium refers to the ability of the system to move far from established patterns of work or behaviour so that new ways of working can emerge. New ways of working are not guaranteed when the system begins to move far-from-equilibrium, as the current state of the landscape the system occupies can constrain the emergence of new ways of working. In essence, through consideration of the concept of historicity and time "New ways of working will be innovative if choice is allowed and the symmetry of established homogenous patterns is broken" (Mitleton-Kelly 2003b:52). This suggests that in this research, innovative ways of operating will be limited until the landscape of the university, allows or enables academics to break past the current bureaucratic, rigid, inflexible and restricting rules for operating. In regards to WIL development this may mean that more innovative ways of designing WIL activities will emerge once academics in charge with designing courses are given more flexibility and choice. Flexibility and choice in terms of the design and development of WIL is explored through considering the space of possibilities in the subsequent section.

5.7 Space of possibilities

In order for an organisation to thrive and survive complexity theory suggests exploring the space of possibilities by being open to trying many strategies (Mitleton-Kelly 2003b). Complexity also suggests that a single optimum

strategy is neither possible nor desirable as when the specific conditions from which that one strategy was thriving, changes, the strategy is no longer optimal (Mitleton-Kelly 2003b). Therefore, for an organisation to be sustainable it must continuously scan the landscape and try many different strategies, and consider having more than one strategy evolving simultaneously (Mitleton-Kelly 2003b). Having more than one strategy evolving at a time ensures that an organisation will be prepared and flexible when faced with an unstable and rapidly changing environment. In addition to this, exploring the space of possibilities by being open to trying many different strategies will support co-evolution with a changing ecosystem.

Although complexity suggests that exploring many strategies is optimal, it is not possible to consider all possibilities. It is therefore suggested to consider the 'adjacent possible'. The 'adjacent possible' principle considers one step away from what already exists, reorganising the already available resources in a new and novel way (Mitleton-Kelly 2003b). The benefit of considering the adjacent possible is that the possibilities are unlimited, because once the current adjacent possible has been realised, a new adjacent possible becomes feasible from the novel discoveries found in the former adjacent possible (Mitleton-Kelly 2003b). A discussion of the space of possibilities and adjacent possible that has already been explored by a participant in this research will now follow.

In this research some individuals within the participating universities have shown that they are exploring the space of possibilities by considering the adjacent possible. Faced with limited resources and institutional support, some academics have considered new ways of operating with the available resources they do have. For example academic 11 describes her struggle for resources including having to find WIL placements for her large cohort of 2500 students.

*2500 students each year I have to find placements for. It's not resourced...*¹⁴²

As a result of the lack of funding and support she receives from the university, she explores the adjacent possible. Through examining how the business school runs successfully, she designs a new unit with a WIL component that uses the already available resources.

*So what I have done then to be creative, I have said I cannot sustain this model the way it is running so let me think of more creative ways of having a community engagement type of activity built into the units where the community comes here instead of sending the kids out. The way the business school works is that we have 500 bums on seats and one lecturer so ok let's do that with community engagement and bring the community here and speak to 500 bums on seats, I have just managed to get this model through the senate here and I have converted over a couple of existing capstone units whereby we are bringing community panels here to discuss issues, real world issues, so if it's a marketing subject it's a marketing issue, and the students have to go away and solve the problem and then the community will give feedback so there's always got to be that mutual beneficial exchange.*¹⁴³

In another situation she has altered the above alternative model of bringing the community to the university by adding a tour of the particular organization prior to that organisation interaction at the university level.

For another subject what I have done is that we are actually going to take students into the city to go on a little tour of a Government agency and for the other 3 visits the community will come here and they will be not-for profit organisations, talking about issues and then students in groups have to solve

¹⁴² Interview with A11

¹⁴³ Interview with A11

the issue. So it's a creative way of solving my numbers problem without being resources.¹⁴⁴

Academic 11's consideration of the adjacent possible where the community comes to the university, has made a new adjacent possible feasible where the students experience a tour of the community organization as well as the community coming to the university for interaction. As previously stated, through considering the adjacent possible the possibilities are unlimited. Academic 11 further emphasizes this in her discussion below of a new adjacent possible that is currently under development.

So I have been pushing and pushing but the senate people won't let me have it, pushing for 100 level unit to go in to all degrees, as like a foundation subject, you know how you should do, but we don't have it here, you should do a business communication skills unit in first year, most other degrees do it but we don't and I have been arguing about that for about 5 years so now I am saying why don't we build in a type of careers unit where they actually perhaps have to go and interview a manager of a HR or manager of accounting or marketing [depending on their discipline] and they actually have to go and do some stuff that forces them to actually go and see what it is like in these areas and they can make a more informed choice when they get to second year when they have to pick their major, to me it's a no brainer.¹⁴⁵

This newer possibility that has emerged as a result of the former adjacent possible, has not been implemented. Academic 11 has expressed that this is a result of the university senate blocking this type of model. In consideration of the previous concept historicity and time (section 5.6), it is argued that the bureaucratic, rigid and inflexible nature of the university is hindering upon

¹⁴⁴ Interview with A11

¹⁴⁵ Interview with A11

the innovation of this new adjacent possible. If the historicity of the system continues to hinder upon the choices of the academics including exploring the space of possibilities in order to explore new WIL programs, the principle adjacent possible and the new discoveries that emerge from exploring the space of possibilities will never be fully realised. This implication of this is that the survival of the organization is threatened as it will no longer to explore its space of possibilities.

The above example represents one individual academics action in their respective university within the HRM degree in business. It shows that the adjacent possible is being considered. However, as no other participants in this research revealed they are exploring possibilities for new innovative WIL programs, it is argued that there is a need for universities to increase the flexibility and choice within the system so that academics can explore the space of possibilities for different strategies for WIL. More research should be done to determine how many other universities are considering or not considering the adjacent possible. This would provide guidance to those universities not exploring their space of possibilities on the benefits of doing so. Presently the participants in this research have identified one WIL unit within their university's HRM discipline that is currently being offered to students. Complexity theory suggests that having one optimum strategy is not desirable because it leaves the organisation open to an inflexible and inadaptible state when faced with change. Therefore it is suggested that more than one strategy of WIL will ensure that universities will thrive and survive within an unstable environment, such as, what they are currently faced with. This can be achieved through considering the adjacent possible. In essence, universities should consider using the already available resources to create new ways of providing WIL experiences that are sustainable.

5.8 Feedback process

Feedback is traditionally viewed in terms of input and outputs, and defined as “The return of a fraction of the output signal from one stage of a circuit... to the input of the same or a preceding stage... tending to increase or decrease, the amplification” (Oxford English Dictionary 2014). This traditional definition suggests feedback is viewed in terms of positive (reinforcing or increasing amplification) and negative (balancing) feedback mechanisms (Mitleton-Kelly 2003b). According to Mitleton-Kelly (2003b:15) feedback in a human social system can be viewed another way; as “positive (reinforcing) feedback which drives change, and negative (balancing, moderating, or dampening) feedback which maintains stability in a system”. Mitleton-Kelly (2003b) substitutes the traditional word mechanism from the original definition of feedback and uses the term feedback process to distinguish human systems from other complex social systems. Feedback processes are influenced by the degree of connectivity within the system, play a role in far-from-equilibrium conditions, and influence ecosystem structure and co-evolution. The level of positive and negative feedback currently present in the CES and the implications of the feedback processes are addressed in this section.

Positive feedback can include such things as a willingness to communicate, a growing level of trust between stakeholders, and evidence of a common language and mutual understanding (Mitleton-Kelly 2003b). These elements of positive feedback reinforce the changes that are happening within the CES of a university. Positive feedback in this research is evident through the mutual understanding of WIL across stakeholder groups and the commonly shared mental model of a lack of or limited resources available for both designing and delivering WIL activities. Specifically, it was stated by all stakeholder groups that finding placements or host organisations for

curriculum-based placement WIL activities is the most difficult challenge faced when implementing WIL (section 4.7).

Although this mutual understanding represents a positive feedback connection between stakeholders, there is a significant amount of evidence to suggest that negative feedback is maintaining stability within the CES. Negative feedback within the university is evident through the negative chaotic edge thinking identified where academics view WIL as a threat. For example discussed in section 5.5, academics 4, 5 and 11 use negative discourses to explain and describe each other's role as stakeholders in the process of WIL in HRM, and express that there is no purpose in academics researching and publishing new knowledge. Below academics 2 and 4 describe their mental models about the process of consulting with employers and organisations for the successful management of curriculum-based placement models of WIL. They have described employers as not being up to date with future needs of education, and lacking in commitment to work together with universities in developing work ready individuals.

Work-Integrated Learning is like a little, put it this way, if we were entirely driven by employers everyone would be 15 to 20 years behind. Employers don't even know what they need for the future.¹⁴⁶

I think there is a little bit of a general lack of commitment by organisations in general. I don't think it's just HR. To actually help and support universities to get students to be work ready. That they just want to take someone from the university who has graduated but they don't actually put anything back

¹⁴⁶ Interview with A2

*into the universities in terms of that help and support, the work placements, that type of thing.*¹⁴⁷

This negative language used by academics to describe the role of professional stakeholders' could be helping to maintain stability in the university in several ways. Firstly, stability is maintained through a restriction on the range of WIL models being developed because if it is viewed that employers are uncommitted and unwilling to participate in the development of WIL programs, then more on campus WIL models may be considered. The negative feedback is ensuring that the university's space of possibilities is not being explored, meaning that the system is equalised, and therefore not operating far-from-equilibrium. Secondly, the negative feedback exhibited in the academics statements may also be influencing their other mental models, including the challenges experienced when implementing WIL or vice versa. If the stakeholders view employers as uncommitted, unwilling to participate and work together to deliver WIL activities they will view host organisations as being unavailable, thus expressing a lack of resources being a challenge when implementing WIL. Academic 8 provide another example of negative feedback stabilising the system:

Our academics here don't want to acknowledge that [the need to change the way we educate people]. That's why they don't change their behaviours. That's why they are happy in their own little ruts. I think I've told you, I'll be publishing some papers this year and I say to my colleague let's research this and I say what for. Who is going to use it? Who wants to know? That's not the point. The point is publication. That's what we are here for is to publish. It doesn't matter who reads it or not. He's a lovely person and I love working with him but we have this distant review about it. I'm the

¹⁴⁷ Interview with A4

pragmatist. I'm saying what the hell are we doing this for? He's saying because this is what we do. We publish. See the publication is an end in itself for these people. It doesn't matter whether anyone reads it or not, except other academics.¹⁴⁸

The quote above describes how in the participant's particular university, academics view that traditional ways of doing things prevail. It is evident in this quote that this traditional way of operating is held deeply within the academics identity. Academic 8 has quoted a colleague expressing that what they do is a result of knowing it is 'what they are here for'. It is therefore no surprise that WIL is viewed as a threat (section 5.5) because it is different to the traditional ways of operating.

The negative feedback identified within the university could also be a result of the varying levels of connectivity that was previously identified (section 5.3). If the stakeholders within the university were more connected, information and knowledge would flow easily and there may not be the need to maintain stability in fear of different ways of operating. In essence connectivity within the university and between the university and its environment needs to be encouraged in order to drive changes successfully through positive feedback processes. The ease of which this can be done is addressed in the next section where path dependence is taken into consideration in terms of its link with positive and negative feedback processes.

5.8.1 Path-dependence and increasing returns

Path dependence can be linked to both positive and negative feedback processes. Negative feedback can stabilise the system and implies a single equilibrium point owing to the reactions generated as a result of the

¹⁴⁸ Interview with A8

offsetting of major changes (Arthur 1990 in Mitleton-Kelly 2003b). It is further argued by Arthur (1990) that stable forces do not always operate or dominate, and dependent upon the negative loops that also operate within the system, positive feedback can magnify small changes and increase returns, making many equilibrium points possible. In addition, the specific paths that a system follows can also depend on its past history. The argument that a system may have more than one equilibrium point and its evolution may depend on its past history has been previously addressed in 5.5 and 5.6.5.6.

Through understanding that it is possible to have more than one equilibrium point, and that past history can affect future development it is now understood that positive and or negative feedback stabilises or reinforces the change or new development within the system. For example, the Australian Government and changing industry expectations through their policies for education and recruitment strategies have reinforced and increased the value in students understanding the relevance of their degrees to the workplace and their future career (section 2.7.1). Simultaneously, prospective students have realised the value of having done work experience while studying at university in increasing their chance of gaining employment. This enhances the value of universities, who offer work related experiences while studying. In this way a small gain by universities who already offer such work related experiences will improve the competitive position of that university and help it to increase its lead in the higher education sector. This will mean that universities who already offer work related experiences across all disciplines will have a competitive advantage in the market, while others continue to develop and produce value in their courses in order to attract prospective students. This is essentially what is called path dependence, the increasing pull of a new development (value in WIL providing enhanced opportunities

for graduate employment) in attracting or enabling future developments (WIL development discipline and university wide).

In this sense, universities whose student enrolment numbers continue to increase as a result of their WIL offerings develop a path dependence. This is because these particular universities who are experiencing increasing returns as a result of their WIL offerings may be perceived by the other universities as having the best WIL model or WIL programs. Thus, the perceived best WIL model or program is implemented in other universities. For example, one WIL model may be seen as the most successful model for furthering students' careers. The implications of this is that according to complexity theory focusing on one strategy at a time is not recommended, because the student enrolments numbers may be entirely as a result of other events happening in the environment. For example student 1 quotes that the reason for choosing a particular subject at university may be because your friends are doing the same subject.

You have to choose 1 out of those 4 subjects and everyone does exactly the same one because it's the easiest one. It's like [subject A] I know its business, innovation, technology and policy and everyone does it because they've heard that it's the easiest subject ever, and it is. I've already done it. Everyone chooses it because all their friends do it.¹⁴⁹

5.9 Self-organisation, emergence and the creation of new order

5.9.1 Self-organisation

According to Mitleton-Kelly (2003b) self-organisation, emergence and the creation of new order are the three key distinguishing characteristics of a complex system. Self -organisation is the capacity of complex living systems

¹⁴⁹ Interview with S1

such as people, and the organisations which we are employed, "...to evolve into organised forms according to internally evolving principles" (Kuhn 2009:26). This means that the individual participants in this research, the university and the organisations in the external environment are all self-organising entities. Self-organisation also happens when a change pushes the system (university) into chaos and the individual elements (stakeholders) within the system behave in a coherent manner to create new order. It is at the operational level that academics are developing and delivering WIL. This means that academics as self-organising individuals are not only introducing WIL into the curriculum, but they are self-organising in their choice of teaching methods used to deliver WIL activities. Academic 11 quoted below discuss the situation at their university where they have had to self-organise in order to develop a WIL placement without guidance and or infrastructure.

I am still personally concerned about risk assessment, particularly placing students, you know I am not skilled, I don't have the skill to go out and do a work health and safety audit and I feel quite uncomfortable yet I am in a situation forced to do that because we don't have anyone to back me up on that and I am just told well as long as you have an induction safety for the students you will be fine...I still don't have any booklet, or guidance or training course or anything I can put my hands on, so I think we are trying to do things too soon, too quick, I don't think we have built enough infrastructure.¹⁵⁰

Self-organisation has also been described as the spontaneous order that arises from connectivity and interdependence and which is necessary for the evolution of the CES (Mitleton-Kelly 2003b). Another example of self-

¹⁵⁰ Interview with A11

organisation is when groups of individuals form to complete a task where they decide what to do, and when to do it, and no one external to the group has influence over the task (Mitleton-Kelly 2003b). It was already pointed out in section 5.5 that self-organisation has occurred in the coming together of a group of individuals to perform the task of developing a WIL unit in a HRM program in a particular university (A11). Self- organisation is also evident in Academic 1's University. Academic 1 describes a situation where outside the parameters of the rules and standards of the university a group was formed in which information and knowledge can be shared with the common goal of producing quality teaching practices and programs in HRM.

I was part of an engaged group that was kind of having people speak to us and getting together and figuring out what is it that we need, how are we going to do this or whatever.¹⁵¹

The advantage of actually having it as an industry advisory panel was that I didn't have to conform to the university's rules anymore. The rules that I had to have, this person and that person and all these other people didn't matter because it wasn't a formal external advisory committee. This was something I was doing for the benefit of the program and I knew the program and no one else. I didn't have to have a host of representatives from academia.¹⁵²

The group discussed above is different to the standard external advisory committee that each university forms, as through self-organisation the group came together spontaneously and worked around the restrictive policies at the university to explore new ways of operating. External Advisory Committees are committees that each course must have at university for

¹⁵¹ Interview with A1

¹⁵² Interview with A1

quality control, relevance and accountability, as they provide “collegial advice on the relevance of courses to prospective students, the community, to industry, and to appropriate professional bodies...” (University of Western Sydney 2003-2013:3). Therefore they are different to the abovementioned group formation in that they are imposed by university policy. Although imposed, the more proactive courses without the imposition would still have external advisory committees to ensure the quality of the education programs.

Despite the aforementioned examples of self-organisation, the self-organisation of all sampled universities is problematic. The two examples discussed came from two academic participants (1 and 11) who are from separate participating universities. The other stakeholder groups’ mental models that were explored did not yield self-organising properties. Therefore, there is not enough evidence to argue that all sampled universities, are self-organising entities. This research only indicates that there are pockets of self-organisation and the degree and level of self-organisation is different from university to university.

In support of this, at the student stakeholder group level, academic 8 has stated that students are not self-organising or self-managing individuals

We live with this delusion that comes out of complexity theory that says they're [students] self- managing organisms. They're not. We have to say they are not self- managing. If we're hoping to get good results and good learning from these students then we might have to artificially force that. We know there's a correlation between good performance and attending lectures, attending tutes and readings. They're not going to do it through any self-motivation.

The above quote from academic 8 supports the argument that the all universities and the stakeholders within the universities are not self-organising entities. In support of this argument, the stakeholders in this research when interviewed discussed a singular WIL subject in HRM within their university, rather than addressing WIL in HRM programs or HRM courses overall. This means that the absence of a discussion about all WIL activities in HRM programs suggests that self-organisation is not occurring. This is because the stakeholders have focused on the details of a singular unit which suggests that units are being developed at the individual level.

Although some evidence of self-organisation was found within some universities in this research, all universities cannot be characterized as self-organising entities. This is because there was not sufficient evidence to suggest that the remaining participating universities were similar to the two that did exhibit self -organising properties. It is argued that the lack of self-organisation identified in this research could be attributable to the varying levels of connectivity within the CES. The disconnect in the conceptualizations of graduate attributes and employability that was previously identified in section 5.3.1 may have led to individuals moving away from each other to work on the development of programs into their degrees. Furthermore, the lack of self-organisation and varying levels of connectivity could be contributing to the evolution focus of the system as it currently emphasizes adaption to rather than co-evolution with.

5.9.2 Emergence

Self-organisation together with the process of emergence creates new order (Mitleton-Kelly 2003b). Emergent patterns and properties appear at the macro level of the system as a result of interacting elements of the micro level. In a human social system emergence will "...tend to create irreversible structures or ideas, relationships and organisational forms, which become

part of the history of individuals and institutions and in turn affect the evolution of those entities” (Mitleton-Kelly 2003b:41).

In this research emergence is viewed on many levels. It can be viewed as the ideas that are generated from interaction within the self-organising groups of academics and the external advisory committees. Through individual interactions new ideas for course development emerges, and relationships are built which become part of the history of the individuals involved and the university. On another level emergence has occurred personally for both students and professionals. Unexpected benefits have emerged as a result of a student participating in a work placement while some professionals have discussed the emergence of new ideas and ways of working within their organisation as a result of the interaction with the university, academics and students whilst hosting a student for work experience. Student 3 and professional 7 quote:

*In my work experience there is a lot of stuff I've learnt in the past three months that I have not even learnt in two years at uni [sic], and I didn't expect that.*¹⁵³

*I actually like having students in the workplace, they bring energy, usually, and they bring currency of thought, currency of theory.*¹⁵⁴

On another level, emergence has occurred as result of conducting this research. Similar and or shared mental models about WIL in HRM have emerged through conversations with the participants and have formed part of the history of the individuals involved in the research and the researcher. This will affect the evolution of the entity of the university. This is because through the interaction in the interviews irreversible structures or ideas have

¹⁵³ Interview with S3

¹⁵⁴ Interview with P7

emerged and through this thesis the ideas will be shared to form the history of the institution and individuals of the participating universities at a particular point in time. For example a shared understanding of WIL (section 4.2) emerged and so did commonalities surrounding the challenges faced when implementing WIL (section 4.7).

Despite the low connectivity between stakeholders within the university in regards to graduate attributes and employability, and the low level of self-organisation present within the university, emergent properties and patterns are evident at several levels of the CES. If connectivity and self-organisation were to be encouraged throughout the university, it would assure that emergent properties and patterns would increase and in turn the university would co-evolve.

5.9.3 Creation of new order

According to Mitleton-Kelly (2003b) the creation of new order is the number one distinguishing feature of a CES. Through all the principles discussed above, something new, a new order or coherence is created. In essence the creation of new order is a positive result of the system (university) operating far-from equilibrium, through encouragement to explore the space of possibilities through strong connections and positive feedback, the individual elements interact and self-organise, so that new ideas can emerge and the system (university) will learn to co-evolve with its external environment to create new order. Examples of the creation of new order include new ways of working or relating, and or new products, procedures or the creation of a new culture.

It has already been identified that moving away from the normal way of operating was the intensified commitment by most universities to increase the development and implementation of WIL into all areas of the higher

education curriculum (section 5.5). This was a constraint put on universities from the external environment (sections 5.4 and 5.5). Therefore it is argued that new order within the CES is viewed as WIL activities that are currently being implemented into disciplines that traditionally have not had a WIL component, the increased attention of employability skills in universities including the newly created employability skills framework, the revision of graduate attributes for some universities and the increased need for closer industry partnerships. Through an enabling environment that encourages innovation new order will evolve further. This is addressed in section 5.11 following.

5.10 Fractality, the 11th principle

Although Mitleton-Kelly (2003b) has discussed chaos and complexity in terms of the concept self-similarity or fractals, she has not listed it as one of her 10 principles for applying complexity theory to human social systems. Kuhn (2009) however considers identifying fractals in organisations an effective way of understanding organisational life. In this research the concept of fractals is relevant and therefore considered the 11th principle of complexity applicable to understanding the social ecosystem of WIL in HRM. The nodes explored in order to conceptualise the fractal operating include: Role of WIL, grad attributes and recommendations.

According to Kuhn (2009:63) "...a fractal is an entity with characteristics simultaneously apparent across multiple scales of focus". Alternatively fractals have also been described as the "repetition of self-similar patterns across levels or scale" (Mitleton-Kelly 2003b:61). Through studying the fractal of an individual the researcher can make generalisations about the larger fractal (organisation) from which the smaller fractal (individual) is derived.

From the data, it is observed across all stakeholder groups within the CES, that there is a need to re-develop the currently offered university programs (including WIL in HRM), so that both current and prospective students may see the role and relevance of their studies in preparing them for their future. In addition to this, the stakeholders not only argue for the need to create more relevant programs of education but that WIL can fulfil this need through its link with the workplace and industry. In discussions about graduate attributes academic 5 and 8 have suggested that the attributes be brought to life by teaching in a way that elicits their development and by discussing their relevance to students, in that they can be used in their future job hunting.

It's a good framework [graduate attributes] for students to use when they are going for interviews. When we mention that about getting a job the students prick up their ears so I've used that lever to sort of bring them to life a bit. And then I start to put them into place about using analogies like, "Would you like to have a partner who is good at communication team work? That's innovative? Can solve problems", things of that nature.¹⁵⁵

I think graduate attributes are embedded within the student, but I think we should teach in a way that elicits the development of those attributes.¹⁵⁶

Academic 11 stated that the role of WIL in universities is for students to be able to receive confirmation that what is taught is useful. This is supported by careers advisors 1, 2, 7 and 8 who have also articulated that the role of WIL in university lies in its ability to put context into what the students are learning so as to assist in their understanding of the workplace.

¹⁵⁵ Interview with A5

¹⁵⁶ Interview with A8

I guess it [WIL] confirms for the students that what we are teaching them here is actually useful, I think that's a really huge outcome because a lot of times they sit in lectures and say why am I here.¹⁵⁷

I think definitely it prepares students to be pretty much employable at the end of their studies, I think that's the most fundamental thing, is making sense, putting context in to their learning, real world context in to their learning, I think that's very critical because I think sometimes students don't understand how what they are studying relates to the real world of work.¹⁵⁸

Furthermore, careers advisor 4 has noted that students want to be able to see the relevance of their studies:

The student feedback says they want to know where their careers are going and that their course is actually leading somewhere.¹⁵⁹

These quotations which suggest that graduate attributes be brought to life, propose that the current form of graduate attributes needs re-developing so that they may be viewed as relevant throughout a students learning within their chosen program. Moreover, careers advisors have argued that WIL plays a role in confirming for students the relevance of programs and those students essentially want to see the relevance in their studies to the workplace and future careers.

Professionals' perspectives of this fractal are viewed through their mental models of graduate attributes and the role of WIL. Professional participants' recommend having discipline specific graduate attributes for students, and general graduate attributes for employers. This is exemplary of an underlying need to make graduate attributes and courses at university more

¹⁵⁷ Interview with A11

¹⁵⁸ Interview with C7

¹⁵⁹ Interview with C4

appealing and or relevant to students. Additionally, professionals, like career advisor participants have cited that it is necessary for WIL opportunities to be in every university course. Professional participants (P1-P4) suggest that this is because of the general principle behind a WIL program; applying real world concepts and theories in practice gives students a more realistic expectation of what it is they are going to be doing when they graduate. These perspectives about giving students a more realistic expectation or understanding of the real world imply that professional participants also support the need to re-develop the currently offered university programs (including WIL in HRM), so that students may see the relevance of their studies in preparing them for their future.

Students have expressed that they had never heard of and, or did not know what the graduate attributes were at their respective universities (section 4.3). The two students that stated that they understood graduate attributes acknowledged that universities should make them discipline specific so that other students may see the relevance of them. Students along with the other stakeholders have recommended that graduate attributes be re-developed so that they are more realistic, therefore enabling the integration of them into everything that the university does. It was suggested by students that this be achieved so that students can understand and be aware of them throughout their studies. Therefore, students' views also show the self-similar pattern that there is a need to re-develop the currently offered university programs (including WIL in HRM), so that both current and prospective students may see the role and relevance of their studies in preparing them for their future.

The above discussed fractal that is evident across the individual elements within the university is also apparent across the entire social ecosystem (Figure 5.3). Through examining the policies on higher education put forward by the Australian Federal Government (section 2.7.1); it is evident

that there is a sense of urgency in the need to create university programs that are more relevant to students. In 2009 the Australian Federal Government announced that they want the education attainment of the population to increase dramatically, so much that "... by 2025, 40 per cent of all 25-34 years olds will have a qualification at bachelor level or above" (Department of Education Employment and Workplace Relations (DEEWR) 2011:3; Department of Industry Innovation Science Research and Tertiary Education 2009:12). This rather ambitious goal along with the other proposed reforms of the Australian Government reform agenda which concern the quality, access, and sustainability of the higher education for the future, along with the newly introduced student centred funding legislation places emphasis on the need to make university programs more relevant to students. Essentially, these changes have created a sense of urgency in the need to reform the higher education system in terms of the quality of education being provided.

Literature indicates that community and industry expectations are changing (section 2.7.2). There is now a demand for 'work ready' or 'employable graduates', and this is driving the increase in the development of WIL activities at university (Business Council of Australia 2011; Orrell 2011; Patrick et al. 2008). The demand for work ready graduates has come as a result of employers being concerned that graduates may not have the ability to apply what is learnt in university to the workplace upon graduation. WIL activities are being implemented in universities to fill this gap as it is suggested that participation in a WIL activity can help identify the relevance of the concepts taught in class to the workplace (Freudenberg, Brimble & Vyvyan 2010). In addition to this, the Business Council of Australia (2011) argues that it is pertinent that universities continually look to improve the quality and relevance of teaching and learning in order to deliver employable graduates.

Fractals play an important role in helping researchers understand organisational life. The stakeholders and the entities in the external environment (Australian Government, the community and industry and the higher education sector) reveal a fractal that is apparent at multiple scales of focus. This fractal is the apparent self-similarity in the mental models across all stakeholder groups within the CES, that there is a need to re-develop the currently offered university programs (including WIL in HRM), so that both current and prospective students may see the role and relevance of their studies in preparing them for their future. This fractal has revealed itself gradually through the course of this research through both the data and literature that was examined. Kuhn (2009:70) states that “if organisations, communities, nations and so on show fractality, with characteristics present in the individual likewise present within larger groups (from local to global), we can choose our focus of investigation knowing that within this focus there will be information about all of the other levels”. This means that in being able to identify a fractal within universities that was also apparent across the external environment, the focus of investigation chosen in this research (universities) has the potential to provide us with information about all other levels. Moreover, the “impacts, feelings, and attitudes of individuals will be replicated throughout the organisation in teams, departments, divisions and so on” (Kuhn 2009:70).

5.11 Creating an enabling environment

The previous sections of this chapter have applied complexity principles to the data in order to understand the human social ecosystem of which WIL related HRM undergraduate programs are developed. Working with Mitleton-Kelly’s (2003a:3) hypothesis that “a robust organisation evolves its social and organisational relationships, and is capable of guiding and supporting its co-evolution with a changing environment”, this section

argues for the development of necessary conditions within the CES of WIL in HRM.

The sampled universities exhibit varying levels of connectivity and interdependence between stakeholders. There was a disconnect evident in the developmental elements of university programs (graduate attributes and employability), and as such this may indicate why there is range of WIL programs offered in the teaching of HRM undergraduates. The system was identified as co-evolving, however with an emphasis on adapting to the external environment rather than evolving with. This means that changes happening at the level of the university are a short term adaptation to the environment. WIL was identified as an outcome of the CES moving far-from-equilibrium, while a second far-from-equilibrium point was identified as WIL pushing the system to explore the space of possibilities surrounding its traditional ways of doing things and its role in the higher education sector. Self-organisation at these points is enabling emergent behaviour, however the negative chaotic edge thinking of the academics is threatening the evolution of the CES, as it has stabilising affects that may mean the full potential of exploring the space of possibilities may never be realised. This along with the bureaucratic, rigid and inflexible state of the landscape identified by the stakeholders is having a negative effect on course design and collaboration with industry. In addition, the external environment is also restricting new ways of operating from being explored.

Universities are not considering the adjacent possible through considering their space of possibilities. The concept of feedback helped identify that the traditional ways of doing things is prevailing because the way things are done is held deeply within the academics identity. Self-organisation, emergent behaviour and the creation of new order is all evident within the CES, however is being hampered by the negative feedback, chaotic edge

thinking space and state of the landscape. An 11th principle, fractality, was identified as being relevant to this research. The fractal evident at many scales of the social ecosystem was that there is a need to re-develop the currently offered university programs to increase the relevance of university programs for students both current and future. This begs the question: with the lack of resources and limited funding previously identified by stakeholders as challenges when implementing WIL (section 4.8), and the conditions of the CES inhibiting the evolution of the university with its external environment, can new innovative ways of working and relating be developed? Mitleton-Kelly (2003a) suggests that through creating enabling and or necessary conditions within the organisation, organisational fitness can be achieved.

Managing an organisation as a CES requires the organisation to want to experiment, spend some time in understanding its current state of the landscape and its capabilities, learn how to set up the natural experiment to facilitate its success, and it “needs to create an enabling environment that will help achieve its goal, while understanding that the goal itself may change” (Mitleton-Kelly 2003a:4). According to Mitleton-Kelly’s (2003a, 2003b) this can be achieved with complexity researchers whom with the organisation will co-create the necessary conditions through helping the organisation identify the conditions that are inhibiting the success of the organisation or organisations themselves can learn to create enabling characteristics for success. In both instances, it is argued that a successful CES facilitates and encourages the emergence of new ways of working and relating, new organisational forms, information and knowledge sharing, self-organisation, and co-evolution (Mitleton-Kelly 2003a). The CES is encouraged to explore its space of possibilities, understand its own connectivity and interdependence within the system, and learn to cope in

unpredictable environments through developing diversity including people, cultures, products and markets (Mitleton-Kelly 2003a). This means that in the context of this research several changes need to occur within the CES. Connectivity between stakeholders needs to increase so that the system can learn to co-evolve with its environment rather than adapting to its environment. As the organisation reaches a far-from-equilibrium point, it needs to be encouraged to explore the space of possibilities and adjacent possible, so as to enable the university to break through its traditional way of doing things. An enabling culture that embraces uncertainty and change will help to build positive feedback processes and this will in turn affect self-organisation and emergent properties that will lead to more innovative ways of operating and relating.

5.12 Conclusion

Complexity theory offers a new way of thinking and analysing data which considers the subjective construction of reality and the unpredictable nature of dialogue (Mitleton-Kelly 2003b; Morin 2008). Through viewing organisations as CES a new way of thinking and managing organisations is fostered. This new way of thinking encourages the development of appropriate social-cultural conditions that enable new ways of working and relating (Mitleton-Kelly 2003b). Through analysing the findings of this research using Mitleton-Kelly's (2003b) principles of complexity, several inhibiting conditions of the CES were revealed. These inhibitors can explain why there is a range of WIL programs offered in the teaching of HRM undergraduates and throughout the analysis the implications of having such a range is addressed.

The CES of the university including the elements within (stakeholders), along with the external environment (Australian Government, the

community, industry and higher education sector) were explored using 11 principles of complexity: connectivity and interdependence, co-evolution, far-from-equilibrium, historicity and time, space of possibilities, feedback, path dependence, self-organisation, emergence, the creation of new order and fractality. In summary, it was found that there are varying levels of connectivity within a university system and this impacted on the evolution of universities as it meant that the universities were found to be creating short term strategies to adapt to the changing environment. Although it was found that WIL is a result of universities operating far from established norms, the negative chaotic edge thinking of the academic participants will influence the system to stabilise and no longer explore its space of possibilities. The participants have identified that the state of the university landscape is bureaucratic, rigid and inflexible, thereby having a significant impact also on the exploration of possibilities and course design. Pockets of self-organisation were found to exist within the participating universities; however the degree and level of self-organisation varied. Overall, it became evident that there is a need to re-develop current WIL programs so that students can see the role and relevance of such programs to their education and future.

Through analysing the CES of WIL in HRM undergraduate degrees, it was found that several necessary conditions for organisational fitness need to be facilitated. These necessary conditions include increasing the connectivity between individuals within universities so that collectively universities can learn to co-evolve with the external environment, rather than react or adapt to changes. The exploration of innovative new ways of organising and designing WIL programs needs to be encouraged. Overall, these conditions will help the organisation to connect, co-evolve, self-organise, be innovative

and foster an environment where emergent behaviour and uncertainty and change are viewed as opportunities full of potential.

Chapter 6– Conclusion

6.1 Introduction

This research has examined the stakeholders' mental models about the development of Work-Integrated Learning (WIL) programs in Human Resource Management (HRM), in order to evaluate the relative impact of a range of WIL programs in the teaching of HRM undergraduates. An interpretivist approach was adopted to explore the individual mental models of academics, careers advisors, professionals and students involved in the collaborative process of WIL in HRM. Qualitative processes were used to gather and conduct the research, and a complexity analysis was employed to understand how WIL programs in HRM programs are currently developed within universities. This research has addressed the following research questions:

RQ1- Why is there a range of Work-Integrated Learning programs offered in the teaching of Human Resource Management undergraduates?

RQ- What is the impact of a range of Work-Integrated Learning programs in the teaching and employability of Human Resource Management undergraduates?

This thesis documents the process from which these research questions were developed. Chapter 1 introduces the thesis and research questions within the context of Australian universities. In chapter 2 the concepts underpinning the development of WIL programs in universities were explored. It was established that there are a range of WIL programs being offered to Australian university students, and that the range and the effectiveness of WIL programs being offered had not been examined in the discipline of HRM. Chapter 3 detailed the methodology that was designed to answer the

research questions and contribute to theory concerning the development of WIL programs in undergraduate HRM. Chapter 4 presented the findings of the research, and in chapter 5 complexity principles were applied to the findings. This chapter synthesises the research's findings and directly answers the above two research questions while exposing the limitations of this research and making suggestions for further research.

6.2 Summary of main findings

This study set out to determine why there is a range of WIL programs offered to undergraduate HRM students, and the impact of that range. In order to address these questions the development of WIL programs in undergraduate HRM degrees were assessed. It was found that overall stakeholder groups hold different mental models about the development of WIL programs in HRM. This section will provide a summary of the main findings of this research, presented under the research question each finding addresses.

RQ1- Why is there a range of WIL programs offered in the teaching of HRM undergraduates?

One of the more significant findings to emerge from this study is that there are single subjects of WIL being adopted in individual universities, but a range of WIL programs across the university sector. All stakeholders in this research have identified a subject at their respective universities which they consider to be the WIL program currently offered to students in the HRM discipline. This suggests that the responsibility of developing and implementing WIL into the curriculum is with the individual faculties. Therefore, there is a range of WIL programs being offered in the discipline of HRM because WIL programs are developed and implemented as individual subjects by individuals within each faculty. This supports the work of

Bennett (2009) whose research has stated that conceptualisations of WIL are subjective in nature and these subjective understandings can influence the teaching and learning practices at university. Literature however has suggested that WIL is being added to the strategic directions of universities and re-shaping areas of the university to better support WIL provision (McLennan & Keating 2008), suggesting WIL is being developed from the top of the organisation. Additionally, Brown (2010) argues that WIL gives staff in universities opportunities to collaborate and share experience. This research findings contradict McLennan & Keating (2008) and Brown (2010), as it was found that in the area of undergraduate HRM degrees, WIL is being developed at the faculty level with little or no support for WIL provision from higher levels of the university.

It was also shown that there is a significant mismatch in the mental models about what WIL is and its purposes between the academics and other three stakeholder groups (careers advisors, professionals and students). Academics perceive WIL programs to be a broad approach to learning and teaching encompassing a broad range of activities while the other stakeholder groups predominantly perceive WIL to be a curriculum- based placement. WIL programs in HRM are perceived by the careers advisor, professionals and students to be one subject (a curriculum- based placement), and the academics perceive WIL programs to encompass many subjects (broad range of activities which can also include a curriculum- based placement). Four models of WIL programs in HRM were found to be operating across universities, of which a curriculum-based placement was the common model operating. Although academics view WIL as a broad approach as encompassing many activities, in practice they are choosing to develop curriculum-based placements.

The third major finding was the severe lack of understanding of the role and purpose of graduate attributes across all stakeholder groups. According to the participants the purpose of graduate attributes is influenced by the role of each stakeholder. This extends the work of Barrie (2003, 2006) who found that academic perceptions of graduate attributes differed. This research has extended Barrie's (2003, 2006) research by examining the mental models of several other groups (careers advisors, professionals and students) of individuals about graduate attributes. In addition to this, the mental models of the individual academics diverge within their own group. This supports Barrie's (2004) findings that rather than the understanding of graduate attributes being collectively understood within the university community, individual academics develop and integrate their conceptualisation of graduate attributes into teaching and learning practices at university. This is evidenced in the range of models of WIL being offered across the university sector.

This study has found that generally there are several factors influencing the development of WIL programs in HRM. This is contributing to single subjects of WIL being adopted by individual universities, and explains why there is range of WIL across the university sector. The influencing factors are a lack of resources, a clash of agendas, requirements of the HRM profession, the academics mental models and the nature of the CES as viewed through complexity theory. These are discussed following.

Lack of resources

A lack of resources, including a lack of host organisations for student curriculum-based placements, was stated as having an effect on WIL program development. This finding supports the literature presented in section 2.6 which identified a lack of resources as the main challenge for the

implementation of WIL. A lack of resources available for designing and implementing WIL was found to be influencing and increasing academics workload as they struggle to find time and money to teach and organise students in WIL programs. To mediate this increased workload academics are exploring alternative ways of delivering WIL programs in HRM. This is increasing the range of WIL programs across the university sector that is being offered to HRM undergraduates.

Clash of agendas

Career advisors recognise a clash of agendas between stakeholders more than the other stakeholder groups. Careers advisors are well placed to make this observation as they are involved in the program coordination and managing of the relationships between students, professionals, employers and the university. The findings of this research about the drivers of WIL support this. It was found that professional and student stakeholder group's state personal benefits were determining factors for participating in WIL subjects, while academic and careers participant identify external forces to the university driving WIL development. This suggests a clash of agendas will prevail when addressing the purpose of WIL, in the development of the future of WIL programs.

It was also revealed that there is a clash of agenda's between the traditional role of a university in education and the purpose of WIL programs as perceived by the academics. According to the academic participants the practical component of WIL clashes with the traditional role of university providing liberal education of a rigorous academic standard. This suggests why academics are developing a range of WIL models because they want alternatives to the curriculum- based placement model.

HRM profession

Half of all participants have indicated that there is a lack of or less prevalent presence of, HRM placements being offered in both the context of the curriculum and external to the curriculum. This perception that HRM placements are unavailable is forcing academics to develop alternative models to the curriculum-based placement model. In addition to this, each stakeholder group perceives the reason it is difficult to access placement opportunities for HRM students is because of specific HRM structural and professional elements. This finding has not been previously identified in the literature as the nature of WIL programs in undergraduate HRM has not been addressed.

According to the participants there are no support systems in place for curriculum-based placement offerings. This along with a large cohort of student's enrolled in HRM degrees, and an already overcrowded curriculum makes it impossible to provide placements for all students. This perception of the HRM profession held by the stakeholders is influencing the development of WIL program models that are alternatives to the curriculum-based placement model.

Academics main influence

It is observed from the findings of this research that academics are the main influence on the variety of WIL programs being developed in HRM. Academics question the role of WIL in higher education. More specifically, they question the practical component of WIL (curriculum-based placements). They perceive the implementation of practical work experience

in universities is impacting on the identity of the institution of the university. This perception along with the identified constraints of a lack of resources and the nature of the HRM profession has led to academics developing alternative models of WIL which do not have a practical component.

The nature of the CES

Complexity theory provides a new way of examining the data that argues for creating enabling environments that facilitate, rather than inhibit the co-evolving systems. In this view there are a range of WIL programs being offered to HRM undergraduates as a result of several interacting principles. When the university was pushed far-from-equilibrium by Australian Federal Government policy changes that demanded new ways of operating, entities within the university self-organised to develop WIL programs. As the connectivity between stakeholders within the university was limiting in their understandings of graduate attributes and employability as well as limited across faculties and universities, WIL programs were developed unique to each university and faculty. Accordingly, there is a range of WIL programs offered in the teaching of HRM undergraduates because the university is adapting, not co-evolving with the external environment. The history of the institution, negative discourse, and limited self-organisation is obstructing the exploration of the space of possibilities including the adjacent possible. Applying complexity theory to understanding the range of WIL programs in HRM has not been previously addressed in the literature. Therefore this research extends the current literature on understanding WIL in universities. This is discussed further in 6.4 following.

RQ2- What is the impact of a range of WIL programs in the teaching and employability of HRM undergraduates?

This study has found that WIL programs in HRM are perceived as a process. The recommendations made by stakeholders are categorised into four phases for further development of undergraduate HRM WIL programs. These four phases includes prior, during and post curriculum-based placements as well as recommendations for WIL activities to be integrated into the curriculum to be developed over the course of a student's education at university. This finding supports the work of Kolb & Kolb (2005), McNamara et al. (2012) and Daniel and Shircore (2012) who advocate in their research and practices that WIL be viewed as a holistic learning process.

As a result of a range of WIL programs in HRM undergraduate teaching the stakeholders exhibit a complete lack of understanding of graduate attributes. This is of particular concern in regards to the student stakeholder group who have stated they do not know what graduate attributes are, and as a result have varying understandings of employability. Consequentially, students have stated they are seeking experiences outside of the university curriculum in order to become work ready in the discipline of HRM.

As a result of there being a range, the stakeholders have recommended changes to different areas of the curriculum. The one area they have agreed that needs re-developing is graduate attributes in regards to the terms used to describe the attributes and the relevance of them to the workplace. However, because of the range of WIL programs developed by each HRM faculty in each university the way in which they view graduate attributes should be re-developed was not shared. This supports the need for TEQSA, in order to improve and provide direction through regulating higher education threshold standards.

The range of WIL programs offered in the teaching of HRM undergraduates has impacted upon the role of the academic stakeholder group in university course development. Academics are now faced with managing competing expectations. Firstly, academics cited that the university is expecting more work from them in terms of developing curriculum-based placement WIL models, without providing the necessary resources needed to achieve the new outcomes. In addition, the external environment is demanding work ready graduates, while academics are operating with a lack of resources and infrastructure. Lastly, the professional and student participants have suggested internal or personal benefits were determining factors for participating in WIL subjects. This places more pressure on academics to develop programs that not only take into account the expectation of university and external environment, but also to consider the professional and students' expectations. Therefore, as a result of there being a range of WIL programs academics have to manage competing expectations of the university, external environment, employers and students in having to develop WIL programs which provide work ready graduates. Consequentially, there is a sense that academics feel threatened (sections 4.6 and 4.7) and uncertain about the future of university education and their role.

Complexity theory views that a range of strategies and, in this case a range of programs is beneficial for organisations (space of possibilities). It is argued that organisations should be open to trying many different strategies and that a single strategy is not optimal because when the condition from which that one strategy was thriving changes, the strategy is no long optimal. In addition to this, Patrick and colleagues (2008:39) have argued that "If WIL curriculum is to achieve its desired educational outcomes and build a bridge of learning between the university and the workplace, then the sector has to

extend its current range of WIL approaches and assessment strategies". The findings however suggest that having a range is negatively effecting the development of WIL programs. This is because academics want direction and guidance in the best way of implementing and designing WIL. Academics have requested and or recommended that there be guidelines, procedures for the proper implementation of WIL programs along with information suggesting how WIL programs be developed and managed. This suggests that academics want a guide on the best way to manage WIL programs in HRM. Therefore, having a range means that this direction and guidance is not being provided. Following from the above finding, it could be argued that the problem is not in the range; it is in the lack of direction and infrastructure to support the development of the WIL programs. As a result of the programs not getting guidance and the lack of resources available, these programs may be poorly implemented and designed and that is the problem, not that there is a range.

Stakeholders describe what characterises an employable person rather than defining employability generally. This means that this research has found that the participants perceive graduate employability to be characteristics of an individual. This supports the work of Clarke (2008) who suggests that there has been shift in the way employability is conceptualised and that now employability is the responsibility of individuals. This also supports the literature citing the employability agenda is now focussed on individuals developing a repertoire of 'employability skills' (Clarke 2008; Holmes 2001; Ithaca Group 2012b; McQuaid & Lindsay 2005). The stakeholders' perceptions that employability is characteristics of an individual with a set of skills could be the result of the way employability skills are being implemented into the university curriculum. Cleary and colleagues (2007) have suggested that employability skills are being integrated by universities

through their graduate attributes, therefore they are perceived as characteristics of an individual in this research.

Another impact of there being a range is that there is the perception among stakeholder groups that 'watered' down WIL programs are being developed, suggesting that one WIL model is better than the other. Academics have stated that some WIL activities do not carry the same benefits that curriculum-based placements claim to provide, such as graduate attribute development, enhanced employability and career clarification for students. Additionally, only 53% of the participants reported WIL as having a positive impact on a student's employability. This suggests that the range of WIL programs is impacting on the quality of programs being developed and on the perceived positive link between WIL programs and employability.

6.2.1 Other findings

Two other significant findings have emerged from this study. These are addressed below.

The academics and career advisors mental models express the drivers of WIL are predominantly external forces to the university. The suggested drivers include Government and student influence, the economy, industry needs and technological advancements. This supports the literature discussed in section 2.7 which states that industry, Government and student needs are driving the increase of WIL in universities through their demands for more work ready graduates with a repertoire of employability skills.

Higher education sector is in a state of change. It was suggested that this change is a result of the changing perceptions of students. This supports Ernst and Young's (2011) report which argues the higher education market is

now a consumer driven market and as a result universities will need to develop stronger links with industry and re-establish themselves in the market in order to remain competitive.

6.3 Limitations of the research

There are several limitations of this research that need to be considered. The most important limitation is that academic participants in this research were selected based on their role in co-ordinating, lecturing or tutoring HRM relevant units which include the assessment of WIL experiences. This meant the research was specifically designed to not evaluate the mental models of HRM academics not engaged in WIL development. This is significant because the mental models of these academics may provide further understanding of WIL programs in HRM. Therefore, research that extends the parameters of this research, by considering the mental models of those academics in HRM not directly involved in WIL is recommended.

The original purposive sampling technique proposed for gaining access to participants was limiting. It was intended that the participating universities would be used as case studies in this research, and purposive sampling would be used to identify between 1-2 participants from each stakeholder group within the related WIL experience from within the universities. However, it became difficult to try and match people within each WIL experience as many people did not respond. To overcome this limitation snowball sampling was used with purposive sampling to access a sufficient number of participants and the stakeholder groups became the cases for examination.

The findings of this research are limited by the use of a case study methodology. Case studies are criticised for the inability to produce findings that are generalizable, because they are focussed on the behaviour of one

group, person or organisation (Simon & Goes 2010). Therefore the unit of analysis may or may not reflect the behaviour of similar entities (Simon & Goes 2010). This limitation is somewhat mitigated by the use of multiple cases and the variation in the cohort being studied (academics, careers advisors, professionals and students). In addition to this, in qualitative research the term generalisation can be substituted for the goal of transferability (O'Leary 2010). Transferability, already addressed in 3.4.2 concerns the applicability of the research to other situations and setting or to consider the 'lessons learned' from the research as being applicable in alternative settings. This is accomplished in this research through giving a detailed description of the research setting and methods employed. By providing this detailed account applicability can be determined by those reading the research account. Additionally, there is potential for the mental model definition, and the methods used in this research to identify a person's individual mental model, to be applicable to alternative settings by considering the lessons learned from the research.

Complexity theory suggests complex systems are dynamic, emergent entities constantly evolving. In this view this research provides a snapshot of a point in time. This was taken into account in the design of the research methods. A number of stakeholder groups were selected for this research so that there is a wider range of mental models about the development of WIL being explored. This was done to ensure the cohort involved in WIL programs in HRM would be effectively represented.

With any social research there is no guarantee that the way in which theory has been interpreted and applied is the way in which the original authors intended it to be used. The idiosyncrasies of the researcher may alter the way in which the theory is perceived. To protect against this limitation, throughout this research there has been continual examination and open

discussion with the supervisory panel about the interpretation and application of the theories used.

The next section will discuss the contribution of this research to knowledge including the implications for research and practice.

6.4 Contribution of the research

This study has contributed to the theoretical advancement of WIL programs in the undergraduate curriculum in a number of ways:

6.4.1 Contribution 1- the notion of WIL programs in HRM

This research adds to the body of literature that informs research in WIL. The lack of research into the range of WIL programs in undergraduate HRM degrees was demonstrated in chapter 2. This research has examined the reasons for and the impact of a range of WIL programs in the teaching and employability of HRM undergraduates. The empirical findings in this study provide an explanation of how WIL, graduate attributes and employability are perceived by stakeholders (academics, careers advisors, professional and students) relevant to the design, development and implementation of WIL programs. It has answered calls for further research in WIL (Clarke 2008; Jackson 2013a; Speight, Lackovic & Cooker 2013) including open debate of employability, the exploration of the link between theory and practice and the inclusion of a wider range of stakeholders. It offers a rigorous understanding of the way in which WIL programs are being developed and implemented, while exploring the internal and external influences in the university's environment.

This research has found that WIL programs in undergraduate HRM degrees are perceived to be a broad range of activities and approaches including curriculum- based placements or viewed singularly as a curriculum- based placement. This suggests that WIL programs in HRM are perceived as one

subject, or many subjects. There may be a range of WIL programs offered to HRM undergraduates, across the higher education sector, however within each university there was only one subject identified by stakeholders as the WIL program. Furthermore, a curriculum-based placement was found to be the common operating model of WIL programs in HRM, however the stakeholders identified that in comparison to other disciplines placements are less prevalent in HRM. As such it is recommended that more curriculum-based placements be sought.

6.4.2 Contribution 2- WIL programs in HRM, the way forward

This study contributes to the literature by providing evidence and direction to those involved in establishing and developing industry partnerships and WIL experiences. This research identifies the drivers, challenges and recommendations for developing, implementing and participating in WIL experiences in order to improve the capacity of WIL in undergraduate HRM degrees.

It is recommended that WIL activities be implemented in a sequential process where students are gradually exposed to different models of WIL over the course of their degree at university. In addition to this there needs to be a tool developed for universities that aids stakeholders in making the right match between student/host employer/organisation. To achieve this expectation management needs to be addressed as well as the development of a learning contract that will be designed to establish conversations around each stakeholder expectations. Included in the learning contract should be conversations around the expectations of the universities on the student's development, and the purpose and or principles of the program need to be communicated clearly.

In addition, stakeholders express many changes be made to the teaching and learning practices in the HRM curriculum. Stakeholders recommend the HRM curriculum focus more on measurement, human behaviour, supply and demand, and making the connection between theory and practice explicit. They further recommend that students develop stronger decision making capabilities, presentation skills, and become proficient in simple HRM tasks such as writing HRM reports. Furthermore, it is recommended that university teachers use real life workplace examples in their teaching methods, address student communication skills through marking and increase the Industrial Relations presence in the undergraduate HRM curriculum

6.4.3 Contribution 3- methodological implications

The application of complexity theory to organisational research is a relatively new phenomenon. Mental model identification is not new, however its combination with complexity theory makes for a new and exciting way of researching and analysing qualitative data. This combination of mental model identification and complexity theory was employed in my first research project, published as my honours thesis. It was through this research that a new robust definition of an individual mental model was developed and successfully tested for its application in organisational research. My honours research used Kuhn's (2009) complexity metaphors; however this research uses the ten generic principles of complexity by Mitleton- Kelly (2003b) and the London School of Economics group. Therefore this research extends and adds to the previous research through its application of the mental model definition to a new area of research, WIL in undergraduate HRM degrees, and the use of a different set of complexity principles.

Mental models influence how a person acts. Therefore in order to understand why there is a range and the impact of a range of WIL programs in the teaching and employability of HRM undergraduates it was essential that the mental models of stakeholders involved in the process of developing WIL programs in HRM be revealed. Mental model identification has not been used in the literature concerned with WIL program development. However, it has proven beneficial in revealing the stakeholders' perceptions about WIL that underpin their actions when designing and implementing WIL in HRM. As such it provides insights about the range of WIL programs.

Complexity theory offers a new way of viewing and understanding the patterns of interaction, communication and relationships within organisations. This new way of thinking and analysing argues for creating an enabling environment that facilitates innovative ways of working and operating. Complexity theory has not previously been used to analyse WIL programs however has proven beneficial in not only understanding how current programs are designed, but showing areas where improvement is needed. Viewing WIL programs in HRM has revealed that universities need to create a new environment and culture where change is viewed as full of potential and new ways of operating can be explored.

6.5 Implications for research

This research has provided important insights into the range of WIL programs in undergraduate HRM programs. In doing so it has also revealed many questions in need of further research.

Further research needs to be done to determine the strength of the relationship between WIL programs and employability in HRM. As the majority of participants reported a link between WIL and employability, a

link has been strongly established, however further research needs to be done in order to quantify the relationship.

It is recommended that further research be undertaken to examine the mental models of academics in HRM that are not directly engaged in WIL development. This research provides important information on the characteristics of WIL in HRM, and through further research with all academics in HRM additional ways in which to promote and progress WIL in HRM programs may be revealed.

This research has established that there is a range of WIL in a range of programs at university. To reiterate, this research has found that single subjects of WIL are adopted in HRM in individual universities, however a range of WIL models and programs being implemented across the sector in HRM. Further research might explore the range of WIL programs being offered in HRM to determine if there is any one type of WIL activity in undergraduate HRM programs that best achieves graduate attributes. In addition to this, as a result of WIL programs in HRM being perceived as one subject, this is an area that should be explored across all disciplines, and the implications of this addressed. Doing so will help build to common language of WIL as recommended by Bennett (2009) and may reveal the purpose and objective of WIL across the sector as perceived by relevant stakeholders directly involved with WIL programs.

Graduate attributes currently exist in the form of orienting statements listed on public university websites. A significant finding of this research was the severe lack of understanding of the role and purpose of graduate attributes. Curriculum mapping of the graduate attributes at the course and unit level is picking up considerable momentum, especially in light of the newly appointed independent Australian regulator of higher education (TEQSA).

As such, it is expected that over time we may see a change in the way student's value the graduate attributes because instead of them being stuck out there on a list on the university website, they are now being directly mapped to their course and unit learning outcomes. It is suggested that the mental models of stakeholders about graduate attributes be revisited in those universities who make changes and map their graduate attributes to outcomes. It would be interesting to compare and assess the effects of this current study to the new proposed research on graduate attributes.

The employability skills framework discussed in section 2.5.1 is in its draft stages of implementation. As it is aimed at providing direction and guidance to those who develop curriculum, wide spread take up is expected. The impact of the framework on the learning and teaching of students and its impact on individual institutions have yet to be determined. It is recommended that the impact of this employability skills framework on a students learning be investigated in regards to specific WIL programs, as WIL is argued to increase the employability and the acquisition of skills.

A complexity analysis of the findings of this research has raised a significant question in need of further investigation. There is the perception that academics are pursuing one optimal strategy for WIL in HRM. Complexity theory argues that this is not desirable because it leaves the university open to failure if all the resources are put into the one strategy. Further investigations are needed to estimate the extent to which this is happening within the higher education sector. Australian universities need to be explored in terms of whether they are considering their space of possibilities and the impact of this on the higher education sector. This includes assessment of the adjacent possible in universities. This further research will help universities understand how they remain competitive and sustainable for the future.

6.6 Implications for practice

The findings of this research suggest several courses of action for developing WIL programs into undergraduate HRM degrees in Australian Universities. These are discussed below.

An implication of the findings of this research is that WIL needs to be developed and supported from the strategic level of the university. This research found that WIL is being developed at the faculty level with little or no support for WIL provision. Support from the strategic level of the organisation will ensure that the purpose of WIL is shared throughout the university, thus possibly providing a foundation for individuals at the faculty level who currently hold different mental models about what WIL is and its purpose. In addition to this, through a strategic approach to WIL academics will be given for more direction and guidance by the way of WIL provision and support.

This research has found that according to the stakeholders' mental models there is a severe lack of understanding of the purpose of graduate attributes. There is, therefore, a definite need for the current way graduate attributes are taught and conceptualised to be audited and improved. It was suggested by participants that this could be achieved through bringing them to life by implementing them and re-enforcing them in anything that the university does.

Complexity theory argues for the exploration of new innovative ways of working and relating and advocates for many strategies to be developing at any one time suggest that a range of WIL programs within the university is beneficial. This research found however that this range is applicable to programs of WIL across the sector in HRM and there is little range in any one individual university. This range was found to be having a negative effect on

the development of WIL programs because academics are requesting direction and guidance. It is recommended that in practice the range of WIL programs within any one university be expanded. A reasonable approach to tackle this issue might be to consider that WIL programs as recommended by the stakeholders in this research, be perceived and accepted as being a process. Through a greater awareness and acceptance that WIL programs be developed as a process, whereby many activities are developed and integrated into the curriculum prior, during, post placements and generally across the entirety of the student's education at university. This may increase the perceived value in having a range of WIL activities and or programs.

Another important practical implication is that academics need further training and development in WIL programs. Academics have been identified as the main influence in the development of WIL programs in HRM, and have also been found to be viewing the implementation of WIL programs in university as a threat, thereby finding ways to minimise the threat of WIL. Academics therefore could benefit from more training and development that addresses the value and benefits of WIL. In addition to this, it was suggested by academics that tools be developed to alleviate concerns for matching students with employers and or host organisations.

It is perceived by stakeholders that HRM placements are less likely to be offered as compared to other disciplines. It was stated by stakeholders that this is the result of issues specific to the nature of the HRM profession. It is therefore suggested that a stronger relationship between universities and the HRM profession be developed in order to overcome issues related to the limited placements being made available so that the number of placement offerings can increase. It was also expressed that the lack of placement opportunities is a result of organisations viewing curriculum-based placements as burdensome. It is therefore recommended that a systemic

support system be developed for WIL in HRM. This support system would benefit from employer inclusion in the process of developing WIL programs.

A complexity analysis of the findings provided a holistic perspective of the enablers and inhibitors of the development of WIL programs in undergraduate HRM. These findings suggest that the connectivity between stakeholders in the university needs to increase. Universities need to embrace change and create an environment where individuals are given the flexibility to explore the space of possibilities in developing WIL programs. Additionally, the information from the complexity analysis can be used to develop targeted interventions aimed at developing a culture within the higher education sector that facilitates creativity and innovation through co-evolutionary flexible practices that allow for the exploration of the space of possibilities. We can use this information to create systems and infrastructure that supports the development of WIL programs discipline and university sector wide.

6.7 Closing remarks

This thesis has presented the data about the range of WIL programs in undergraduate HRM degrees in Australian universities. The results of this research revealed that there is a range of WIL programs offered across the university sector, but little range offered in any one individual university. In general, the stakeholders' mental models have provided an overview of how WIL, graduate attributes and employability are conceptualised and the challenges associated with implementing WIL into the curriculum. Recommendations for the future development of WIL programs were also addressed by stakeholders.

Mental model identification and a complexity analysis of the findings have proved effective in providing insights into the entire social ecosystem of WIL

programs in undergraduate HRM degrees. An analysis of the findings using complexity theory has shown that a holistic systems view of an organisation can reveal areas where improvement is needed, and provide evidence for the future direction of the development and sustainability of Work-integrated Learning programs within undergraduate Human Resource Management degrees.

Appendices:

Appendix A

Human Research Ethics Committee
Office of Research Services



Participant Information Sheet

Project Title:

An investigation of Work-Integrated Learning programs and the implications for Human Resource Management graduates.

Who is carrying out the study?

Laura Murray. You are invited to participate in a study conducted by Laura Murray, a PhD candidate at the University of Western Sydney, in the School of Management.

What is the study about?

This project seeks to understand the types of Work-Integrated Learning programs offered in the teaching of Human Resource Management graduates, as well as explore the implications these varying programs are having on the future development of Business programs. Generally, I am looking at how these views of the concept and usefulness of Work-Integrated Learning programs are understood by the stakeholders involved in the process of developing, delivering and participating in Work-Integrated Learning programs. This includes academics, students, professionals and co-operative education staff.

What does the study involve?

Your participation will involve you taking part in a relaxed conversation with myself about your views of Work-Integrated Learning programs. This will be conducted in a comfortable setting where the conversation will be guided by the following topics:

- Discuss your understanding of the concept of Work-Integrated Learning.
- Describe your feelings of how useful you believe Work-Integrated Learning programs are in Human Resource Management degrees.
- Explain your understanding of the concept of 'employability' in relation to Human Resource Management graduates.
- Express your understanding of the link between Work-Integrated Learning, employability and graduate attributes or capabilities.
- Identify and detail your understanding of the desired capabilities for Human Resource Management graduates as employees.

How much time will the study take?

The study will require a commitment of approximately one (1) hour of your time via skype or telephone.

Will the study benefit me?

If you choose to participate in the research, you will be talking about and reflecting on your views and ideas around Work-Integrated Learning. In doing so you will have a better understanding of your own assumptions and expectations. This can assist in understanding how to communicate better as well as possibly improve your own understanding of the concepts discussed, such as Work-Integrated Learning, employability, graduate attributes or capabilities.

Will the study involve any discomfort for me?

No, the study is not expected to involve any discomfort.

How is this study being paid for?

I, Laura Murray have received a scholarship to complete my PhD, in which this research is the primary component.

Will anyone else know the results? How will the results be disseminated?

Each conversation will be recorded and transcribed. You will be invited to view a copy of your transcript in order to provide feedback to me in relation

to its accuracy. After you have checked the transcript, the data will be de-identified in order to keep the results private and confidential. The primary publishing point for the results of this project will be a thesis to be written to satisfy the passing requirements of a Doctorate of Philosophy degree. The data will also be used for future publication in academic journals.

Can I withdraw from the study?

Yes. If you volunteer to participate and for any reason decide to withdraw, you can do so without consequence or penalty.

Can I tell other people about the study?

Yes, you can tell other people about the study by providing them with the chief investigator's contact details. They can contact the chief investigator to discuss their participation in the research project and obtain an information sheet.

What if I require further information?

After you have read this information I will be happy to discuss this study further and answer any questions you may have. Please feel free to contact me or my supervisors on:

Laura Murray (Chief investigator)
Mobile: 0422960719
Email: l.murray@uws.edu.au
16166905@student.uws.edu.au

Dr Lesley Kuhn (Principal supervisor)
Office: 02 9685 9689
Email: l.kuhn@uws.edu.au

Ms Genevieve Watson
Office: 02 4620 3138
Email: g.watson@uws.edu.au

Should you be interested in participating in this study, please complete the attached consent form and email it back to me, Laura Murray.

What if I have a complaint?

This study has been approved by the University of Western Sydney Human Research Ethics Committee. The Approval number is H9354. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0013 or email humanethics@uws.edu.au.

Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome. If you agree to participate in this study, you may be asked to sign the Participant Consent Form.

Appendix B

Human Research Ethics Committee
Office of Research Services



Participant Consent Form

!....., consent that to participate in the research project titled:

An investigation of Work-Integrated Learning programs and the implications for Human Resource Management graduates.

I acknowledge that:

I have read the participant information sheet [or where appropriate, 'have had read to me'] and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I consent to the semi structured interview via skype, which will be recorded for accuracy of transcription.

I understand that my involvement is confidential and that the information gained during the study may be published but no information about me will be used in any way that reveals my identity.

I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher/s now or in the future.

Signed: _____

Name: _____

Date: _____

Return address:

Ms Laura Murray
School of Business
Campbelltown campus, building 11
Locked Bag 1797 Penrith NSW 2751 or via email to
16166905@student.uws.edu.au

This study has been approved by the University of Western Sydney Human Research Ethics Committee. Approval number H9354.

Appendix C

1. What is your definition of Work-Integrated Learning (WIL)? What do you conceptualise it to be about?
2. What is your role or relationship to the development of Work-Integrated Learning programs?
3. What role do you understand WIL plays in universities?
4. What is your understanding of employability?
5. What is your definition of an employable graduate/ graduate employability?
6. What is your understanding of graduate attributes/ graduate capabilities?
7. Do you believe universities should have a set of graduate attributes? How do you feel these should be developed? What is their usefulness in developing employable graduates?
8. Do you feel WIL is useful in the development of the employability of graduates?
9. Do you see a link between WIL, employability of graduates and increasing employability of a nation's workforce? What do you think that link is? Can you expand on that connection?
10. What benefits if any do you understand WIL to have?
11. How do you believe WIL to be best engaged? Are you speaking from experience?
12. Do you believe that WIL can improve the transition for individuals from the university to the workplace?
13. How effective do you find the current process of the development of WIL programs? Is competitiveness among universities having an effect on changing how we approach course design?

14. Do you find that the Human Resources interns you employ in your organisation to be of a benefit to the company? And or the intern?
15. What negatives or implications have you experienced as a result of taking on an intern?
16. Do you foresee implications for other organisations taking on Human Resources interns/students/work experience?
17. What do you perceive to be the main reason why your organisation decided to offer a Human Resources internship? Are you picking up the short fall for the lack of Work-Integrated Learning in the Human Resources curriculum?
18. Do you believe that if a Work-Integrated Learning opportunity or work placement is not integrated as part of a student's curriculum that learning does not occur?
19. How useful do you find Work-Integrated Learning to be from a workplace supervisor's perspective?
20. Do you perceive there to be implications for the range of Work-Integrated Learning programs offered by Australian universities?
21. Do you constantly maintain a relationship with participating employers or do they come to you?
22. Do you find it hard to find employers?
23. Do you find maintaining the employer relationships time consuming?
24. Do you work together with your co-op/careers office to ease the process?
25. What are students' feedbacks? Would it be possible to interview one of your students or at least ask if they would like to be involved?
26. As an academic do you notice any differences in the students that have completed the course as compared those that haven't?
27. Do you foresee implications for organisations taking on Human Resources interns/students/work experience?

28. Do you believe that co-operative education programs are picking up the short fall for the lack of Work-Integrated Learning in the Human Resources curriculum?
29. Do you perceive there to be implications for the range of Work-Integrated Learning programs offered by Australian universities?

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