



**THE INTEGRATION AND ALIGNMENT OF GRADUATE ATTRIBUTES WITH THE
INDUSTRY ADVISORY BODIES' REQUIREMENTS IN THE HUMAN RESOURCE
MANAGEMENT DIPLOMA**

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DECLARATION

I hereby declare that the dissertation submitted for the degree Master of Education in Higher Education at the University of KwaZulu-Natal is my original work and has not previously been submitted to any other institution of higher education. I further declare that all sources cited or quoted are indicated and acknowledged through a comprehensive list of references.

Signed _____

Date: _____

As a supervisor for the candidate, I hereby approve this dissertation for submission.

Prof Sarasvathie Reddy

Signed _____

Date: 03 July 2024

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ABSTRACT

Graduate attributes have become increasingly important in South African Higher Education (HE) as universities strive to produce employable graduates who add value once they are employed. This study aimed to examine the integration of graduate attributes into the curriculum using a single case study of a Diploma in Human Resource Management (HRM) and the extent to which these attributes align with Industry Advisory Body (IAB) requirements. Undertaken at a University of Technology (UoT) that offers career-orientated programmes, the study further sought to determine whether or not the curriculum prepares employable graduates for the world of work. Designing and implementing an industry-responsive curriculum requires collaboration with industry advisory bodies and professionals. Industry bodies provide academic departments with meaningful inputs and feedback on curriculum development concerning industry graduate attributes and programme quality, thus strengthening programmes, enhancing programme quality and shaping course content. In HRM, such industry bodies also undergird the conceptualisation of graduate attributes. Integrating graduate attributes into the curriculum appears not straightforward and is not always clearly understood. A qualitative research approach was adopted, underpinned by an interpretive philosophical stance. Through the purposive sampling technique, a sample of six lecturers with a combined HR teaching experience of over 30 years were selected and interviewed. Data generated from the interviews were transcribed and analysed through Atlas.ti, thus generating codes and themes. The findings were interpreted and explained according to Legitimation Code Theory (LCT) dimensions, which led to a proposed systems approach of embedding graduate attributes into the selected curriculum. The findings revealed that a high degree of HRM diploma graduate attributes are aligned to industry and that integrating graduate attributes into the curriculum is a multifaceted approach involving several stakeholders. The study recommends that departments in UoTs should foster and cultivate strong and sustainable relationships with industry to ensure that beyond the curriculum alignment, students and graduates are also provided with opportunities for applied learning.

ABBREVIATIONS

4IR	Fourth Industrial Revolution
HDI	Historically Disadvantaged Institution
HESA	Higher Education South Africa
HRM	Human Resource Management
IAB	Industry Advisory Body
IPM	Institute of People Management
LCT	Legitimation Code Theory
NQF	National Qualifications Framework
PBA	Project-Based Approach
SABPP	South Africa Board for People Practices
SAQA	South African Qualifications Authority
SATN	South African Technology Network
TLDC	Teaching and Learning Development Centre
UKZN	University of Kwa-Zulu Natal
UoT	University of Technology
WEF	World Economic Forum
WIL	Work Integrated Learning

Table of Contents

DECLARATION	I
ACKNOWLEDGEMENTS	II
ABSTRACT.....	III
ABBREVIATIONS	IV
1. CHAPTER ONE: INTRODUCTION AND BACKGROUND	1
1.1 Introduction.....	1
1.2 Background and context of the study.....	1
1.3 Statement of the research problem.....	2
1.4 Objectives of the study	3
1.5 Research questions	3
1.6 Location of the study	4
1.7 Significance of the study.....	4
1.8 Limitations of the study.....	4
1.9 Structure of the dissertation.....	5
1.10 Chapter summary	6
CHAPTER TWO: LITERATURE REVIEW.....	7
2.1 Introduction.....	7
2.2 The context of Universities of Technology	8
2.2.1 Mandate of Universities of Technology.....	10
2.3 Graduate attributes in higher education	11
2.3.1 What influences graduate attributes	12
2.3.2 Human Resources Management Graduate attributes.....	13
2.3.3 Graduate attributes in the era of the Fourth Industrial Revolution.....	14
2.3.4 MUT Graduate Attributes	16
2.4 Integration of Graduate Attributes into the curriculum	19
2.4.1. A Systems Approach.....	20
2.4.2 Strategies integrating graduate attributes.....	21
2.5 Assessing Graduate Attributes	24
2.6 Employability	25
2.7 The role of Industry Advisory Boards	27
2.7.1 Human Resources Professional Bodies	28
2.8 Theoretical framework underpinning the study	30
2.8.1 Dimensions of LCT.....	30
2.8.2 Justification for the selection of LCT.....	32
2.9 Chapter summary	33
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY	34

3.1 Introduction.....	34
3.2 Research design.....	34
3.3 Research approaches.....	36
3.3.1 Qualitative research	36
3.4 Research paradigm	37
3.4.1 Interpretivism	38
3.4.2 Paradigm selection: justification	40
3.5 Sampling	41
3.5.1 Probability sampling	42
3.5.2 Non-probability sampling.....	43
3.5.3 Justification for the selected sampling technique for this study.....	45
3.5.4 Sample size	45
3.6 Data production and collection.....	46
3.6.1 Interviews.....	47
3.6.2 Non-empirical data.....	49
3.7 Process of analysis of data.....	49
3.7.1 Analysis of primary and secondary data.....	50
3.7.2 Bibliometric review	52
3.8 Issues of Trustworthiness	54
3.8.1 Credibility	54
3.8.2 Transferability	54
3.8.4 Confirmability	55
3.8.5 Authenticity	55
3.9 Ethical issues	55
3.10 Chapter summary	56
CHAPTER FOUR: PRESENTATION OF FINDINGS AND INTERPRETATION OF RESULTS	
.....	57
4.1 Introduction.....	57
4.2 Sample profile and interview data.....	57
4.3 Findings from semi-structured interviews.....	58
4.3.1 Alignment of HRM graduate attributes to institutional graduate attributes.....	59
4.3.2 Alignment to industry advisory bodies	59
4.3.3 HRM Curriculum review	62
4.3.4 Key Attributes for HRM.....	62
4.3.5 Integration of Graduate Attributes	69
4.3.6 Assessment of Graduate Attributes	71
4.4 Findings from secondary data analysis.....	72
4.5 Findings from bibliometric review.....	74

4.5.1 Analysis	74
4.5.2 Cluster one: Graduate Attributes in the Context of Industry 4.0	75
4.3.3 Cluster two: Cluster on HRM Education Methodologies and Graduate Attributes 77	
4.5.4 Cluster three: Cluster on HRM Educational Standards and Organizational Management.....	78
4.6 Conclusion.....	80
CHAPTER FIVE: DISCUSSION AND SYNTHESIS OF FINDINGS.....	81
5.1 Introduction.....	81
5.2 Discussion of findings.....	81
5.2.1 Integration of graduate attributes into the HRM curriculum.....	82
5.2.2 What influences the integration of graduate attributes into the curriculum?	84
5.2.3 The extent to which the graduate attributes that are reflected in the HRM curriculum are aligned to the industry advisory body requirements	86
5.2.4 The integration of 4IR-aligned graduate attributes into the HRM curriculum aiming to enhance the employability and future readiness of graduates.....	87
5.3 Synthesis of findings to the theoretical framework	87
5.4 Systems approach to embedding graduate attributes at UoT.....	90
5.4.1 Inputs	92
5.4.2 Transformation.....	94
5.4.4 Outputs	97
5.5 Conclusion.....	98
CHAPTER SIX: SUMMARY AND RECOMMENDATIONS.....	99
6.1 Introduction.....	99
6.2 Summary of the findings	99
6.3 Recommendations.....	102
6.3.1 Recommendations for practice.....	102
6.3.2 Recommendations for future research	103
6.4 Conclusion of the study	103
REFERENCES	105
Annexure A: gatekeepers' letter	125
Annexure B: HSSREC ethics approval letter.....	126
Annexure C: Informed consent form.....	127
Annexure D: Interview guide sample.....	130
Annexure E: Turnitin report	131
LIST OF TABLES	
Table 2.1: Institutional types.....	9
Table 2.2: WEF future skills of work.....	15

Table 2.3: Basic skills and understanding	16
Table 2.4: Knowledge and intellectual ability	17
Table 2.5: Workplace skills and applied knowledge	18
Table 2.6: Interactive and personal skills.....	19
Table 2.7: Summary of LCT dimensions	32
Table 3.1: Types of interviews.....	47
Table 4.1: Participant's profile	58
Table 4.2: Summary of triangulated HRM attributes	72
Table 4.3: Keywords cluster analysis	75

LIST OF FIGURES

Figure 2.1: Basic systems model	21
Figure 2.2: HR competency model	29
Figure 3.1: Types of sampling	41
Figure 3.2: Data analysis process using Atlas.ti	51
Figure 4.1: Codes word cloud	58
Figure 4.2: Summary of themes and codes.....	58
Figure 4.3: Key attributes	63
Figure 4.4: VOSviewer analysis	75
Figure 5.1: LCT framework synthesis model	88
Figure 5.2: A systems model for embedding graduate attributes	91

1. CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

This chapter provides an overall introduction and rationale for the study. It presents the background and context of the study, including the statement of the research problem, objectives, research questions and purpose of the study. Chapter one concludes with a brief outline of the dissertation by way of chapter arrangements.

1.2 Background and context of the study

Universities of Technology (UoTs) have a unique role in higher education and society in that, by their mandate, they are expected to produce graduates who are ready for the working world. This means that curriculum design, development and implementation of the programme offerings should strongly emphasise the knowledge, skills and attitudes that graduates should possess that are relevant to the industry where they will be employed. Traditionally, UoTs internationally focussed strongly on linking learning with the industry (Daniels & Brooke, 2014). However, since the merger of South African universities and the creation of UoTs nationally after the democracy, the extent to which the curricular have achieved this link is not yet known (Holmes, 2013). Bastges-Lienshöft et al. (2021) point out that universities are under pressure because of education and labour market policy changes. Universities generally and UoTs specifically have been intensifying their focus on graduate attributes in their endeavour to provide appropriate and relevant teaching and learning to cater for the industry's needs. Along with this changing image of universities, how university students are perceived has changed significantly (Bastges-Lienshöft et al., 2021). Faller et al. (2023) also proffer that the changing industry conditions and pressures from external stakeholders mean that universities must ensure that graduates attain the desired attributes.

The concept of graduate attributes has thus become increasingly important in higher education as universities strive to produce graduates equipped with the necessary skills, knowledge, and attitudes to succeed in their chosen careers and contribute to society. As far back as 2012, researchers like De la Harpe and David (2012) postulated that graduate attributes have become a critical outcome of contemporary higher education globally. Today, many universities have graduate attributes

statements in the teaching and learning strategies. One of the main reasons for the emphasis on graduate attributes is the rapidly changing and diverse needs of the 21st-century workplace, which requires graduates to demonstrate knowledge, skills and attributes that extend beyond the discipline specific and/or technical aspects of their roles (De la Harpe & David, 2012). The role of industry advisory bodies has become increasingly important in attempts to ensure that graduate attributes are aligned to what industry requires and that UoTs primarily strive to design programmes in line with industry needs.

Commonly known in academia as Industry Advisory Boards (IAB), these structures have become an integral part of curriculum development in higher education. They provide academic departments with meaningful feedback from their curriculum reviews (Taylor & Calitz, 2020) thereby maintaining programme quality and relevance. Available literature (Sener, 2014; Refae et al., 2016) indicates that academic departments use IABs to strengthen programmes, enhance programme quality and shape course content. Critically, IABs also enable academic departments to keep abreast of the industry's needs (Sener, 2014) and to meet accreditation requirements (Taylor & Calitz, 2020).

Literature is saturated with aspects dealing with employability, the work readiness of graduates and student experiences (Mahon, 2022, Römgers et., 2020; Cole & Tibby, 2013; Homes, 2013), and the future focus of graduate attributes (Daniels & Brooke, 2014). However, the studies examining UoT graduate attributes aligned to advisory body requirements in the HRM discipline appear to be scant. The current study is thus relevant in that it endeavours to provide a fresh perspective on the contemporary debates in higher education pertaining to integrating and aligning graduate attributes of the Diploma in Human Resources Management (HRM) with industry advisory bodies' requirements.

1.3 Statement of the research problem

Integrating graduate attributes into the curriculum appears not straightforward and is not always clearly understood (Sibuqash, 2019). A study conducted by Sibuqashe (2019, p. 168) observed a lack of understanding by academics on how to integrate graduate attributes into the curriculum, including the assessment of such attributes. Similarly, Bitzer and Wethering (2020) observed that academics are faced with too

much workload, as they are also responsible for designing the curriculum and preparing accompanying documents such as study guides and assessments, which are ultimately used for teaching and assessing students. Furthermore, given the focus of UoTs, the curriculum is inherently characterised by an emphasis on practice rather than theory components. Integrating graduate attributes into the curriculum thus appears to be critical in ensuring that UoTs produce employable graduates who are ready for the world of work (Bastges-Lienshöft et al., 2021).

It is therefore important to examine the integration of graduate attributes into the curriculum of the Diploma in HRM at the selected UoT and determine the extent to which these attributes align to industry advisory body requirements. Furthermore, the study sheds some light on whether graduate attributes in the HRM programme emphasize the practical aspect (rather than theory) as envisaged in the mandate of UoTs and industry advisory bodies.

1.4 Objectives of the study

At the backdrop of the research problem statement elucidated above, the objectives of this study are conceptualised as follows:

- a) To explore how graduate attributes are integrated into the HRM curriculum at one UoT in Durban including whether the graduate attributes reflect the practical or theoretical emphasis of UoTs.
- b) To determine what influences the integration of graduate attributes into the curriculum of the Diploma in HRM at a selected UoT.
- c) To examine the extent to which the graduate attributes that are reflected in the HRM curriculum are aligned to the industry advisory body requirements.
- d) To investigate the integration of 4IR-aligned graduate attributes into the HRM curriculum aiming to enhance the employability and future readiness of graduates.

1.5 Research questions

In line with the objectives outlined above, the research questions underpinning the study are;

- a) How are the graduate attributes integrated into the curriculum of the Diploma in HRM (module outcomes and assessments) at a selected UoT in Durban?

- b) What influences the integration of graduate attributes into the curriculum of the Diploma in HRM (module outcomes and assessments) at a selected UoT in Durban?
- c) How are the graduate attributes that are reflected in the HRM curriculum aligned to the industry advisory body requirements?
- d) Why are the graduate attributes that are reflected in the HRM curriculum aligned to the industry advisory body requirements in the way that they are?
- e) How can the HRM curriculum align with the demands of 4IR, ensuring that graduates possess the necessary attributes needed in the contemporary workplace?

1.6 Location of the study

The location and context of the study is a UoT, which happens to be a Historically Disadvantaged Institution (HDI). HDIs are universities that were established to serve marginalised groups in South Africa along racial lines during the apartheid era due to discriminatory policies or practices. The institution is based in the Umlazi township in Durban, South Africa.

1.7 Significance of the study

The significance of the study is envisaged to be twofold; firstly, the study provides insight into how graduate attributes are integrated into the curriculum and aligned to industry. This is important given the emphasis of UoTs on career focus and employability of graduates. Secondly, the study's implication pertains to providing insight into delivering HRM programmes that would equip graduates with the relevant and necessary attributes and skills to succeed in the workplace. The study contributes to scientific knowledge on integrating and embedding graduate attributes in higher education.

1.8 Limitations of the study

Though case studies can be a valuable research tool, they also have some limitations. One limitation is that case studies can be time-consuming and expensive to conduct. Another limitation is that case studies can be difficult to generalise to other settings or populations, which is the case for this study. Given that the study was conducted as a single case study focusing on single UoT, the results of the

study may not be applicable or generalisable to other institutional types such as traditional universities.

1.9 Structure of the dissertation

Chapter 1: introduction and Background

This chapter sets the general logical trajectory and tone of the study. The research problem statement, research questions as well as the general objectives of the study are outlined in detail.

Chapter 2: Literature Review

Critical review of existing scholarship on graduate attributes in higher education is provided in this chapter. The relevant literature and scholarly debates on graduate attributes are reviewed, and how these debates have shaped the conceptualisation of graduate attributes and praxis of approaches of embedding graduate attributes in the curriculum are explored.

Chapter 3: Research design and methodology

This chapter describes and discusses in detail the research methodology and design followed in the study, including the research instrument used, data production and analysis techniques.

Chapter 4: Presentation and interpretation of results

In chapter five, data generated through interviews and secondary data is presented and interpreted at a descriptive level.

Chapter 5: Discussion and synthesis of findings

The chapter provides a detailed discussion of findings, including a synthesis of the findings that relate to the theoretical framework, and concludes by illustrating a systems approach to embedding graduate attributes.

Chapter 6: Conclusions and recommendations

This chapter summarises research conclusions, shows the original contribution of the study, and concludes by setting out the implications of the study for practitioners.

1.10 Chapter summary

Chapter one provided an overall introduction and rationale for the study. It presents the background and context of the study, including the objectives, research questions and purpose of the study. Chapter one concludes with a brief outline of the entire study by way of chapter arrangements. In the next chapter, an in-depth literature review is provided.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The previous chapter outlined the general purpose and aim of the study. This chapter provides an in-depth literature review of recent studies that have been done and debates on graduate attributes in the higher education context. As a point of departure, the review introduces the epistemology of graduate attributes and associated concepts. It then discusses the importance of graduate attributes in higher education and why it is worth studying, especially concerning the nature of the selected programme (HRM diploma) and the institution (a UoT). The review in this chapter relies on both theoretical and empirical studies, and it also identifies gaps in literature and implications for these gaps for future research. Before delving into the heart and heart of the literature review in this chapter, it is vital to provide some literature-informed context regarding the literature review approach adopted in the study.

The importance of the literature review is not in dispute (Hiebl, 2023); however, the *how* part is often problematic (see the works of Denney & Tewksbury, 2013; Hiebl, 2023; Kamler & Thompson, 2014;). In their book titled *Helping Doctoral Students Write*, Kamler and Thompson (2014, p. 30) state that the literature review is not just a matter of one's showcasing to examiners that one has read a lot of articles and books. It is thus apparent that a literature review is not (or should not be) merely a matter of many citations; rather, it should be a thoughtful and critical process of building one's argument drawing from existing works. As attested by Mouton (2005), the review approach is not merely a collection of texts but an in-depth engagement of the body of literature. This implies that the literature review adopted in this study leans towards what Majam and Theron (2006, p. 603) call "critical review of literature". For Majam and Theron (2006, p. 603), a critical review of scholarship is about "looking again (re + view) at the literature or scholarship (reports of what others have done) in a related area: an area not necessarily identical with, but collateral to, your own area of study". To this effect, the works of Denney and

Tewksbury (2013), Hiebl (2023) and Kamler and Thompson (2014) largely influenced the literature review approach adopted herein.

Several drawbacks often mar the literature review process. Kamler and Thompson (2014) observed that often, researchers are 'crowded' by the literature and 'drown' in detail as they traverse the complex terrain of literature and theories. One can argue that this trend and dilemma is also observable in postgraduate studies in general, where researchers fall into the pit "who said what about what" and "he said, she said" (Kamler & Thompson, 2014, p. 34). This approach lacks critical interrogation and synthesis because, after "who said what about what" and "he said, she said", then so what? Synthesis is, therefore, a key feature of a 'good' literature review, as emphasised by Denney and Tewksbury (2013, p. 221):

A" common error that reflects a mistargeted literature review is to string together a series of sentences or paragraphs that tell the reader study A found this, study B found this, and study C found this".

Essentially, regardless of the focus of the study, the concepts should be connected seamlessly throughout the literature review, which is why Kamler and Thompson (2014) emphasise that the lack of connection between sentences makes the literature review sound like a mere list or summary of ideas. Against this backdrop, this chapter provides an in-depth and critical review of the literature on graduate attributes in higher education, including associated concepts.

2.2 The context of Universities of Technology

South Africa's higher education is configured across three institutional types, namely UoTs, traditional universities, and comprehensive universities. There are 26 public universities in South Africa, as depicted in Table 2.1. The three different categories of universities have, in principle, different mandates to fulfil in the country (Sibuqashe, 2019). According to Sibuqashe (2019), traditional universities are mandated to offer academic and theory-orientated programmes, whilst comprehensive universities offer both theory-orientated and vocational programmes. Universities of technology mainly offer vocational programmes in the form of degrees, diplomas, and higher certificates. Since this study is located at a UoT, emphasis is henceforth on the institutional type of UoT.

Table 2:1: Institutional types

Traditional universities	Comprehensive universities	Universities of Technology
University of Fort Hare (UFH)	Nelson Mandela University (NMU)	Cape Peninsula University of Technology (CPUT)
Stellenbosch University (SU)	University of South Africa (UNISA)	Vaal University of Technology (VUT)
University of Limpopo (UL)	University of Venda (Univen)	Durban University of Technology (DUT)
University of KwaZulu Natal (UKZN)	Walter Sisulu University (WSU)	Mangosuthu University of Technology (MUT)
University of Pretoria (UP)	University of Zululand (UniZulu)	Tshwane University of Technology (TUT)
University of the Witwatersrand (Wits)	University of Johannesburg (UJ)	Central University of Technology, Free State (CUT)
North-West University (NWU)		
University of the Free State (UFS)		
Rhodes University (RU)		
University of the Western Cape (UWC)		
University of Cape Town (UCT)		
Sol Plaatjie University (SPU)		
University of Mpumalanga (UMP)		
Sefako Makgatho Health Sciences University		

Source: author's own creation.

Given that UoTs in South Africa emanated from the conversion and amalgamation of Technikons this resulted in UoTs inherently adopting the significant features of Technikons (Sibuqashe, 2019). Traditionally, Technikons were mandated to prepare graduates for industry through practical based curriculum delivery. According to Du Pré (2010), applied learning and strong link to industry were the hallmarks of Technikons. As such, UoTs inherited these characteristics, which meant that the programmes offered by UoTs ought to be relevant to industry and incorporate applied learning in order to familiarise graduates with the industry practices.

2.2.1 Mandate of Universities of Technology

To unpack the mandate of UoTs, we need to turn to the South African Technology Network (SATN) as it plays a crucial role in the identity and mandate of UoTs. It was established in 2008 by five UoTs: CPUT, DUT, CUT, TUT and VUT. The SATN was seemingly formed as a co-operative network to promote quality and build strong UoTs and collaboration between UoTs and industry (SATN, 2008). It has since changed its name from SATN to Technological Higher Education Network South Africa (THENSA). Amongst other critical initiatives of SATN/THENSA was the development of characteristics of UoTs (Sibuqashe, 2019), that should further distinguish UoTs from other institutional types. Key among these characteristics include the relevance of programmes with a robust corporate focus and responding and fulfilling the needs of industry, the community and society at large. By implication, this means that UoTs are expected to develop programmes in collaboration with industry, that should also respond to the needs of the industry, including national and societal interests. As such, the industry should be an integral part of curriculum development for UoTs, as they are expected to produce graduates ready for the world of work.

Given the unique focus of UoTs and emphasis on career-orientated programmes, emphasising graduate attributes thus appears to be critical in ensuring that UoTs produce graduates who are employable and ready for the world of work (Bastges-Lienshöft et al., 2021). Garraway and Winberg (2019, p. 39) posit that UoTs were primarily created to produce employees for industry, with industry as the dominant partner, meaning that UoT programmes are inherently characterised by emphasis on practice rather than theoretical principles typical of traditional universities. Tefese and Mphahlele (2018, p. 98) support this notion by stating that in the contemporary world, employers look beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. The vision of the selected UoT is to offer career orientated programmes at the cutting edge of technology that focus on innovative problem solving, and engagement with industry, business, government and communities (MUT Strategy 2020-2025). This appears to be consistent with the assertions of Garraway and Winberg (2019) and Tefese and Mphahlele (2018). The current study thus offers a unique perspective in that it focuses on a single programme (Diploma in HRM) with different professional

attributes and the extent to which the curriculum learning outcomes align with the institution's overall statement of graduate attributes and industry advisory bodies requirements.

2.3 Graduate attributes in higher education

Integrating and implementing graduate attributes into the disciplines at higher education institutions has become imperative. A study by Griesel and Parker (2009) for the South African Qualifications Authority (SAQA) and Higher Education South Africa (HESA) prioritises the following particular niche areas as far as graduate attributes are concerned: (1) The interface between higher education and the working world; (2) the imperative skills required for the economy and society in general; and (3) the reality of a 21st century knowledge-driven global society that necessitates higher education to produce graduates who can effectively and productively compete and participate in an increasingly globalised society.

Graduate attributes have become increasingly important as universities strive to produce graduates equipped with the necessary skills, knowledge, and attitudes to succeed in their chosen careers and contribute to society. Broadly speaking, universities need to ensure that graduates are imbued with attributes that would make them employable or add value immediately once they are employed. As far back as 2012, researchers like De la Harpe and David (2012) indicated that graduate attributes have become a critical outcome of contemporary higher education globally. The rationale is the rapidly changing and diverse needs of the 21st-century workplace and the need for graduates to demonstrate knowledge, skills and attributes that extend beyond the discipline-specific and/or technical aspects of their roles (SAQA, 2008; De la Harpe & David, 2012).

Definitions of graduate attributes vary but seemingly converge at some point. Thompson et al. (2008) refer to graduate attributes as professional and personal skills embodied by graduates, including understanding and applying discipline-specific knowledge. For Shivor et al. (2018), graduate attributes encompass the qualities that graduates should possess upon completing their qualifications in institutions of higher learning. For this study, graduate attributes can be regarded as the set of skills, qualities and understandings that are agreed upon by an institution's

community that its graduates should embody after completing their qualifications (Bowden et al., 2000).

In South African higher education, as Mahon (2022) postulates, graduate attributes can be viewed using learning outcomes, which are standards in terms of what one should know and be competent at upon completing a programme (SAQA, 2013). The South African Qualifications Authority (SAQA) has developed a national qualifications framework (NQF) encompassing exit-level outcomes describing the generic skills and knowledge that graduates should possess at the different NQF Levels (SAQA, 2013) upon completion of the programmes. According to Mahon (2022), these exit-level outcomes provide a basis for developing program-level outcomes, that describe the skills and knowledge students should acquire within a particular program of study.

The process of acquiring a qualification from institutions of higher learning is often characterised by the expectation that students will not only acquire theoretical knowledge but also develop skills and attributes relevant to their future jobs. According to the South African Qualifications Authority (SAQA, 2008), the nexus between higher education and industry is vital, as higher education plays a significant role in human capital development. The importance of aligning graduate attributes embedded in curricula to the world of work is thus in the interest of both higher education institutions and industry, which is also attested by the move from accrediting bodies and governments to look at graduate attributes as part of quality assurance (Thompson et al., 2008). It can thus be deduced that the development of graduate attributes is significant for all stakeholders in higher education. For students, developing graduate attributes is in their interest for future job prospects (Shivoro et al., 2018). Tefese and Mphahlele (2018) confirm that in the contemporary world, employers look beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. This implies that employers are also more interested in the employability of graduates.

2.3.1 What influences graduate attributes

The significance of graduate attributes is hitherto well established, and different institutions approach graduate attributes differently (Ipperciel & El Atia, 2014; Mahon, 2022; Pauli & Raymond-Barker, 2016). Literature suggests that several factors could

influence the development of graduate attributes, of which Mahon (2022) points to a shift away from graduate attributes as implicit consequences of university education to explicit factors considered as outcomes. In addition, graduate attributes enable universities to distinguish and position themselves in contrast with other vocational providers. **In this regard, the internal and external factors influencing graduate attributes are identified.**

2.3.1.1 Internal influences

Within the institution, internal factors play a pivotal role on graduate attributes at institutional and departmental level. Mahon (2022) suggests that the nature of an institution is a significant factor in the variation of graduate attributes. Considering South African higher education comprises three types of institutions explicated earlier, different institutions inherently have different stakeholders. In this regard, their priorities may align in various directions. Hughes and Barrie (2010) note that the influence of specific groups may vary between universities and award programs, as some universities may place more emphasis on certain groups than others. It is also possible that institutions may view graduate attributes as a way of differentiating themselves from other institutions.

2.3.1.2 External influences

Beyond the internal factors, Mahon (2022) notes that industry appears to have increasingly impacted higher education in recent years. This impact and influence are more evident in curriculum development at universities, where academic departments have to constitute and consult industry advisory bodies in the curriculum development process. From the industry perspective, a skilled workforce is essential (Mahon, 2022), and as such, the role of industry and professional bodies in the conception and assessment of graduate attributes has become even more pronounced. This point will become more evident in section 2.5.

2.3.2 Human Resources Management Graduate attributes

What is expected of HRM graduates in the contemporary HRM working world appears to be aligned with the general skills requirements across industries. Ressa and Shaw (2022) aver that HRM professionals are now operating in a dynamic environment, which means that contemporary HRM graduate attributes should take account of these dynamics. On this note, Sharma et al. (2021) postulate that the advent of 4IR diminished the roles of Human Resources in organisations. The

authors further suggest that HRM in the era of 4IR could focus on using advanced technologies for acquiring qualified talent, including strategic decision-making. Malik et al. (2020) and Ressia & Shaw (2022) further underline that the advent of data mining, intelligent agent technologies, enterprise resource and planning systems (ERPS), and extraction software and smart sensory mechanisms ushered new data managed practices that had impact on HRM practices and subsequently the required skills. As organisations are pressured to respond to the need for flexibility in the workplace and the transformation of labour markets (Ressia & Shaw, 2022) it is essential for contemporary HRM programmes to take cognisance of these issues in crafting HRM graduate attributes. Paadi (2014) states that due to workplace changes, HRM professionals' roles should also change to adapt to the changing work environment. **With the advent of 4IR, the required skills and competencies in the workforce have had an impact on the conceptualisation of graduate attributes.**

2.3.3 Graduate attributes in the era of the Fourth Industrial Revolution

Whilst institutions of higher learning put an emphasis on different graduate attributes, the World Economic Forum (WEF) indicates that the evident seismic changes in the required workforce talents have created a demand for new competencies and skills because of 4IR (WEF, 2016). Higher education institutions' implication is accelerating learning and development for the workforce and broader labour markets (Penprase, 2018). The WEF depicted that the Covid-19 pandemic has accelerated the digital economy, which requires digital skills. In this regard, the 2022 report by WEF points to a shortage of digital skills across sectors. As depicted in Table 2.2 below, the skills required for future jobs in the context of 4IR are changing rapidly.

Table 2.2 depicts that skills such as critical thinking, complex problem solving, emotional intelligence and creativity will continue to be in demand as predicted for 2025. However, comparing the WEF 2016 and 2025 list of skills, a notable addition reflects the importance of technology-related skills, resilience, leadership and learning strategies. This can be seen as a testament to the impact of technology on the workforce and the need for graduates to adapt and embody continuous learning in the face of a rapidly changing job market.

Table 2:2: WEF future skills of work.

WEF Future of Jobs for 2020	WEF Future of Jobs for 2025
<ul style="list-style-type: none"> • Complex problem solving • Critical thinking • Creativity • People management • Coordinating with others • Emotional intelligence • Judgment and decision making • Service orientation • Negotiation • Cognitive flexibility <p><i>Source: WEF 2016 Future of Jobs Report</i></p>	<ul style="list-style-type: none"> • Analytical thinking and innovation • Active learning and learning strategies • Complex problem-solving • Critical thinking and analysis • Creativity, originality and initiative • Leadership and social influence • Technology use, monitoring and control • Technology design and programming • Resilience, stress tolerance and flexibility • Reasoning, problem-solving and ideation • Emotional intelligence • Troubleshooting and user experience • Service orientation • Systems analysis and evaluation • Persuasion and negotiation

Source: WEF 2020 Future of Jobs Report

Contemporary work has become more automated, meaning graduates must be more agile and move between jobs with ease (Penprase, 2018). In this regard scholars acknowledge (Oliver & Jorre, 2018; Penprase, 2018) that the changes in education and labour force policies resulted in universities being under pressure to produce graduates who are employable. As a result, the emphasis of learning at universities shifted towards the work-readiness of the graduates (Daniels & Brooker, 2014), which is the mandated focus of UoTs (Garraway & Winberg, 2019; DHET, 2014; Masinde & Roux, 2020). Thus, it is sensible that UoTs take cognisance of these developments in the development and review of curricular offerings and to ensure further that there is a constructive alignment of such graduate attributes with the advisory body's requirements.

2.3.4 MUT Graduate Attributes

In this section, MUT’s graduate attributes are outlined and discussed against the backdrop of the discussion above. MUT’s *Academic Identity* document, where the graduate attributes are enshrined, states:

“The higher education landscape in South Africa has also transformed significantly, making it necessary for institutions to define themselves in relation to their individual vision and mission. At MUT, we intend not only to distinguish our graduate from other graduates in the sector, but also to define our graduate in line with the 21st century world of work and the demands of the South African economic environment” (MUT Academic Identity, 2015, p. 31).

From this extract, two things emerge: firstly, the institution acknowledges the changes in the education landscape and how these changes affect the institutional mission and vision. Secondly, it appears that the institution differentiates its graduates in the sector by defining them in tandem with the 21st-century world of work, including the economic demands prevailing in South Africa. These expositions are consistent with SAQA (2008) and the assertions of De la Harpe & David (2012). Thirdly, and by implication, the institution intends to equip its graduates with the knowledge and skills needed to succeed in the South African economy. In this regard, the Academic Identity document states that the 21st-century world of work and HESA/SAQA Graduate Attributes Baseline Study served as a starting point in developing its graduate attributes. MUT’s graduate attributes appear to be cored around “Basic skills and understanding”, “Knowledge and intellectual ability”, “Workplace skills and applied knowledge”, and “Interactive and personal skills”. As depicted in tables 2.3, 2.4, 2.5 and 2.6, the “Global context” and the approach adopted by MUT in crafting graduate attributes appear to be different from the norm in the sector, where such attributes are ordinarily written as statements.

Table 2:3: Basic skills and understanding

Global context	Employer expectations	Graduate attributes
<ul style="list-style-type: none"> • Information Age • Electronic communication dominates • Rapid technological development • English as lingua franca • World Wide Web • Nuanced jobs 	<ul style="list-style-type: none"> • Proficiency in English • Written communication skills • Oral presentation skills • Prior exposure to the workplace • Knowing the organisation • Technical ability 	<ul style="list-style-type: none"> • Able to communicate effectively in English • Able to source and use appropriate information • Computer literate • Has discipline-relevant professional skills • Familiar with the workplace

<ul style="list-style-type: none"> • Several job changes in a lifetime 	<ul style="list-style-type: none"> • Computer literacy • Ability to find, access and use information • Numeracy or quantitative literacy 	<ul style="list-style-type: none"> • Able to move between jobs, thus remaining employable for life
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Source: MUT Academic Identity Document (2015, p.31-37).

Table 2.3 shows that the graduate attributes related to “Basic skills and understanding” consider the rapid changes in the global context, which significantly impacts the workplace. The table highlights the emphasis of employers on adaptable graduates who can move between jobs due to the fluidity of the modern workplace. Additionally, the graduates should be imbued with knowledge and skills to be successful in the economy. The table highlights the importance of attributes such as communication, IT, and professional skills for graduates, which are essential skills for graduates who want to be successful in the workplace.

Table 2:4: Knowledge and intellectual ability

Global context	Employer expectations	Graduate attributes
<ul style="list-style-type: none"> • Proliferation of knowledge • MOOCS (Massive Open Online Courses) • Shifting paradigms • Discontinuity and rupture • Complexity • Uncertainty • Risk taking • Unpredictability • Increasing panic 	<ul style="list-style-type: none"> • Rapid conceptualisation of issues • Ability to follow and construct logical arguments • Understanding of core principles • General knowledge about local and global affairs • Subject or discipline knowledge • Interest in ideas and a desire to continue learning • Critical and analytical ability 	<ul style="list-style-type: none"> • Possesses both general and in-depth disciplinary knowledge • A critical and analytical thinker • Has research skills • Intellectually curious • Committed to further learning

Source: MUT Academic Identity Document (2015, p.31-37).

On “Knowledge and intellectual ability”, Table 2.4 depicts MUT graduate attributes take cognisance of the global context, which recognises the proliferation of complexity of the world, at the heart of which is the proliferation of knowledge. In this regard, employers are looking for graduates imbued with critical thinking, problem solving skills, and lifelong learners, as knowledge is created and spread rapidly. Accordingly, MUT graduates should have a strong disciplinary knowledge, including general knowledge about local and global affairs. In addition, MUT graduates should be intellectually curious and critical and analytical thinkers with research skills.

Table 2:5: Workplace skills and applied knowledge

Global context	Employer expectations	Graduate attributes
<ul style="list-style-type: none"> • Globalisation • Speed and acceleration • Information saturation • Innovation and creativity • Outsourcing of jobs • Unemployment • Internationalisation • Scarcity of resources • Austerity • Poverty vs. affluence • Need for prudence • Accountability • Transparency 	<ul style="list-style-type: none"> • Understanding of changing workplace practices • Ability to recognise a problem situation • Ability to choose appropriate information to address problems • An appropriate approach to problem solving • Ability to plan and execute tasks independently • Ability to monitor and evaluate own work-related actions • Ability to apply knowledge to new situations • Ability to deal with different cultural practices 	<ul style="list-style-type: none"> • Able to function in any work environment and thrive • Able to apply knowledge to solve problems • Entrepreneurial and resourceful • Able to work independently • Creative and innovative • Able to adapt to new/different workplace practices and cultures • Accountable and ethical • Environmentally responsible

Source: MUT Academic Identity Document (2015, p.31-37).

In terms of “Workplace skills and applied knowledge”, Table 2.5 illustrates that MUT considers the global context to be changing rapidly, characterised by issues such as globalization, speed and acceleration, information saturation, innovation, and creativity, outsourcing of jobs, unemployment, internationalization, scarcity of resources, accountability, and transparency. Consequently, employers expect graduates to recognise these changes and be able to function effectively in new and diverse environments. Furthermore, employers expect graduates to be able to solve complex problems and work independently. Against this backdrop, MUT conceptualised and envisioned its graduates to be resourceful and entrepreneurial, thrive in any work environment, work independently, be creative, innovative, ethical, and accountable, with a sense of environmental responsibility.

Table 2:6: Interactive and personal skills

Global context	Employer expectations	Graduate attributes
<ul style="list-style-type: none"> • Youthfulness • Intergenerational conflict • Conflict (social, marital) • Private vs. public sector tension • Entitlement vs. responsibility • Multiculturalism • Multilingualism • Need for ethical citizenship • Flexibility • Adaptability 	<ul style="list-style-type: none"> • Sense of identity and self-confidence • Negotiation and mediation skills • Contribution to teambuilding and work • Ability to relate to a wide range of people • Appreciation of different cultural contexts • Openness and flexibility 	<ul style="list-style-type: none"> • Leadership ability • Independent and confident • Adaptable and resourceful • A socially responsible and ethical local citizen • A connected 'global citizen' • Flexible and responsive to diverse environments • Positive, self-motivated and entrepreneurial • Willing to work with and learn from others

Source: MUT Academic Identity Document (2015, p.31-37).

Table 2.6 shows attributes related “Interactive and personal skills”, the institution has several influencing factors, such as Multiculturalism, Multilingualism, ethical citizenship, ethical citizenship, flexibility, entitlement, and reasonability. As such, employers expect graduates with a sense of identity and self-confidence, including negotiation skills, teamwork, open mindedness, and appreciation of diverse cultural contexts. As a result, the graduates conceptualised by MUT indicate that their graduates should be flexible and responsive to diverse environments, socially responsible, adaptable, resourceful, independent and confident.

2.4 Integration of Graduate Attributes into the curriculum

Although graduate attributes appear to be developed at an institutional level, the epistemology of a specific department may not be catered for by the generic attributes. Jones (2013) argues that attributes should fit with the disciplinary and departmental culture, epistemic frames, and teaching practices. Correspondence between generic institutional attributes and the discipline is vital to ensure coherence. Conversely, as Jones (2013) cautions, the institutional attributes may appear peripheral and thus be difficult to integrate into a specific programme. Beyond the advisory bodies requirements, the programme's curriculum is typically aligned with the South African National Qualifications Authority's (SAQA) National Qualifications Framework (NQF). SAQA also sets out the SAQA level descriptors, which are used in formulating programme learning outcomes that higher education institutions should align their qualifications with. The NQF is a national register that

provides for a uniform, integrated and coherent education and training system of internationally and nationally acceptable standards, which are expressed as learning outcomes. It also seeks to establish a coherent, integrative education and training system that provides a platform for a unifying approach. In this regard, at a conceptual level, a systems approach can be useful tool for integrating graduate attributes.

2.4.1. A Systems Approach

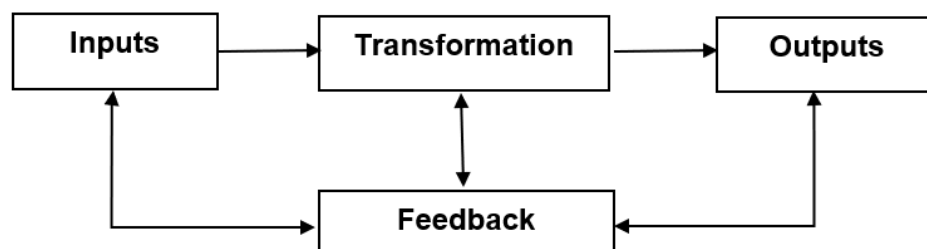
A systems approach can be traced to the classical works of Ludwig von Bertalanffy in the 1950s and 1960s, notably his seminal work 'General System Theory' (Bertalanffy, 1951:303–361; von Bertalanffy, 1968). Also referred to as open systems theory, it is applied in various organisational contexts. Roiszowki (1981: 23) defines a system as “a set of elements or components or objects which are interrelated and work towards an overall objective”. For Groenewegen (1993), a system comprises complex factors that interact according to an overall plan for a common purpose. Achieving a common strategic goal or objective appears to be central to the definition of a system. Gupta and Gupta (2013) postulate that a systems approach is a management mechanism that enables the examination of all aspects of the organisation, including the interrelationships and how resources use can be optimised. In essence, the basic principle underpinning the systems theory is that “the whole system is more than the sum of its parts, that the whole determines the nature of the parts, and the parts are dynamically interrelated and cannot be understood in isolation from the whole” (Mizikaci, 2006, p. 43). According to Banathy (2000), systems are generally goal-oriented, have inputs from their internal and external environment, have outputs to achieve their goals, and the environment provides feedback about the output.

In the context of education, a systems approach has been applied, for instance, to holistically analyse the teaching and learning enterprise (Gupta & Gupta, 2013), for programme evaluation (Mizikaci, 2006) and for sustaining tutor programmes (Sithole & Gumede, 2022). For the context of the study, a systems approach is viewed as a comprehensive framework and interdisciplinary method which considers the university as a complex system comprised of interconnected components. As mentioned by Sithole and Gumede (2022, p. 230), “a university is a complex system operating in a complex environment, influenced by internal and external factors”,

meaning that all components of the system and its environment must be taken into account in our quest to arrive at a holistic approach to embedding graduate attributes. Literature shows that few scholars have attempted to conceptualise the embedding of graduate attributes in recent years. These include Barrie (2007), with a conceptual framework for the teaching and learning of generic graduate attributes, and Hughes and Barrie (2010), focusing on the influences on the assessment of graduate attributes in higher education. The works of these scholars (Barrie, 2007; Hughes & Barrie, 2010) provide invaluable holistic insight into staff perceptions of graduate attributes in the Australian traditional university context. However, in terms of holistic systems view in the context of embedding attributes at UoTs, literature is scant, to the best of my knowledge.

The basic systems model (the transformation model) is outlined in Figure 2.1, comprises three main tenets or components: inputs, transformation, and output.

Figure 2.1: Basic systems model



Source: adapted from Banathy (2000) and Groenewegen (1993).

Inputs are all the ingredients of the systems, all the elements that should be transformed into an output or the end product. In terms of transformation, it is concerned with transforming all the inputs into an output. In other words, transformation combines and processes all the ingredients into a final product as outputs. Outputs result from the systems process; that is, it is the product of what has been transformed. Figure 2.1 further shows that feedback is integral to the system, where the system uses feedback to improve itself through a holistic approach.

2.4.2 Strategies integrating graduate attributes

At a practical level, various strategies for integrating graduate attributes into the curriculum are proffered as deliberated hereunder.

2.4.2.1 Work Integrated Learning (WIL)

WIL is considered as an educational strategy combining theoretical learning with practical work experience (Moalosi et al., 2021). WIL programs are designed to offer students practical working experience in their field of study, thus enabling them to apply theory in a practical setting. WIL is an umbrella term covering initiatives such as internships, cooperative education, apprenticeships, and other experiential learning opportunities that bridge the gap between academic learning and workplace demands (Rowe & Zegwaard, 2017). WIL's primary purpose is to enhance students' employability, develop their professional skills, and make the transition from education to the workforce smoother. WIL is a strategy that is more common in UoTs due to the emphasis on for UoTs to prepare students for work. Students at UoTs must complete a WIL in the workplace, without which a student cannot graduate. More institutions are extending WIL beyond professions with a tradition of practice-based education, such as education, medicine, nursing, and engineering (Moalosi et al., 2021). According to Du Pré (2010), the main advantage is that students receive experience in a related professional field during their formal education and begin working by understanding the marketplace, organisational structures, and employer expectations. The benefit of incorporating WIL into courses is that it benefits both companies and students. Students arrive well-prepared at work, saving employers time and money to train newly hired employees (Bates & Hayes, 2017). **From the WIL experience**, these students arrive at work having a high familiarity with the workplace.

2.4.2.2 Project-Based Approach

Integrating graduate qualities has resulted in adopting numerous teaching approach variations, ranging from teacher-centred to student-centred and learning community involvement approaches (Moalosi & Molokwane, 2017). One such student-centred model is the project-based approach (PBA), which allows students to connect skills, knowledge, values, and attitudes, as well as create knowledge, through a variety of learning activities (Barron, 1998; Moalosi & Molokwane, 2017). PBA creates a framework for learning that is both engaging and relevant (Moalosi & Molokwane, 2017). PBA engages students to acquire vital knowledge and life skills through an extensive, student led inquiry process built around challenging questions and tasks

(BIE, 2003). According to Gill (2020), in PBA, students engage to collaborate in small groups to complete complex tasks based on challenging driving questions embedded in a real-world problem. This approach has become a more formally defined teaching technique and an educational model that organises learning around project-based learning (Moalosi & Molokwane, 2017).

Problem solving is one of the most common graduate characteristics that employers seek. To this effect, PBA enables students to pursue solutions to problems by asking critical questions, debate ideas and design solutions using technology to collect and analyse data and communicate their findings (Downing et al., 2009; Marx et al., 1994). PBA also allows students to work relatively autonomously over time, culminating in realistic products (Bates et al., 2019). This approach engages students in real-world tasks and challenges that are relevant outside of the classroom. Prince and Felder (2006) state that the PBA improves students' interest and encourages active inquiry and higher-level thinking, problem-solving, cooperating, communicating, teamwork, critical thinking, and self-directed lifelong learning. The approach also integrates multiple subject topics, connecting students to real-world challenges and tasks. Relate the above to your study.

2.4.2.3. Mentoring Approach

Mentoring approaches are centred on the development of relationships and assisting people in the learning process. Studies have shown that mentoring helps students develop essential skills such as amplified self-confidence, problem-solving, teamwork, and relationship-building (Congos & Stout, 2003; Donelan & Wallace, 1997). This suggests that the mentor role, with its leadership responsibilities, provides students additional opportunities to develop skills. Jackling and McDowall (2008) and Laurs (2008) assert that when students serve as mentors, they build and strengthen graduate traits such as teamwork, communication, and leadership abilities, as well as empathy, patience, self-efficacy, responsibility, and dedication (Skalicky & Caney, 2010),

Although mentoring has been widely used in business and medicine to foster an individual's career success, it has only recently been used in graduate education to guide an individual's academic development to improve graduate attributes and program completion (Wright-Harp & Cole, 2008). Jenkinson and Benson (2016)

reported that mentoring in undergraduate programs results in being more recognised by others, where students also earn respect from peers and build leadership, interpersonal and critical reflection skills.

2.4.2.4. Peer Assisted Learning Approach

For almost all programmes, peer-assisted learning (PAL) is used in UoTs. The fundamental purpose of PAL is to assist students in solidifying their knowledge by educating each other through active learning and critical thinking skills (Cameron et., 2015). The benefits of peer-assisted learning are accentuated by Arendale (2014), that students benefit academically and professionally by increasing confidence, teamwork, engagement, independence skills, sense of responsibility, critical thinking, and problem-solving focused learning for peer teachers.

2.5 Assessing Graduate Attributes

It is a common cause among universities, employers, graduates and communities that graduates should possess and demonstrate certain attributes needed for learning beyond university (Radloff et al., 2008). In this regard, Radloff et al (2008) argued that attention should be paid to the assessment of graduate attributes because assessment tends to define curriculum and drive staff and student behaviour (Ramsden, 2003; Biggs & Tang, 2007). **The assessing of graduate attributes is crucial in guaranteeing that universities generate graduates who possess not just subject-matter expertise but also the principles and skills required for both personal and professional success (Withering & Bitzer, 2020). Employers across worldwide voice their concern about graduates who are unable to compete on a global scale due to a lack of necessary skills (Varnava and Webb 2021). With such concerns being raised, higher education has made it a mandate to have graduates demonstrating certain attributes needed for learning beyond university.**

In South Africa, for instance, there has been an increase in the assessment of undergraduate research skills among students in the faculties of engineering, natural sciences, health sciences, and management science (Vahed, & Cruickshank, 2018; Mahomed, Ross, & Van Wyk, 2021). Ngubane, Hay & Adedeji, (2022) study revealed that, the Engineering Council of South Africa (ECSA) has outlined the requirements for graduate attributes in their qualification unit criteria, which include research skills. As a result, research skills are now required in the framework of civil

engineering, given the emphasis on sustainable infrastructure and engineering, to encompass the creation of various ideas to solve engineering challenges (Ngubane et al. 2022).

Swart (2018) claims that it is not only difficult to measure graduate attributes, but also to identify and understand them for both academics and students in higher education. The difficulty of assessing graduate attributes is also underscored by ElAtia et al. (2021), pointing that the difficulty of measuring graduate attributes can be attributed to the fact that they are generic and difficult to measure, especially attributes such as confidence, critical thinking and collaboration. In particular, qualitative and subjective attributes such as leadership or ethical reasoning, are more challenging to evaluate using typical quantitative approaches (Varnava & Webb, 2021). As such, Bovill, (2020) posits that integrating the assessment of graduate attributes into current curriculum without interrupting discipline content demands creative instructional design and collaboration among faculty, which can make it challenging for lecturers to assess the required attributes.

Despite these afore mentioned difficulties of assessing graduate attributes, Angel et al. (2022) proposes examining numerous competences required of a graduate as part of the final-year design project or capstone project. On a similar vein, Radloff et al. (2008) also recommends designing and linking assessment activities to attributes. In this regard, interactive orals, as a method of assessment, have been demonstrated to improve the development of professional expertise and skills such as critical thinking and effective communication, which encourage employability (Cranmer 2006; Sotiriadou et al. 2020). To measure students' capacity to apply knowledge and skills in real-world or simulated problems, Bovill, (2020) refers to research projects that assess higher order thinking skills, practical application, and knowledge integration. Higher education institutions can use a combination of different types of assessment to successfully measure and improve both academic and graduate attributes, ensuring that students are well-prepared for their potential careers and responsibilities in society.

2.6 Employability

Concerns regarding the employability of graduates have been a subject of research for ages, from the US and Europe (Arnedillo-Sánchez et al., 2017; Benson &

Morgan, 2013; De Aldama & Tseloudi, 2017) to Asia (Tran, 2017; Yang, Cheung & Song, 2016) to Australia (Gilbert et al., 2022), and South Africa (Bangani, 2019; Chiwara et al., 2017; Mseleku, 2019; Murire et al., 2023). Employability appears to be one of the core notions embedded in the discourse of graduate attributes that by achieving specific attributes, the employability of graduates would thus be enhanced. In essence, employability is implied in the very definition of graduate attributes. According to Schreuder and Coetzee (2011), employability refers to the individual's ability to become and remain employed in the labour market and be prosperous in numerous occupations. Furthermore, the concept of employability implies that an individual would have a set of attributes, knowledge and skills which make them more likely to be employed (Beretu, 2018).

In defining the concept of employability, Römgens, Scoupe and Beusaert (2020) state that employability refers to the individual's ability to become employed and remain employed. As such, for higher education institutions, the concern is to prepare graduates to be employable upon graduation and throughout their careers (Römgens et al., 2020). At the heart of employability is the emphasis that graduates should be imbued with certain skills to enhance their employability (Beretu, 2018; Murire et al., 2023). In this regard, employability skills can be divided into two broad categories: soft and hard skills. The former includes personal attributes and qualities that a graduate can carry or transfer across different industries and jobs, including teamwork, communication collaboration, time management and critical thinking. Hard skills are specific and applicable to a specific industry, including technical expertise and computer skills. In this sense, both the individual and the employers can benefit from employability skills. For individuals, it implies that their chances of being employed, remaining employed and career advancement are increased, whilst for employers, it means finding qualified and suitable candidates who will contribute to the company's success.

Graduate employability in South Africa is a cause of concern for stakeholders. This concern is underlined by Graham and De Lannoy (2016) and Harry and Chinyamurindi (2020), that graduate unemployment is growing at an alarming rate, resulting in increased poverty, continued idleness, and frustration among graduates. The key factors attributed to this graduate unemployment, according to Murire et al. (2023, pp. 1-2), include a) lack of skills that enhance employability; (b) the

qualification type attained, including the field of study; (c) the superiority of the tertiary education acquired based on the institution; (d) higher prospects from graduates; (e) a lack of knowledge about the employment hunt and limited work experience. These factors are also observed by Chiwara et al. (2017), Harry et al. (2018) and Mseleku (2019), though we cannot solely attribute employability skills to graduate unemployment.

The labour market generally also deserves scrutiny regarding graduate unemployment, as Beretu (2018) contends that employability skills are not the only factors affecting graduate employability in South Africa. The author argues that the general state of the economy should not be side-lined in the discourse of graduate employability. Essentially, even if graduates possess the desired employability attributes and aptitudes, if the economy is not creating adequate jobs, graduate unemployment is unlikely to reduce. Bluntly put by Selvadurai et al. (2012, p. 296), “people can only be employed when there are jobs in the market”. It is, therefore, essential to take into account South Africa’s general economic growth with reference to graduate employability and the converse of it as well.

Critics also point out that the narrow approach to employability and overall approach of preparing graduates only for the world of work is short-sighted (Mtawa et al., 2021), as the unintended consequences may be developing what Walker (2006) termed economic citizens, as opposed to public good citizens. In other words, as Nussbaum’s (2010) coined it, universities will soon produce robotic citizens devoid of the ability to think for themselves and meaningfully contribute to society as complete citizens. Such graduates will only be good for the corporate world. In this regard, Mtawa et al. (2021) argue that although employability is vital for economic reasons and social mobility, it is equally important to train graduates beyond employment. **Given the emphasis of the UoT programme to align to industry, the role of industry advisory bodies deserves attention.**

2.7 The role of Industry Advisory Boards

The role of industry advisory is accentuated by Mandviwalla et al. (2015), who describe these bodies as groups of qualified volunteers whose goals include providing direction, content and resources, professional development, research, curriculum, resources and strategic direction. According to Taylor and Calitz (2020),

an advisory board in academia is a group of professionals gathered to help academic departments inform, implement and accomplish their missions. The common denominator in these definitions is that advisory bodies comprise industry professionals who bring their expertise and expectations into academia. Commonly known in academia as Industry Advisory Boards (IAB), these structures are a common practice and an integral part of curriculum development in higher education. Taylor and Calitz (2020) underscore that IABs are essential to academic departments as they provide meaningful feedback on curriculum development concerning industry graduate attributes and programme quality. Available literature (Sener, 2014; Refae, Askari & Alnaji, 2016) indicates that academic departments use IABs to strengthen programmes, enhance programme quality and shape course content. Critically, IABs also enable academic departments to be abreast of the industry's needs (Sener, 2014) and to meet accreditation requirements (Taylor & Calitz, 2020). Additionally, there are well-documented and well-informed lists of skills and attributes employers seek in graduate recruitments, both in generic terms and from specific discipline areas. For this study, we looked at two professional bodies that accredit human resources practitioners in South Africa, as described below.

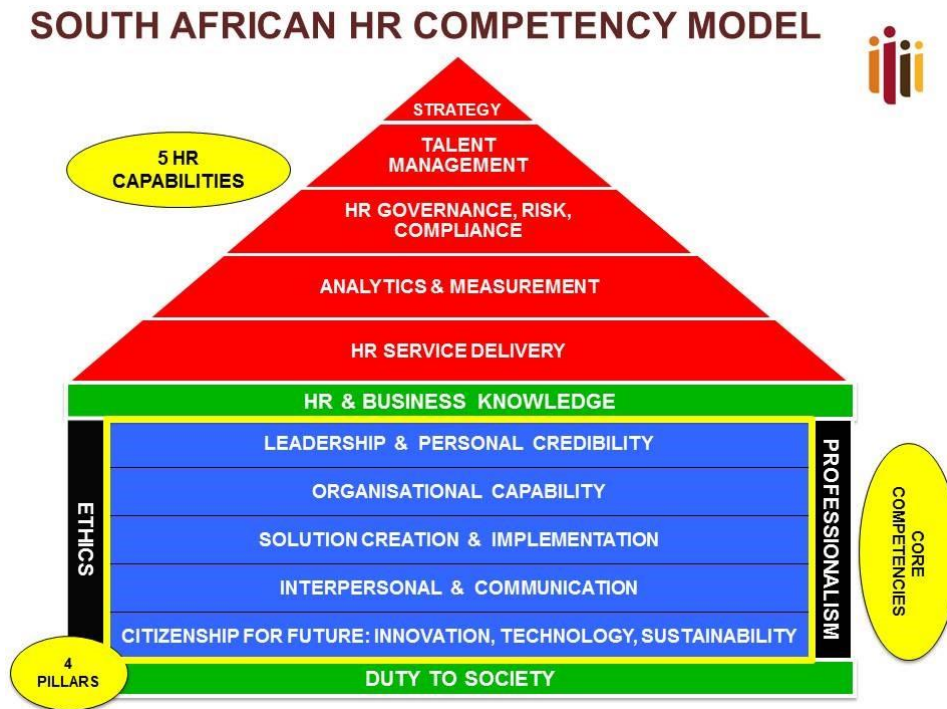
2.7.1 Human Resources Professional Bodies

According to the MUT's HRM programme prospectus (2022, p. 56), a student "holding this qualification [Diploma in HRM] could serve as a requirement for professional registration at associate level, e.g. South Africa Board for People Practices (SABPP) and Institute of People Management (IPM)". The prospectus further mentions that the programme aligns with SABPP and overall industry standards, including those developed by academia. With this background, I narrowed the focus to the two professional bodies: SABPP and IPM.

2.7.1.1 South African Board for People Practices

One of the key roles of SABPP is to ensure that HR professionals are fit for purpose and adhere to professional HR standards. The body also promotes, directs, and influences the development of the HR profession and reviews competency standards related to the conduct, training and education of HR practitioners. Furthermore, Paadi (2014) posit that SABPP advice involves parties developing and attaining those competencies and evaluating such attainment.

Figure 2.2: HR competency model



Source: SABPP (online)

As shown in Figure 2.2, the SABPP competency framework emphasises four pillars coined around ethics, HR and business knowledge, professionalism and duty to society. In this regard, HR practitioners must demonstrate the core competencies of organisational capability, leadership, personal credibility, solution creation and implementation, interpersonal skill and communication. Figure 2.2 further illustrates that citizenship for the future, underpinned by innovation, technology and sustainability, are also the core competencies. The SABPP competency framework also comprises five HR capabilities, which appear to be at a higher echelon of management: strategy, talent management, HR governance and risk, analytics and measurement, and HR service delivery.

2.7.1.2 Institute of People Management

The IPM is another professional body in the field of HRM, comprised of a membership body that represents the human resource and people management fraternity. IPM is an independent and non-profit body with official professional recognition from the South African Qualifications Authority (SAQA). The IPM aims to provide strategic and operational people management and development knowledge and tools that contribute to businesses' growth, profitability and sustainability.

2.8 Theoretical framework underpinning the study

Pursuant to the in-depth literature review, this section expounds on the theoretical framework adopted in the study. A theoretical framework is an integral part of a study, laying the foundation and providing guiding principles or lenses for analysing a particular phenomenon (Varpio et al, 2020). In this study, for reasons that shall follow, Legitimation Code Theory (LCT) was elected to underpin the research process.

LCT explains the fundamental knowledge principles that make different kinds of thinking, doing and being possible (Maton 2014). LCT integrates ideas from various approaches, notably insights from the frameworks of Pierre Bourdieu and Basil Bernstein (Maton, 2014). In the realm of education research, scholars such as Hood and Shay (2015), Maton and Moore (2010), Maton (2014) and Maton and Wheelahan (2010) contributed to the development and refinement of the LCT. These authors have used LCT as a framework for various settings and phenomena. Concerning graduate attributes, Winberg et al. (2018) used LCT to look at the emergence of distinctive graduate attributes in flagship programmes at UoTs in South Africa.

2.8.1 Dimensions of LCT

LCT as a framework for research comprises five dimensions (Wingberg et al., 2018, p. 236): Autonomy, Density, Temporality, Semantics, and Specialisation.

Autonomy

Autonomy concerns who decides on the curriculum and comprises two concepts: relational autonomy and positional autonomy (Winberg et al., 2018). Relational autonomy (RA) refers to external influences on the curriculum decision-makers. The question arises: "Are the principles drawn from the world of science or the world of practice?" (Winberg et al. 2018, p. 236-237). Positional autonomy is stronger (RA+) when academic disciplines underpin the curriculum and is weaker (RA-) when curriculum principles are mainly influenced by external influences (Maton 2005). Given the internal and external influences on graduate attributes in section 2.2.3, the autonomy dimension provides a lens through which an analysis can be done.

Density

In terms of density, the focus is on the material and moral resources graduates of the programme should attain. For instance, a programme may have a clear intention around certain material constructs such as 'entrepreneurship' and 'employability'. Winberg et al. (2018) state that where there is a strong emphasis on the material constructs, it signifies a 'strong material density' (MaD+), whilst less emphasis would signify a 'weka material density' (MaD-). Winberg et al. (2018) further exemplify that a programme characterised by solid ethical guidelines, for instance, would signify a strong (MoD+), whereas the converse would be true. The dimension of density, therefore, serves as an appropriate frame to analyse the material emphasis in the HRM programme.

Temporality

Temporality is the degree to which a programme has a temporal position and orientation. This is concerned with whether the past influences the programme curriculum, that is, how things were previously done (TO-), or whether it is more future-looking (TO+), such as preparing students for a workplace of the future.

Semantics

Semantics is concerned with the organisation of principles underpinning a practice (Clarence, 2016), that is, in the context of curriculum, the key principles characterising a programme's curriculum. According to Clarence (2016), the semantics conceptual tool can be used to understand how knowledge builds over time in terms of contextual application (semantic gravity, SG) and complexity invested over time regarding symbols and concepts (semantic density, SD). As applied in this study, semantics describes the knowledge field that underpins the programme curriculum (Winberg et al., 2018). Semantic Density (SD) concerns the degree of 'condensation of meaning' (Maton, 2014), also described as the level of intellectual challenge reflected in graduate attributes. Semantic density refers to the level of detail and specificity required within a field. Fields with high semantic density value specific facts, details, and examples.

Specialisation

Specialisation involves analysing organising principles regarding their 'epistemic relations' and 'social relations' (Clarence, 2016). Epistemic relations relate to the nature of knowledge in the discipline, whilst social relations relate to the knowers in

the discipline. Either relation can be stronger or weaker along a continuum of strengths and in relation to the other. In other words, with reference to graduate attributes, specialisation explains the distinctiveness of the programme, its graduate attributes, and the curriculum’s relationship to discipline knowledge and society. According to Winberg et al (2018: p. 238), the crux of specialisation for the curriculum is “What is the curriculum’s relationship to knowledge and to society?”.

2.8.2 Justification for the selection of LCT

LCT is applicable in different contexts within the education field or environment. Acknowledging Clarence’s (2016) remarks that LCT is a complex theory, and its application requires a deep understanding of its concepts and principles, Table 2.7 below attempts to explain the dimensions of LCT by summary. The summary provides an overview of their application in the study and an outline of the analytical framework.

Table 2:7: Summary of LCT dimensions

Dimension	Genesis	Measure (- +)	
Autonomy	Who decides on the curriculum (External and Internal)	Relational autonomy (RA) (RA+ = Internal influences)	Positional autonomy (RA- = External influences)
Density	Material and moral resources or social ‘goods’ that might be attained by graduates of the programme	Material density (MaD-).	Strong material density (MaD+).
Temporality	Temporal position and orientation: is the programme curricular is more influenced by the past?	Influenced by the past: (TO-),	Future-looking (TO+),
Semantics	Knowledge field that underpins the programme curriculum	Stronger semantic density (SD-)	Stronger semantic density (SD+)
Specialisation	Distinctiveness of the programme and its graduate attributes	Socially oriented code (ER-, SR+) implies that specialist knowledge or skills are less significant.	Epistemic relation (the knowledge relation) (ER+, SR-) suggests that the possession of specialised knowledge, skills or procedures are emphasised.
		(ER-, SR-) suggests that neither specialist knowledge nor specific dispositions characterise the programme.	professional code (ER+, SR+) implies that both possessing specialist knowledge.

Source: Author’s own creation.

The five dimensions of LCT shall assist in understanding what influences the integration of graduate attributes in the HRM programme and offer a conceptual

framework for understanding how the different attributes are embedded in module outcomes and assessments. Relational autonomy (RA) and positional autonomy (PA) provide a framework for understanding whether graduate attributes in the curriculum are more influenced by academic discipline or external influences such as industry advisory bodies and SAQA NQF level descriptors. The Density (SD) component helps determine intentionality around graduate attributes and whether these intentional graduate attributes are reflected in module outcomes and assessments in the HRM programme. Temporality (TO) provides a framework to examine the degree to which the past influences HRM programme curricula or future prospects (ie, preparing students for a workplace of the future). Furthermore, the component of Semantic Density (SD) provides a useful framework with regard to level of intellectual challenge reflected in HRM diploma graduate attributes, whilst Specialisation assist in explaining the distinctiveness of the HRM diploma programme and how its graduate attributes and the curricula relate to the HRM discipline knowledge and society.

2.9 Chapter summary

In this chapter, an in-depth literature review of the recent state of knowledge and debates on the topic of graduate attributes was provided, the approach of which was a critical review of literature. The chapter ended with a presentation of the theoretical framework that underpinned the study and its justification thereof. The next chapter deals with the research methodology and design of the study.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The literature review as well as the theoretical pillars that undergird the study were outlined in the previous chapter. Chapter three elucidates and illustrates the research approaches, research techniques and the instruments that were employed in the data production and analysis processes. In this chapter, the reader is also taken into confidence in so far as the ethics and limitations of the study are concerned. Care should be given to design coherence, and this chapter discusses the research design and approaches adopted herein in relation to the study's research objectives as presented in section 1.4.

3.2 Research design

Research design is considered a vital architecture of a study, which implies it should be delicately elucidated and justified. Saunders et al. (2016) describe research design as an edifice that integrates or holds different components of research together to ensure that the research questions are answered. It is a blueprint of a research study followed when collecting/producing and analysing data. For Babbie (2017, p. 119), research design involves critical decisions regarding “what topic is to be studied, among what population, with what research methods, for what purpose”. Accordingly, an appropriate research design is selected based on the nature of the problem under investigation and the subsequent research questions. The onus is on the researcher to select appropriate techniques and instruments for data collection and analysis. Considering the qualitative nature of this study, as justified later in section 4.2.6, the research design discussed herein is limited to qualitative research designs.

3.2.1 Case study research

According to Yin (2009), a case study is an empirical inquiry investigating a phenomenon in its real-life context. In this regard, multiple data collection methods can be used as case studies typically involve an in-depth study of a phenomenon, which is why Priya (2021) considers it a research design to study a social unit. A lucid and comprehensive definition of a case study is advanced by Cresswell (2014), that it is a qualitative design through which the researcher explores a phenomenon

in-depth, bound by time and activity. For Creswell (2012), a case study is concerned with exploring a phenomena in-depth, which requires extensive data. Through a case study, one can gain a depth understanding of the case under investigation by relying on multiple data sources (Yin, 2003). Furthermore, case study research fosters the use of multiple methods and sources of evidence (Denscombe, 2000) and data validation through triangulation (Yin, 1994). For Yin (2014), case study research design is a 'craftwork' due to its rigour and sharpness, which are essential for efficacy, reliability, and validity.

3.2.2 Conceptual studies

A conceptual study typically has its unit of analysis as a non-empirical phenomenon. Inherently, non-empirical studies fall in the second order of reality (Mouton, 2005; Babbie & Mouton, 2006). For Gilson and Goldberg (2015), conceptual studies do not necessarily deal with primary data because they focus on integrating and proposing new relationships among constructs. Thus, the onus is on the researcher to develop logical and complete arguments for associations rather than testing them empirically. Conceptual studies are in no way inferior (Jaakkola, 2020) in comparison to empirical studies. Jaakkola (2020) states that a conceptual study primarily deleanates an entity, thus contributing to extensive knowledge by detailing, charting and describing or depicting an entity and its relationship to other entities. According to Yadav (2010), a conceptual study allows the researcher to explore and model emerging phenomena where few empirical data are available.

3.2.3 Justification for selected research design

The research design explored hitherto attest to the multiplicity and plethora of options researchers have for a research blueprint to follow when collecting and analysing data. Given the research questions and objectives of the study, two research designs were deemed appropriate: a case study and a conceptual study as explained above. The former was helpful in the first, second and third research questions, which are empirical in nature, whilst the latter was appropriate for the forth and fifth research questions, which are conceptual in nature. MUT was chosen as a case for this study to understand the alignment of graduate attributes to advisory bodies in the UoTs. Case studies are common in research, as Creswell (2012) argues that a case study is an in-depth exploration of a bounded system based on extensive data collection. A combination of these two research designs and the

convergence of their respective analysis provides a rich insight into the integration and alignment of graduate attributes in the HRM curriculum.

3.3 Research approaches

Qualitative and quantitative research are two distinct methodologies used in various disciplines to investigate and understand different phenomena. They differ in their research designs, data collection methods, data analysis techniques, and the results they produce. This section distinguishes between quantitative and qualitative research regarding their expositions: data collection, data analysis, sample size and research outcomes. Ultimately, the selected approach for this study is justified.

3.3.1 Qualitative research

In contrast with quantitative research, the qualitative research approach dictates for non-numerical techniques to gather and analyse the data. According to Rahman (2017), qualitative research aims to understand participants experiences, including their attitudes and beliefs. Strydom and Bezuidenhout (2014) consider it difficult, if not possible, to quantify or measure human subjective experiences. As such, qualitative research focuses on subjective experiences and meanings associated with phenomena.

3.3.1.1 Qualitative data

In quantitative research, the meaning of data is linked to the “sense data” of observations, as McLeod (2001, p. 137) posits that “In contemporary usage, data has come to mean an array of information, as in data set or data bank” (McLeod, 2001, p. 137). It connotes “bits” of information. In the qualitative context, data implies that its information directly reflects what the phenomenon under study is about and is independent of those who gathered it. Nevertheless, using the term data to describe the accounts gathered by qualitative researchers has become customary. I use the term data production in this study, with the understanding that it does not have the same connotation here as it does in quantitative research.

3.3.1.2 Qualitative data analysis

Qualitative data analysis deals with non-numeric data aimed at understanding complex human experiences and its context (Rahman, 2017). As such, Saunders et al. (2016) aver that the quest is to identify meanings, patterns and themes that emerge from the data. In this regard, grounded theory, thematic analysis and content

analysis are some of the most popular analytical methods for analysing qualitative data (Rahman, 2017).

3.3.1.3 Qualitative sample size

Strydom and Bezuidenhout (2014) posit that qualitative research samples are usually smaller compared to quantitative research samples. The major difference thereof is that the principle of saturation guides qualitative research sampling, meaning that once saturation is achieved, the process of data collection or generation stops (Saunders et al., 2016). This ensures that research questions are explored comprehensively, with an emphasis on depth rather than breadth.

3.3.1.4 Qualitative research outcomes

The outcome of qualitative research is often interpretations and nuanced understanding of a phenomenon (Saunders et al., 2016), thus providing insight into the complex human experiences, beliefs and behaviours. In this regard, the results are typically presented in themes, narratives and conceptual frameworks exploring the subjective human experiences (Saunders et al., 2016).

3.4 Research paradigm

In social sciences and humanities, the concept of research paradigms is prominent. Research paradigm is defined by Saunders et al. (2016) as research philosophies that encompass values and beliefs guiding researchers during data collection, analysis, and interpretation. For Bryman and Bell (2017), the term paradigm denotes a worldview or shared beliefs within a specialised field, representing an epistemological standpoint. Researchers' perceptions of the social world are influenced by various assumptions and realities, termed research paradigms by Punch (2009). These paradigms determine suitable techniques and research topics and offer researchers a lens through which they view the world. According to Creswell (2009), paradigms serve as worldviews, providing a fundamental orientation towards the world and shaping the researcher's focus and direction in their research endeavours. In a nutshell, the paradigm adopted in this study set out the fundamental assumptions, values and beliefs which shaped the research process. It set a framework for perspectives to produce, analyse and interpret data and draw conclusions.

Different research paradigms are associated with different methodologies, approaches, and ways of understanding the world. Researchers are spoilt for a choice regarding paradigms in social sciences and humanities. Other popular paradigms include but are not limited to, positivism, critical realism, pragmatism, feminism, and postmodernism, which are not discussed herein. The focus of this study is limited to interpretivism, which is thoroughly discussed in terms its fundamental philosophical underpinnings: epistemology, ontology, metatheory, axiology and methodology.

3.4.1 Interpretivism

Interpretivism can be considered an antithesis of positivism, for it makes a distinction when studying social and natural sciences phenomena (Hammersley, 2013). Alharahsheh and Pius (2020) argue that interpretivism was developed due to the critique of positivism that emphasises the subjective perspective. Interpretivism differentiates humans from physical phenomena, since humans create meanings from experiences. Therefore, proponents of interpretivism (Hammersley, 2013; Alharahsheh & Pius, 2020) hold that we cannot use the same research methods investigate human knowledge as in the natural sciences, as humans inherently interpret the world and act on their interpretations, whilst objects do not. As du Plooy-Cilliers (2014) states, interpretivism recognises that humans are different from objects. In this regard, Saunders et al. (2012: 108) state that we lose rich insights into the world's complexity if we reduce such complexity to law-like generalisations. This explains the humanistic stance of interpretivism. One of the central features of interpretivism is its positionality (Saunders et al., 2012), which regards the researcher as an active agent of the research process who critically reflects their preconceptions and assumptions that might impact data interpretation.

3.4.1.1 Interpretivist ontology

Ontologically, interpretivists consider reality a multidimensional social construct that is forever changing and dependent on different references (Babbie & Mouton, 2012; Bryman et al., 2014). In this regard, reality is considered subjective, perceived through intersubjectivity through consideration of meanings and understandings of social and experiential aspects in the research (Saunders et al., 2012). Pham (2018) states that a single phenomenon may have multiple interpretations rather than a truth that a measurement process can determine. Pundits for interpretivism

paradigms state that each research study is unique. Therefore, an appropriate philosophical stance should be adopted to address the problem (Babbie & Mouton, 2012). It implies that researchers can gain an in-depth understanding of a single phenomenon in its unique context. According to du Plooy-Cilliers (2014), in interpretivism, reality is a social construction deduced from the meanings of human interpretations of their experiences and interactions. In the context of this study, the interpretations and experiences of participants are considered as a reality of their lived experienced.

3.4.1.2 Interpretivist epistemology

The definition of epistemology was offered in section 4.3.1.1, the central thesis of which is what constitutes acceptable knowledge in a field. The idea of objectivity is not in congruence with interpretivism, as interpretivists consider facts to be fluid and not static, like in positivism. Instead, interpretivism is highly contextual and avoids generalisations beyond the context within which the phenomenon is studied. Interpretivism implies a clear link between the research and the research subject as it assumes that humans cannot be divided from their knowledge (Saunders et al., 2012). Therefore, viewed through interpretive lenses, the nature of knowledge in the context of this study is subjective and takes cognisance of people's experiences, including the context.

3.4.1.3 Interpretivist axiology

Interpretivism recognises that, axiologically, the value free research is not necessarily plausible when studying human experiences. Thus, it values the “complex understanding of unique realities” (du Plooy-Cilliers, 2014).

3.4.1.4 Interpretivist methodologies

Interpretivist methodologies are research approaches that align with the philosophical principles of interpretivism. These methodologies emphasise understanding human experiences, meanings, and contexts through qualitative and subjective methods. Methodologically, interpretivism leans towards qualitative research to understand multiple realities (du Plooy-Cilliers, 2014; Pham, 2018). Qualitative research emphasises the description of experiences and views by participants (Rahman, 2017). Other research approaches aligned with interpretivism include ethnography, case studies, participatory observation, narrative research

hermeneutics and autoethnography. In this study, qualitative research is adopted, approach underpinned by a case study research design.

3.4.1.5 Interpretivist metatheory

Metatheoretical implications on interpretivism are underscored by du Plooy-Cilliers (2014) and Pham (2018), that interpretivism research is based on textual descriptions of the phenomena. This helps to understand people's experiences, values, and meanings, which contrasts with the positivist approach, where empirical evidence serves as the basis of theory. As such, metatheoretically the textual descriptions of participants' views and experiences are expressed in findings of the study.

3.4.2 Paradigm selection: justification

Against the backdrop of the in-depth background provided, interpretivism is deemed appropriate for this study. Pundits for interpretivism paradigms state that each research study is unique from the other; therefore, an appropriate philosophical stance should be adopted to address the problem at hand (Babbie & Mouton, 2012). Given the positionality of interpretivism, and related pros and cons of researcher positionality (Green, 2014; Saidin, 2016) it is vital that I succinctly address issues of positionality as a curriculum practitioner in this regard. **Green (2014) avers that positionality of a researcher offers valuable insights on the subject or phenomena, but cautions that it requires careful handling of methodological and ethical issues. As an insider, one can have ease of access to data and establish rapport with participants (Green, 2014; Saidin, 2016). However, as Saidin (2016), the potential biases and limitations that may arise from being an insider researcher, which may compromise the validity of findings (Green, 2014). Accordingly, a researcher must guard against these pitfalls, and ensure that research ethics are always adhered to. To this effect, in section 3.8 all issues of ethical adherence are outlined, demonstrating that the positionality of the researcher did not compromise the study in any way. Instead,** it enabled me to interpret the phenomena of graduate attributes from the perspective of a higher education curriculum practitioner situated in a UoT context. As Alharahsheh and Pius (2020) proffer, the interpretivism paradigm would enable researchers to treat the research context and its situation as unique, considering the circumstances associated and the participants involved. Per Remenyi et al., positivism also supports the research to focus more on the specific

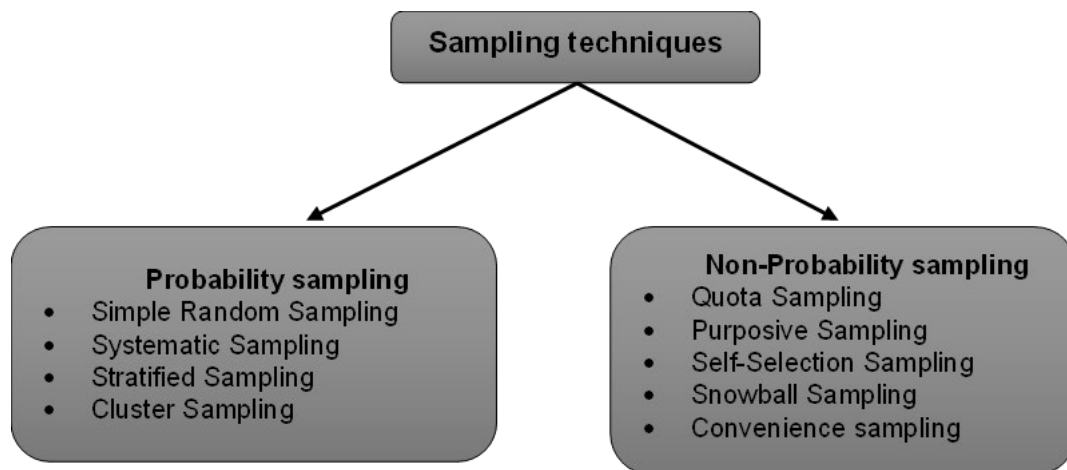
topic and abstains from heading towards more generalisations, as given in the positivist paradigm.

3.5 Sampling

Sampling issues ought to be clearly elucidated in a study because sampling techniques and procedures can influence the study's trustworthiness (Mathipa & Gumbo, 2015). The authors further underline that sampling is a crucial element of a research study as it is not feasible to study everyone everywhere doing everything. According to Bryman and Bell (2017), sampling involves extracting small elements from a larger group which share the same characteristics and are a representative of such a population. For Mathipa and Gumbo (2015), sampling enables researchers to select who to include in the study to find answers to research questions and the research location (Barglowski, 2018). In the context of qualitative research, when thinking about sampling, Mathipa and Gumbo (2015) advise that the following factors should be considered: (a) Is the sampling relevant to one's conceptual frame and research questions? (b) Can reliable descriptions or explanations be produced using the sampling plan selected? (c) Is the sampling plan feasible regarding time, money, manpower, and access to people under study? Moreover, (d) is the sampling plan effective enough for its findings to be generalisable to the entire universe of the population from which the sample is obtained? Considering these factors advanced by Miles and Huberman (1994), the purpose of the study and the research question plays a vital role in ensuring the most appropriate sample is selected (Yin, 2014, p. 118).

Against this sampling backdrop, the various sampling techniques are outlined below, followed by a justification for the selected sampling technique. There are two typologies of sampling, as illustrated through the work of Taherdoost (2016) in Figure 3.1: probability and non-probability sampling.

Figure 3.1: Types of sampling



Source: adapted from Sharma (2017) and Taherdoost (2016).

3.5.1 Probability sampling

Probability sampling is based on the idea that all sample elements have the same probability of being selected for inclusion in the study. According to Sharma (2017), this is also referred to as random sampling. To this effect, Taherdoost (2016) exemplify that, for instance, a researcher may use random number selection using a computer to pick a sample from a sample frame, meaning that the process is random and free from bias. The biggest pitfall for random sampling is that it requires more time (Taherdoost, 2016; Sharma, 2017) due to its level of sampling error.

3.5.1.1 Simple random sampling

Simple random sampling (SRS) is a statistical method in which every member of a population has an equal chance of being selected for the sample (Saunders et al., 2014). It means that the sample will likely represent the population (Sharma, 2017), and the study results can be generalised to the population. Unbiased random selection is essential for drawing conclusions from the results of the study (Sharma, 2017). Simple random sampling involves generating a list of all the possible members of the population, which can be done by numbering all the members of the population or by using a random number generator. However, this requirement for a complete list of all population members can also be a drawback (Sharma, 2017), as the complete list might not be available for larger populations.

3.5.1.2 Systematic sampling

Systematic sampling is a probability sampling technique that involves selecting a random starting point from a list or population and then systematically selecting every Nth element from that point onward until the desired sample size is achieved. (Saunders et al., 2014; Sharma, 2017). In other words, a specific Nth frequency is established from which a case is selected. Suppose that the N units in the population are numbered 1 to N in some order, to select a sample on N units, we randomly take a unit from the first K units and every kith unit after that. For instance, if K is 10 and the first unit drawn is number 7, the subsequent units would be numbered 17, 27, 37, and so on. The choice of the first unit establishes the composition of the entire sample.

3.5.1.3 Stratified sampling

In stratified sampling, the population is divided into smaller groups known as strata (Taherdoost, 2016), derived from members sharing the same characteristics (Sharma, 2017). Stratified random sampling is an approach to sampling where a population is first divided into smaller, distinct groups or strata. These strata are created based on shared attributes or characteristics among their members. Within each stratum, a random sample is selected in a quantity proportional to the stratum's size relative to the entire population.

3.5.1.4 Cluster sampling

The last probability sampling discussed herein is cluster sampling, where the population is divided into groups or clusters. As Sharma (2017) points out, a random sample is drawn from all the clusters. Unlike all the random sampling techniques, cluster sampling does not require all sampling units (Davies, 2005). Sharma states that the advantage of cluster sampling is that it is economical in terms of time and money in cases where the population is fragmented over a large geographical area.

3.5.2 Non-probability sampling

Sampling techniques discussed earlier assume a sample will be chosen statistically at random, valid with non-probability sampling. According to Saunders et al. (2014), non-probability sampling provides numerous alternatives to select a sample objectively. Unlike probability sampling, not all population members are equally likely to be selected in non-probability sampling. Instead, as Taherdoost (2016) posits, a rationale is needed to include some individuals or cases and not others,

meaning that a researcher must justify the rationale behind selecting the sample or participants. Given their subjective nature, non-probability sampling techniques are often associated with qualitative research (Saunders et al., 2014).

3.5.2.1 Quota sampling

Quota sampling is a non-probability sampling method in which the researcher divides the population into subgroups called strata (Rahi, 2017) and then recruits a predetermined number or proportion of individuals from each stratum until the quota for that stratum is met. In this case, Sharma (2017) states that the objective is to have a sample proportional to the studied group. As such, the researcher determines the quotas based on the population's known characteristics, which makes quota sampling ideal for ensuring a proper representation of all population groups. For example, a higher education researcher studying the first-year university integration experiences of first-year students may divide the population into strata based on the residential type and then set a quota for each stratum, say 100 respondents from each stratum (residence category). The researcher would then recruit respondents until the quota for each residential category (stratum) is met. Quota sampling is much easier to carry out and quicker; thus, Sharma considers it famous for postgraduate researchers (Sharma, 2017). However, quota sampling may suffer researcher bias, and the findings cannot be generalised (Rahi, 2017).

3.5.2.2 Purposive sampling

Purposive sampling is done deliberately, always with some focus or purpose in mind (Punch, 2005, p. 187). It is also known as judgement sampling (Sharma, 2017), whereas the researcher's judgement is crucial in purposive sampling when selecting units. Accordingly, the researcher uses judgment to select participants with in-depth knowledge of the issue or problem being studied (Rahi, 2017), meaning that there is a purpose behind selecting participants. Purposive sampling can be cost-effective and convenient (Rahi, 2017) and can also be advantageous in qualitative research involving multiple stages (Sharma, 2017). Purposive sampling can be prone to researcher bias (Sharma, 2017), making it difficult to defend the representativity of this type of sampling. As a result, the onus is on the researcher to justify using this type of sampling.

3.5.2.3 Snowball sampling

Snowball sampling occurs when the participants of an existing study recruit future participants (Sharma, 2017). In this respect, cases of interest are identified through an exchange of information between individuals, basically, through networking, one individual in the sample guiding the researcher to others in which the researcher is interested (Cargan, 2008). According to Sharma (2017), snowball sampling is advantageous in instances where a population is not easily accessible, meaning the sample group grows like a rolling snowball.

3.5.3 Justification for the selected sampling technique for this study

Against the background of probability and non-probability sampling techniques, it is apparent that researchers are spoilt for choice. The selection of sampling techniques is informed by the nature of the research, the research questions, and the characteristics of the sample (Pascoe, 2014). In the end, non-probability purposive sampling was deemed appropriate for the study. With purposive sampling, one has the privilege to select participants purposively and carefully for the study, as Pascoe (2014) outlined. The lecturers who comprised the sample in this study have in-depth knowledge of curriculum development at the departmental level. They possess in-depth insight into how the department integrates graduate attributes into the curriculum and how it aligns graduate attributes with the industry advisory bodies.

3.5.4 Sample size

Regarding the sample size, Ngulube (2014) states that it is advisable to have a good sample size for qualitative research because interviews can be daunting and time-consuming for a novice researcher. By “good size”, Ngulube (2014) suggests between five and fifteen sample elements, whilst Creswell (2018) suggests between four and twelve sample elements. Considering these sample size suggestions, the sample size for this study comprised six lecturers involved in the curriculum development of the HRM programme, which is consistent with Ngulube (2014) and Creswell (2018). The inclusion and exclusion criteria were based on the following factors;

- Lecturers should be involved in curriculum development at the departmental level in HRM at MUT.

- Lecturers should teach in the HRM Diploma and be involved in the curriculum/module review process at MUT.
- Lecturers should be part of the department's industry advisory body committee at MUT.

Lecturers who fit this criterion have in-depth knowledge of curriculum development at the departmental level. Thus, they provided in-depth insight into how the department integrates graduate attributes into the curriculum and how it aligns graduate attributes with the industry advisory bodies. Conversely, lecturers who teach in the HRM programme but are not involved in curriculum development were excluded from the study. As Polkinghorne (2005) stipulates, there is a purpose and reason for selecting participants. The participants were thus selected because they would provide significant insight and perspectives on the phenomenon under study.

3.6 Data production and collection

Regarding data production and analysis, it is important to highlight that the study comprises empirical and non-empirical aspects. As such, the issues of data production and analysis cover these two aspects to illustrate the procedures for both empirical and non-empirical data production/analysis. Before delving into the overview of and specific techniques adopted, it is essential first to discuss the nomenclature used in this study, which relates to 'data collection' versus 'data production'. This preamble is done in line with the assertion of Polkinghorne (2005), who considers that language is an important aspect of qualitative research, of which we need to clarify the implication of the nomenclature 'data collection' and 'data production'. According to Polkinghorne (2005), qualitative research data is not readily available for the researcher to gather. Instead, Polkinghorne expounds that a qualitative researcher must go beyond the surface to bring up experiential accounts from participants. In this regard, new data is generated and produced through direct interaction with participants. By exploring the views and experiences of participants regarding a particular issue or phenomenon, the researcher is actively involved in generating new data.

On the other hand, the wording 'data collection' in qualitative denotes that the data exists and is readily available from other sources (Polkinghorne, 2005), such as observations made by other researchers. Against this backdrop, the nomenclature

adopted in this study is data production through interviews. As for data collection, the following sections elucidate how data was collected, considering that the study also deals with a non-empirical aspect.

3.6.1 Interviews

In qualitative research, interviews with participants are the most widely used approaches or techniques to produce data (Polkinghorne, 2005). Researchers mainly have three options or formats for interviews: structured interviews, unstructured interviews and semi-structured interviews, which are summarised in Table 3.1. Babbie (2010) informed us that structured interviews typically involve predetermined, structured, and closed-ended questions. In this case, the researcher prepares an interview schedule with predetermined questions and asks respondents the same questions in the same order, meaning that flexibility is low. Unstructured interviews tend to be highly flexible, and the structure assumes a normal conversation flow (Babbie, 2010), where different issues are discussed related to the topic. Participants are typically asked a few questions in unstructured interviews during the interviews. The last format of interviews is semi-structured, which falls somewhere between unstructured and structured interviews. Predetermined open-ended questions characterise semi-structured interviews, though the researcher can ask follow-up questions and explore different angles of the topic where necessary. This provides a medium flexibility for the researcher to generate rich and comparable data.

Table 3.1: Types of interviews

Type of interview	Questions	Order	Flexibility
Structured	Predetermined, closed-ended	Same for all participants	Low
Unstructured	Few	none, conversation format	High
Semi-structured	Predetermined, open-ended	Same for all participants, but with the flexibility to ask follow-up questions and explore new topics	Medium

Source: Authors' own creation.

In the end, semi-structured interviews were deemed appropriate for this study based on the explanations above regarding the other interview formats available. Empirical data was therefore generated through semi-structured interviews with six lecturers

involved in the curriculum development in the HRM programme at MUT. Ruslin et al. (2022) highlight that semi-structured interviews have a framework of themes to be explored, and they guide the interview process. Considering the assertion of Ruslin et al. (2022), the framework consisted of an interview guide with predetermined open-ended questions. The interview guide (Annexure A) was designed to enable participants to provide biographical information (Section A: Biographical information), followed by preidentified themes (Section B and C: Main questions) aligned to the objectives of the study. Five interviews were conducted using the Microsoft Teams (MS Teams) platform, which can record and transcribe interviews, whilst one was conducted in person at the interviewee's request.

The proliferation of online video and audio technologies for qualitative research interviews is attested by de Villiers et al. (2022), with technologies such as MS Teams, Skype, Zoom and WhatsApp being available. COVID-19 seemingly accelerated the use of these technologies as de Villiers et al. (2022) indicate, practitioners and academics had to quickly familiarise themselves with video conferencing technologies such as MS Teams and Zoom to do their work. One of the main advantages of online video interviews is that researchers and their potential interviewees now often perform their work through virtual platforms and are not always able to travel. These changes afford qualitative researchers the ability to use video interviews and the ability to research these new work environments. On the other hand, the lack of rapport from online interviews may mean that the researchers and respondents may not connect well, which de Villiers et al. (2022) advise that it is vital to ask follow-up questions in a virtual environment to ensure that participants engage adequately with the questions posed.

Since most (five) interviews were conducted via MS Teams using the platform's recording function, the recordings were supplemented by handwritten notes, which ensured that I accurately captured and analysed the data generated. The exact process of note taking was also applied to the face-to-face interview. Each interview took between 15 to 30 minutes. In line with the ethical protocols outlined in section 3.9, participants were emailed informed consent forms (Annexure B) before the interviews. Before each interview commenced, permission to record the interview was requested, and the ethical protocols were explained to all participants, including that they were free to withdraw from the interview at any moment without providing

any reason. Since MS Teams has a transcription feature, it was enabled during the interviews, which proved helpful as I could easily access the transcribed interview from MS Teams when I required it. It is important to note that although the transcription feature on MS Teams is useful, especially for the first transcript draft, it is not always accurate. As such, I had to re-listen to the interviews and fill in the missing parts on the transcript. Beyond interviews, the study's non-empirical aspect required a different data collection process as explained below.

3.6.2 Non-empirical data

Given that the study also dealt with non-empirical aspects with respect to research question and objective five, a key question that a researcher needs to ask, is which methodological research approaches can be used to acquire insights necessary for engaging with a non-empirical object of the study? The social sciences and humanities researchers have a variety of non-empirical research methods, which is not uncommon in research (Logan, 2019). For instance, in the realm of strategic management, the use of secondary data is widespread and common (Fellipe, Julio & Fernando, 2018). The same trend appears to be prevalent in educational research, as Logan (2019) alludes that secondary data analysis (SDA) as a research method has been well-established for years in educational research. Along a similar trail of thought on SDA, Johnson (2013) attests that SDA provides viable research options, saving resources and time. With the advent of digital data (Panchenko & Samovilova, 2020), the opportunities and options for using SDA have increased (Logan, 2019). In this regard, Bishop and Kuula-Lummi (2016) highlight that an increasing number of researchers now have access to data repositories, and subsequently, SDA has become a prominent technique. In this respect, secondary data was collected to respond to objective 5 of the study following a bibliometric review process which is elucidated in 3.7.2.

3.7 Process of analysis of data

Whether data was produced or collected, it must be analysed to arrive at any findings (Pascoe, 2014). For Mezmir (2020), the data generation and collection processes is only the beginning. Once gathered and generated, the data must be organised, given that a high proportion of the data is transcribed verbatim from interviews and documents. To this effect, Mezmir (2020) posits that the onus is on the researcher to provide structure and coherence to the data. Therefore, retaining

the original observations and accounts of participants is crucial. Kabir (2016:211) and Saunders et al. (2019) underscored the significance of a sound data analysis process. Given the high degree of subjectivity of qualitative research discussed earlier in this chapter, the integrity of qualitative data analysis cannot be overemphasised.

3.7.1 Analysis of primary and secondary data

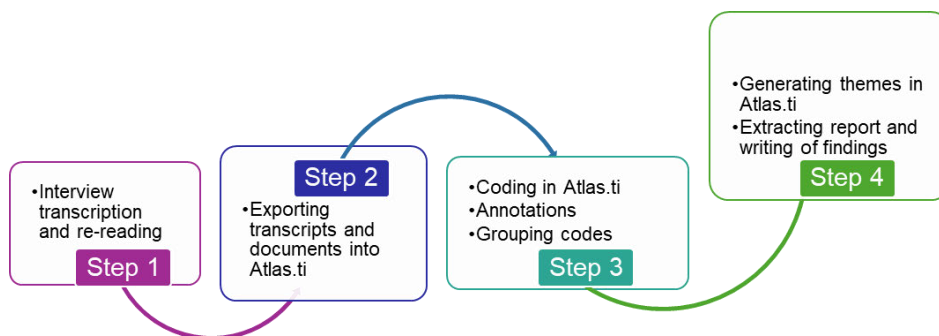
Pursuant to the detailed exposition of data production and data collection procedures outlined above, this section deals with the techniques adopted and data analysis procedures followed in the study. A vital step of the research process (Kabir, 2016), data analysis involves a systematic interpretation using logical and analytical techniques to determine patterns and derive insight into the phenomenon under study. A crucial aspect in this regard is ensuring data integrity for accuracy, and that appropriate analysis tools or techniques are used (Kabir, 2016). In this respect, there are several qualitative data analysis tools and techniques at the disposal of qualitative researchers (Straus & Corbin, 1998), such as grounded theory and thematic analysis.

The data analysis process for this study utilised Atlas.ti, a qualitative data analysis software. Computer-assisted/aided qualitative data analysis (CAQDAS) is used to aid qualitative data analysis (Dalkin et al., 2021). According to Ronzani et al. (2020), the proliferation of technology in research resulted in a growing appetite by researchers for the use of CAQDAS in the past 30 years. From social sciences, humanities, nursing, medicine and health sciences, CAQDAS is widely used in different fields (Woods et al., 2015). In this regard, literature illustrates the pros and cons of CAQDAS, such as Atlas.ti™, MaxQDA and NVivo, have been discussed and debated by scholars (Woods et al., 2015), including methodological foundations of these technologies in qualitative research (Leech & Onwuegbuzie, 2011). In the end, scholars have a positive consensus that CAQDAS is a resource to enhance validity, transparency, rigour and trustworthiness in qualitative research (Chandra & Shang, 2017).

Moreover, O'Kane et al. (2020) state that qualitative data analysis software assists with organising, analysing, and exploring data. Like many CAQDAS, Atlas.ti is a software program with a graphical user interface that can treat all loaded data, such

as interview transcripts, articles, and organisational documents, as a single entry for analysis (Ronzani et al., 2020). It has the capabilities to store and sort data, index, and perform flexible coding and data attributes. Beyond data analysis, Ronzani et al. (2020) proffer that Atlas.ti can also be used for literature reviews. The capabilities of Atlas.ti allowed for the analysis of both primary and secondary data findings and to synthesise primary and secondary data. It is important to emphasise that QDA software is a productivity software that simplifies the researcher's job and saves time. The data analysis process that this study followed is illustrated in Figure 3.1, comprising four steps.

Figure 3.2: Data analysis process using Atlas.ti



Source: Auhtors own creation.

As seen in Figure 3.2, the data analysis process comprised four sequential steps, commencing with the transcription of interviews, a customary initial phase in qualitative data analysis. This involved attentive review and transcription of interview recordings into MS Word documents. In cases where interviews were conducted via MS Teams, transcripts were initially obtained from the application, and a meticulous review was conducted to rectify inaccuracies. The subsequent step involved the importation of transcriptions and relevant documents into Atlas.ti, a comprehensive qualitative data analysis software offering functionalities such as coding, analysis, and data organisation. Upon the integration of raw data into Atlas.ti, the third step, coding, ensued. This process encompassed identifying and labelling significant passages, coupled with annotations highlighting emerging patterns. Following thematic coding, wherein themes were discerned and coded in real-time, the coded

segments were subsequently categorised based on similarities and differences, culminating in identifying overarching themes. For instance, grouping codes on aligning graduate attributes into a theme that addresses aligning these attributes with industry standards. The final step involved the generation of a detailed report encapsulating themes, associated codes, and direct quotations, all meticulously linked to specific themes. This approach facilitated the succinct summarisation of findings and the seamless incorporation of data extracts into the research report.

3.7.2 Bibliometric review

A bibliometric review is a research method that focuses on analysing knowledge production and accumulation patterns through quantitative analysis of bibliographic data (Cavalcante et al., 2021). Bibliometric analysis helps identify research gaps, potential future research directions, and new study prospects. It can also classify and assess bibliographic material, such as publications, citations, authors, and institutions. Additionally, bibliometric parameters judge the productivity and impact of scholars, academic programs, universities, and countries (Xie et al., 2020). Bibliometric analysis was conducted in this study to understand the nature and attributes of academic publishing in integrating and aligning graduate attributes with the industry advisory bodies in HR diploma graduates. This enables the development of the research agenda and come up with innovative ideas to respond to objective 5 of the study. Additionally, bibliometric analysis can contribute to the existing pool of literature by providing a candid and resourceful exercise in identifying responses to crises, supporting the new normal and building a robust study.

3.7.2.1 Database selection

Scopus database was used to extract the studies related to graduate attributes with the industry advisory bodies' requirements in the human resource management diploma. Scopus is widely regarded as one of the premier abstracts and citation databases for academic research, offering several distinct advantages for bibliometric reviews. One of its primary strengths lies in its extensive coverage, boasting over 23,000 titles spanning diverse disciplines from science and technology to the arts and humanities. These include Elsevier, Emerald, Informs, Taylor and Francis, Springer and Inderscience publications (Mishra et al., 2018). This broad range ensures a comprehensive overview of any given academic topic. It offers a

wider coverage of literature than other databases, such as the Web of Science (WoS), and it is updated more frequently, ensuring that the latest research is included in its results. Scopus also covers a wider range of disciplines than WoS, including the social sciences, humanities, and medicine. It is a good choice for bibliometric reviews, considering literature from multiple disciplines (Cascajares et al., 2021).

In addition to its comprehensive coverage and timeliness, Scopus offers several features specifically designed for bibliometric analysis, such as author search and disambiguation, citation analysis tools, and visualisation tools (Baas et al., 2020). These features make it easy for researchers to find and analyse relevant literature, identify patterns and trends in the research, and assess the impact of individual authors, publications, institutions, and funding agencies (Păduraru et al., 2022). Scopus is the best choice for conducting bibliometric reviews because it offers a comprehensive and timely database of research literature and a variety of features specifically designed for bibliometric analysis.

3.7.2.2 Search string

The search was done on Scopus to find publications related to graduate attributes with the industry advisory bodies' requirements for the human resource management diploma. Various Boolean operators such as AND, OR and * were used. The AND operator combines two or more search terms so that all results must contain all the terms. The OR operator combines two or more search terms so that all results must contain at least one of the terms. The asterisk is used as a wildcard character in search strings. It represents one or more characters in a search term, allowing for word variations (Bramer et al., 2018: 536). Thus, the search string was:

TITLE-ABS-KEY graduate AND attributes OR skill* AND knowledge OR competency* OR employ* AND advisory OR bodies OR industry AND requirements OR (human AND resource OR HR AND diploma AND 4IR)

3.7.2.3 Inclusion and exclusion criteria

Inclusion and exclusion criteria are the criteria that researchers use to determine which publications are eligible to participate in a research study (Farooq et al., 2023). These criteria are critical because they help ensure that the study results are valid and reliable. According to Jahanger (2021), the eligibility evaluation is a full-text

assessment based on inclusion/exclusion criteria, like whether the article under review has anything to do with the research. For this study, the inclusion criteria were:

- Published between the years 2000 and 2023
- Publications in the form of journal articles and review articles
- Written in English

Scopus built-in functionalities were used to automatically remove publications which do not meet the inclusion criteria, where 228 documents remained from the original 429 documents which originally appeared. The included studies that were extracted through a CSV Excel set-up for further analysis.

3.8 Issues of Trustworthiness

It is a common cause in research that trustworthiness and reliability are important concepts to ensure the rigour and credibility of findings. Owing to the subjective methodological and philosophical stance underpinning the study, trustworthiness issues cannot be overemphasized and thus are delineated hereunder.

3.8.1 Credibility

The concept of credibility in qualitative research means that the perceptions of respondents must be captured and reported accurately (Anney, 2014), which should give a true reflection of the phenomena being studied. In other words, what is reported or presented as findings in the subsequent chapter should reflect what was said by participants. To this effect, Kalu and Bwalya (2017) offer a few strategies to enhance credibility, namely, prolonged engagement, follow-up questions, and even debriefing. Further, Creswell (2013) indicates that sharing information and interpretations about the research is a good research practice. Drawing from Kalu and Bwalya (2017) and Creswell (2013), the interview process was characterised by prolonged engagements with participants, with meticulous note-taking, as alluded to in section 3.7.1, to ensure that participant's experiences were captured and interpreted correctly.

3.8.2 Transferability

Transferability is concerned with the extent to which the findings of the study are applicable to another context or setting (Pandey & Patnaik, 2014; Anney, 2014).

Transferability is vital in qualitative research because it allows researchers to extend the applicability and relevance of the findings beyond the specific research context. For instance, the current focus is on integrating and aligning graduate attributes in HRM programme in a UoT; in this regard, the findings and recommendations may apply to a similar programme or UoT elsewhere. Nonetheless, as Amankwaa (2016) posits, determining transferability requires the researcher to provide a detailed description of the context of the study, including the setting, participants and methods used.

3.8.4 Confirmability

According to Bwalya (2017), the notion of confirmability concerns the steps taken by the researcher to affirm that the findings are a true reflection of the data collected. This means the research design and implementation should be clearly outlined, including a logical description and justification of the methodological and theoretical decisions (Bwalya, 2017). Creswell (2018) states that this is aimed at providing the reader with a full picture of the selected methods and taking into confidence thereof. The research method, philosophy, design and techniques have all been comprehensively discussed and justified in chapter three of the study.

3.8.5 Authenticity

Authenticity is the degree to which a range of truths in a research study are justifiably and faithfully publicised by the researcher (Polit & Beck, 2014). The authenticity criterion was addressed by selecting suitable participants for the study sample (Connelly, 2016) as outlined in section 4.5.4

3.9 Ethical issues

Ethical standards are a *sine quo non* both in research (Betram & Christiansen (2014). This study followed the ethical guidelines espoused by Betram and Christiansen (2014), which require that ethical principles must always be upheld when conducting research. The issues of adherence to research ethics are outlined below.

Permission to conduct the study

Gatekeepers' permission (Annexure A) letter to conduct the study at MUT was obtained from the institution's research ethics committee bearing reference RDI/24/2022. Additionally, a full ethics approval (Annexure B) for the study was

granted by the Humanities and Social Sciences Research Committee (HSSREC) at the University of KwaZulu Natal (UKZN), bearing reference HSSREC/00005826. Effectively, the study met ethical muster and proceeded with a green light from the institutions mentioned above.

Information sheet and informed consent forms

Respondents were provided with an information sheet (Annexure c) explaining the purpose of the study, what they are expected to do, their rights to withdraw from participating at any time, and assurance of anonymity. Participants were fully informed of the nature of the study, including their participation. Additionally, participants were given informed consent forms to sign before they could participate in the study.

The results are a true reflection of primary and secondary data

As hinted in sections 4.9.1 and 4.9.4, the findings reported in the next chapter reflect the empirical and non-empirical data that has been generated, gathered, and analysed. The data collected in the study is solely for academic purposes.

Anonymity and confidentiality

The anonymity of participants was enshrined in the information letter, and as such, their identities were not divulged. Instead, pseudonyms are used herein to ensure that the identity of all participants interviewed is kept confidential and private.

3.10 Chapter summary

Chapter three entailed a comprehensive discussion of the research methodology and design followed in the study. All decisions are justified pertaining to the selection of research philosophy, research approaches and research techniques. The chapter ended by elucidating the research ethics adhered to in carrying out the study, including the limitations. Given the methodological issues addressed in this chapter, the following chapter presents the findings of the study.

CHAPTER FOUR: PRESENTATION OF FINDINGS AND INTERPRETATION OF RESULTS

4.1 Introduction

I outlined and discussed the research methodology and design in the previous chapter, including the data analysis process. Chapter four presents the results and interpretation emanating from the data analysis process elucidated in chapter four. The quest of analysis was done against the backdrop of the following research objectives;

- a) To explore how graduate attributes are integrated into the HRM curriculum at one UoT in Durban including whether the graduate attributes reflect the practical or theoretical emphasis of UoTs.
- b) To determine what influences the integration of graduate attributes into the curriculum of the Diploma in HRM at a selected UoT.
- c) To examine the extent to which the graduate attributes that are reflected in the HRM curriculum are aligned to the industry advisory body requirements.
- d) To investigate the integration of 4IR-aligned graduate attributes into the HRM curriculum aiming to enhance the employability and future readiness of graduates.

The presentation of results herein commences with a brief profile of participants interviewed to generate data. The results of the study are presented in this sequence; firstly, results from interviews, secondly, results from secondary data, and thirdly, results from a bibliometric review.

4.2 Sample profile and interview data

Table 4.1 below illustrates the profile of participants, pseudo-named Refilwe, Phumzile, Sono, Nothando, and Buhle. The deduction from the table shows that all participants are highly experienced and qualified lecturers teaching in the HRM programme. Two participants have PhDs, whilst four have master's degrees as the highest qualifications. Five participants are affiliated with the SABPP, except Nothando, who is yet to affiliate with the body.

Table 4:1: Participant's profile

Participant	Highest qualification	Teaching experience	Affiliated industry body
Refilwe	PhD	10 years teaching experience	SABPP
Phumzile	PhD	22 years teaching experience	SABPP
Sono	Masters	5 years teaching experience	SABPP
Nothando	Masters	<ul style="list-style-type: none"> • 20 years HR practice experience • 4 years teaching experience 	Not yet affiliated
Buhle	Masters	6 years teaching experience	SABPP

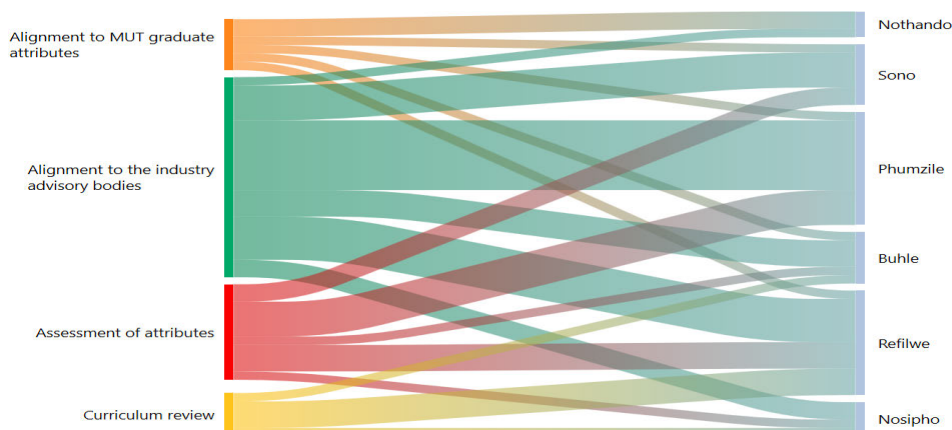
4.3 Findings from semi-structured interviews

The results were generated through the Atlas.ti software and are presented in this section. Codes were generated, and ultimately, themes were generated from the codes. Stanky charts generated from Atlas.ti illustrate codes and themes as Figures 4.1 and 4.2 summarise the generated 28 codes from interview data.

Figure 4.1: Codes word cloud.



Figure 4.2: Summary of themes and codes



4.3.1 Alignment of HRM graduate attributes to institutional graduate attributes

Interview data shows that all participants believed the HRM diploma programme graduate attributes align with the broader institutional attributes. Accordingly, the alignment ensures that the HRM programme graduates are well prepared for work upon graduation. To this effect, Phumzile said:

“When I’m doing the graduate attributes because I know that those are well thought out, I’m basing that on the graduate attributes from that document [MUT Academic Identity]” (Phumzile).

The same sentiment was shared by Buhle, who stressed that an HRM department must ensure that programme-level graduate attributes are aligned and integrated with the institution’s attributes. Although Sono was in the same line of thought as other participants, Sono pointed out that whilst HRM graduate attributes conformed to the overall university graduate attributes, the department emphasises explicitly the discipline-related attributes. According to Sono, this is to ensure that graduates are embedded with HRM discipline skills, aptitudes, and knowledge necessary for the world of work. Over and above this alignment, Nothando raised the point that the alignment to university graduate attributes is important because *“we are a University of Technology so we should be a running along the tune of being a University of Technology”* (Nothando), which suggests an awareness of the institutional type within which the HRM graduate attributes are conceptualised and embedded.

4.3.2 Alignment to industry advisory bodies

In response to the question of whether HRM graduate attributes align with industry advisory body requirements and to what extent, participants responded overwhelmingly affirmative. In this regard, Sono stated that the department reviews the curriculum regularly to ensure alignment with industry standards, whereas inputs from professionals in the industry are also regularly sought. All participants stated that SABPP is the main professional body that the department is involved in and aligns with in terms of conceptualising HRM graduate attributes. Nosipho underscored that consulting advisory bodies is a statutory requirement when a department develops or reviews a curriculum, which also informs the attributes that are sought by the industry. Refilwe stated:

“From what we do as a department, we are basically using the HR standards that are sets by SABPP which is our professional body. So, we use those, and our programme is just based on that.... We even have a kind of a book [from SABPP], and they [SABPP] also do magazines that we look at because it is one way also of finding out what is currently happening in the industry” (Refilwe).

Refilwe further emphasised that involving the industry professional bodies is done so that HRM diploma students are up to speed on what is happening in the real world of work, hence the use of HR standards from the SABPP. According to Buhle, collaboration with bodies like SABPP in curriculum development and review plays a critical role as the department can leverage the HR expertise within SABPP, thus ensuring the HRM curriculum meets the dynamic requirements of the HR industry. The heavy collaboration with SABPP is further evidenced by SABPP accrediting the HRM diploma programme.

“...we have got our programmes are accredited by SABPP through their higher Education Sub Committee of the board and I am a member of that. So, our programmes are accredited, and it is a five-year cycle. So, in that accreditation process, that's where we now look at the alignment of whatever you are offering with those attributes of the professional body of the industry”, said Phumzile.

Phumzile further stated that once their programmes are accredited, it earns the department a seat in the Higher Education Committee of the board. The board meets every quarter, enabling constant interaction with other universities where best practices are shared. Additionally, it appears that the department also collaborates with other universities when it comes to programme development issues, as further attested by Phumzile:

“So, in the development of those standards, I attended all three and also over and above that you work with other universities we have in HR, what we call South African human Resource Universities Forum, we meet annually, we share information”

On the rationale behind aligning and integrating graduate attributes, the common thread in the responses appears to be the need to ensure that the programme, including the graduate attributes, reflects the industry trends and practices. According to Buhle, this is crucial to ensure that their graduates are imbued with the

requisite skills, knowledge and aptitudes desired by employers in the HRM industry. Sono further illustrated this point;

“Reviewing curriculum on a regular basis, guided by industry demands and HRM trends, enables us to adjust the curriculum. By doing this we stay attuned to the changes out there and what the industry requires” (Sono).

The emphasis on the need to align curriculum and graduate attributes to industry is further highlighted by Nothando;

“Every year they would identify different industries that will form part of the curriculum review and if we are to develop a new curriculum, they advise us so they are like advisory body as well, so it is identified by them” (Nothando).

It appears that the department mainly works with the SABPP rather than IPP, and Phumzile explained the rationale:

“Best we have got SABPP like ours saying IPP is very good in terms of your education structures and what we do in HR” (Phumzile). The preference for SABPP appears to be based on the fact that the IPP does not necessarily have a committee dedicated to HR education at universities, whilst the SABPP has it, as indicated earlier. Participants felt that the IPP is more focused on those in the industry already, whilst the SABPP fulfils both the role of industry professionals and also links with universities.

“First, they [SABPP] developed the HR standards and in those HR standards, it was predominantly your industry people because these were developed in 2014 and 2015 and they were reviewed in 2022, in fact in all three it was industry and then I think in 2014. There were even maybe about 5-6 of us as universities that participated there, in that development and in that structure where you have all these industry people” (Phumzile).

Although the data overwhelmingly shows a strong collaboration between the department and SABPP, some participants (Nothando, Phumzile, and Sono) highlighted that industry bodies like the SABPP do not necessarily dictate the graduate attributes to the department.

“Advisory boards do not dictate to us because we have our own attributes as the university so the first point is to ensure that we align them to have our own attributes as the university then we take the advice from these advisory boards and they you

know and the industries so that we brought deviate from our own mandate and so we do not lose our direction” (Nothando).

These remarks suggest that the department retains some degree of autonomy over the conceptualisation and design of the curriculum.

4.3.3 HRM Curriculum review

Interview data further reveal that the department seeks inputs from stakeholders such as HR professionals and advisory bodies in terms of curriculum review. However, a strong emphasis is on aligning the curriculum to the industry's needs. To this effect, Phumzile had this to say;

“So, it is that principle that I care with this when you develop and design your programme and review your programmes, it's driven by what the industry requires. So as the department at the end of each year, towards the end of the year where we do and have our strategic planning, we reassess as to what is happening in the first year, and second year, what is happening in the third year” (Phumzile).

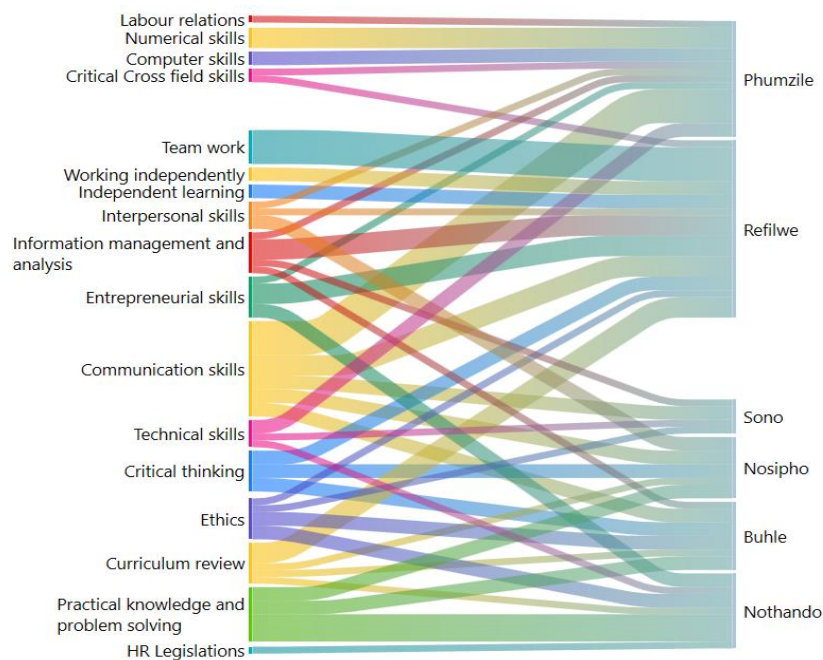
In this regard, Sono stressed that these meetings enable the department to continuously review curriculum, teaching, learning and assessments outside the formal statutory reviews carried out in compliance with university policies. At the heart of these reviews is the involvement of critical stakeholders such as industry bodies and students. One participant highlighted:

“And we are looking for, we are looking at the innovative ways of how our students can survive out there because it looks like it's quite difficult for students to get employment now. So, there is the forecast...we have just reviewed our curriculum and in that we have made some modules to be semester modules so that we can accommodate [some attributes] that in our final year programme” (Refilwe).

4.3.4 Key Attributes for HRM

Beyond the alignment of HRM graduate attributes to industry and institutional attributes, the quest of interviews also delved into understanding the key graduate attributes that underpin the HRM programme. Interview data to this effect is summarised in Figure 4.3 below.

Figure 4.3: Key attributes



Based on interview data, the codes that emerged illustrate that participants identified the following graduate attributes as critical for HRM graduates: communication, computer skills, critical thinking, critical cross-filed skills, entrepreneurship, independent learning, curiosity and awareness of current affairs, information management and analysis, practical knowledge, teamwork, working independently, technical skills and social responsibility. Apart from these attributes, participants further stressed the importance of the graduate’s knowledge of important HR components such as HR legislation, HR administration, recruitment and selection, and employee maintenance. The attributes presented hereunder are further triangulated in section 5.3, with the exit level outcomes of the programme and the institutional graduate attributes as reflected in the Academic Identity of MUT.

Communication skills

From the interviews, communication skills emerged as all participants extolled it as a critical attribute, save for Nothando. Participants consistently emphasised that HRM graduates should be imbued with good communication skills, not only the ability to articulate but also the ability to communicate at difference levels within the workplace, as attested by Phumzile’s remarks;

“And not just communicate, not just being articulating English and all that, but understanding how to communicate it different levels. That is key. So, we are [at] a design level. So that is why you see communication in our programme... We have got presentation, group presentations. Those are testing their ability to communicate in front of the class, In front of an audience” (Phumzile).

This means that the department has integrated communication skills into the programme and uses various teaching and learning activities to allow students to develop communication attributes. Phumzile’s points were substantiated by Nosipho, who pointed out that *“their communication and interpersonal skills which are important when they go to the world of work”*. For Buhle, effective communication skills are something also emphasised in the curriculum. Overall, the data suggests that effective communication plays a vital role in the HR space, and it also serves as a foundation for other key attributes, such as critical thinking.

Critical thinking

The insight from the interview data underscores that critical thinking is another crucial attribute in the HRM program. To this effect, Buhle and Refilwe’s perspectives accentuate the importance of fostering critical thinking for HRM students, including integrating critical thinking into the curriculum. Underscoring the importance of critical thinking, Refilwe said:

“You want the students to grow and then you want that critical thinking right at the end but it's something that you prepare from the onset, every student should be like when we are doing our assessment, it could be the formal or informal assessment, the formative assessment and summative assessment” (Refilwe).

The essence and significance of critical thinking were further highlighted by Nosipho, who stated that critical thinking is well aligned with the HRM programme. This alignment appears to be reflected in the assignments designed to allow students to apply critical thinking in the context of HRM.

Entrepreneurial skills

The data indicates a strong emphasis by participants for students to exhibit entrepreneurial skills and practical application of knowledge gained through their studies. In this regard, Phumzile highlighted that students should be instilled with

entrepreneurship skills and knowledge, especially given the high unemployment levels in South Africa. To this effect, Nothando mentioned that;

“Actually, entrepreneurship is one of our modules within an undergraduate qualification, it is very much important” (Nothando).

The sentiment on entrepreneurship was further echoed by Refilwe, who mentioned that the HRM diploma curriculum was restructured to include a module on entrepreneurship to introduce students to the basics of entrepreneurship and accumulate knowledge on this aspect. By doing this, mentioned Nothando, students can develop into entrepreneurs or gain employment through their entrepreneurship skills. Refilwe further mentioned that lecturers are exposed to the Ignite entrepreneurship programme, which gives some lecturers in the department exposure to entrepreneurship education, thus transferring the knowledge to students more effectively.

“The programme is called Ignite entrepreneurship programme which is a 12-week programme. We are doing it because the belief is that in every level you need to emphasise this to our students. That is why most of us now are in this programme, so that we understand how to teach it so that we ensure that this entrepreneurship will benefit our students in the long run” (Refilwe).

“So we actually want to equip them to be able to assist the employers even if they if even if they cannot be the employers themselves, even if they cannot be the entrepreneurs but they should be able to assist the employers who identify the opportunities business opportunities out there” (Nothando).

The emphasis on entrepreneurship skills suggests an awareness of entrepreneurship’s pivotal role in encouraging students to leverage their education for innovative and practical purposes.

Ethics

High ethical standards emerged strongly from interview data, as participants stressed that graduates adhere to and uphold high standards of ethics as they become HR practitioners upon graduation. For Buhle, a strong ethical foundation is critical for HR students, alongside other attributes such as social responsibility, whilst Sono concurred, citing ethical decision making. In this regard, integrity and honesty are integral to the foundation of ethics.

“We are actually trying to build and part knowledge to the future HR practitioners, so the first one which is most important is the issue of integrity. Integrity, honesty and ethical” Nothando

“Ethics. So, all these things you do, you need to enforce them right from the onset and not to wait until the end and then say this is what I am assessing” (Refilwe).

In this regard, Nothando mentioned that they have a module which focuses more on the issue of integrity and ethical behaviour in HR practice as graduates will go out there and be in charge of the human resources activities of different organisations. A strong emphasis on ethics by participants within the HRM context exemplifies the need to instil a sense of integrity, moral responsibility and ethical decision-making to students. The data further underscore the importance of instilling ethical standards.

Information management and analysis

Participants highlighted the student’s ability to manage and analyse information as an essential attribute for HRM graduates, which signifies the significance of preparing students with the required skills to handle and process information effectively. The extracts below highlight some of the views of participants:

“I think you understand that we only we are merely giving them exposure to the information out there that is pertaining to the field that they are in. So, it’s up to each student to transform dead particular information into something useful...Go and do that research, in that research you are saying to a student. Are you able to find information in your own?” (Refilwe).

“Digital literacy is important these days, especially considering that the nature of HRM landscape is very dynamic” (Sono).

“And then also I mentioned the ability to source information, analyse and apply information. That is why you would see a research methodology in our programmes, so that is at design level” (Phumzile).

These sentiments from participants suggest that research is integrated into the curriculum to foster information management and analysis, which underlines the ability of students to gather, analyse, interpret, and apply information effectively.

Practical knowledge and problem solving

Practical knowledge and problem solving appeared to be among the attributes mentioned by participants during the interviews. It implies a focus on instilling practical skills relevant to the industry. What further emerged under this theme is the emphasis of the programme on practical case studies to ensure that students are well prepared for the challenging world of HRM work, which Nosipho attests:

“Sometimes we make complete a case study in which they apply the principles of HRM planning and administration to a real-world situation” (Nosipho).

On a similar trail of thought, Nothando expounded on practical knowledge and problem solving by stating the following:

“The introduction of the software that is used by [HRM industry], I mean the system that is used in the industry because they go to a working environment they've never used any system before so it's very much important that when they are doing their qualification and they're busy with their qualification, the element of you know sort of like the system that is used by different organisation even if it cannot be the similar system, whatever the institution can introduce that will actually help them because you do not want to take them from fresh from class and then you put them in front of the computer and say capture employees records” (Nothando).

Nothando substantiated her point with an example of a practical from another department:

“Like accounting they use PASTEL, they have that module PASTEL [a software for Accounting students]...when our students go into a working environment, the first thing that they do is, ‘you capture leave, you capture employees records’, if they've never touched any system before then how do we add then expect them to do that or do we expect the employer to teach them?” (Nothando).

The practical application of HR principles, systems and processes would ensure that HRM graduates are familiar with these components upon graduation and can seamlessly apply these skills in the real world of work.

Technical skills

Although not necessarily specific to the exact technical skills, the attributes of these skillset emerged as an essential graduate attribute for HRM students. Sono

underscored that students need to have the ability to adapt to the rapid technological advancements in the field of HR, a point which Nothando also emphasises:

“I want to say it's artificial intelligence and I will tell you why, gone are the days whereby HR was seen as a paper pushing a department you know taking this from point A to point B but we want to make sure that now things are automated” (Nothando).

These sentiments illustrate that the HR domain is increasingly shifting away from manual or paper-based systems towards automated processes and systems, where systems like artificial intelligence play a pivotal role. Furthermore, Phumzile underlined technical skills such as computer skills, including software proficiency, are critical for HRM graduates:

“That’s why you see computer skills in that programme. So each module would have them [various computer skills] its own specific outcomes, but those specific outcomes are intended to address what is needed at exit level” (Phumzile).

Curiosity, social responsibility and current affairs awareness

Beyond the HR discipline attributes, interview data suggests that participants felt that graduates need aptitudes such as curiosity, awareness of current affairs and social responsibility. This, according to Sono, is because graduates are inherently members of society and, as such, need to be socially responsible and be aware of what is happening in the world within which they live. Expounding on this point, Phumzile said:

“...that awareness of your environment around you and how it impacts your [business] operations. And the curiosity. The awareness of your environment around you, and when I say the awareness of the world around you, I’m not talking about the physical space, meaning MUT. Even the war in Ukraine is environment around me. Why is it happening? Why does it matter? It’s because it affects the diesel that I put into my car, coming to a MUT” (Phumzile).

Independent learning and social responsibility

The role of students in their learning and citizenry as members of society came to the fore during the interviews, in that participants believed that students should actively and independently engage in the learning process. This highlights the significance of students taking ownership of their learning and understanding the

significance of education and actions in the broader context of society. Refilwe emphasised that:

“But then the student also has a responsibility to understand, comprehend, whatever that is given and to look how this is applicable in the real world, in the workplace... All students are expected to be able to communicate effectively, to work independently, to work with others, to do the research, and to apply back to the community” (Refilwe).

In this regard, the data shows that implementing reflective assessments in the HRM programme underlines the quest to instil a sense of individual accountability, efforts, and contribution. The data further shows a strong emphasis on students connecting what they learn in class to the real world in society, highlighting the intertwined nature of education and social responsibility.

Teamwork and interpersonal skills

The data on teamwork underscores the significance of collaboration and effective communication within educational and professional contexts. Refilwe’s initial statement highlights the expectation for students to possess the ability to work both independently and within a team, emphasizing the importance of effective communication and cooperative skills. Further insights from Refilwe emphasize the practical aspects of teamwork, including the ability to navigate conflicts and assume leadership roles when necessary, reflecting the real-world challenges students might encounter in professional settings. These insights highlight the development of interpersonal skills and the capacity to work harmoniously with others, which mirrors workplace teamwork dynamics. Collectively, the data underscores the importance of fostering teamwork and interpersonal skills among students, preparing them for the collaborative environments they will likely encounter in their future careers.

4.3.5 Integration of Graduate Attributes

Pursuant to understanding some of the key graduate attributes for the HRM programme, the interest of the study moved to how the department integrates these attributes into the programme. To this effect, the interview data indicates that the desired attributes, skills and competencies are integrated into the exit-level outcomes of the HRM programme at the programme design phase. Elaborating on this point, Nosipho said:

“They [graduate attributes] are explicitly stated in exit level outcomes and module outcomes. We embed them in module content from the start” (Nosipho).

For Refilwe, although the exit level is where students will primarily be expected to demonstrate these attributes as they exit the programme, the department ensures that students are exposed to the expected graduate attributes right from the beginning of their enrolment.

“Yes, the exit level is where you want to see that everything has happened, but you cannot then expect that this is going to happen only in the final year. This thing when someone joins or when the students join the university, all those values, because I think I prefer even to call them values...All those values must be enforced right from the onset, right from the onset because you cannot be waiting for a student to stay in the university for three years. And then you say now let us focus on the graduate attributes” (Refilwe).

Nothando shared a similar view with Refilwe that the integration of graduate attributes cannot be left for when students are doing their final years of study:

“And we don't actually introduce those attributes during at exit level or during the course but immediately when they start their course, we make sure that we introduce it slowly so that by the time they finish, they are fully equipped” (Nothando).

The attributes are continuously refined and practically integrated throughout the learning process, underscoring the department's approach to integrating graduate attributes. In Sono's view, such integration should be aligned with the overall goals of the programme, something that resonated with Nothando and Phumzile too:

“We try like I said to combine our [programme] planning with these attributes so that as they go along, they are learning and they understand exactly what is expected of them at the end of their learning session” (Nothando).

“That's my understanding of exit level outcomes of a programme when you are designing A programme, you sit down and say when a student is done with this qualification, what do I want that student to have so that they can either be marketable?” (Phumzile).

Therefore, as the data suggests, the learning objectives and module content would be influenced by the graduate attributes encapsulated in the programme's exit-level outcomes. The integration of graduate attributes appears to be influenced by three

major factors: alignment to industry, alignment to the institution's attributes, and disciplinary epistemology.

4.3.6 Assessment of Graduate Attributes

The study's interests also concerned the assessments of graduate attributes in the HRM diploma programme, of which participants shared their views to this effect. Responses suggest that the assessment of graduate attributes assumes a holistic and integrated approach to continuously evaluating various attributes and proficiencies. This holistic approach means that the graduate attributes are not necessarily assessed one by one separately; instead, an integrated approach is taken involving assessing attributes throughout all levels in the programme. Phumzile and Refilwe recounted that:

"We do not assess graduate attributes separately per se. Graduate attributes are embedded in everything that you do" (Phumzile).

"And I always encourage my students to take different roles in an assignment and as such, related to the exit level outcomes, I mean the graduate attributes. You know, when I give them an assignment? I will always in say at the end of the assignment. Once you have completed, you have to write your own reflections" (Refilwe).

These views on assessing graduate attributes appear to suggest that students are given the opportunity to develop different attributes simultaneously, incorporating attributes in activities and assignments, whereas students are encouraged to reflect on their learning as well. In addition, data shows that students are also given opportunities to practically develop graduate attributes and practical knowledge through various activities and assessments:

"One of the assessments at second year level students are expected to role play the entire recruitment process. It is one of the assessments in that assessment... They are expected to identify a position, identify the job spec and jobs description. And then drop your advertisement. Your analytical skills, it's testing that." (Phumzile).

This practical approach is also attested to by Buhle, who mentioned that group and individual activities are used to assess student understanding of concepts and apply such theoretical concepts in real-world scenarios.

Hitherto, the findings relating to primary data illustrate that the six main themes emerged, capturing the comprehensive responses of participants. Beyond primary

data and to comprehensively understand the phenomena under investigation, primary data is triangulated with secondary data.

4.4 Findings from secondary data analysis

In this section, I briefly present and extrapolate a triangulation of the institution’s graduate attributes, the HRM programme exit-level outcomes and key attributes identified from primary data. Table 4.2 depicts the institutional graduate attributes as reflected in the Academic Identity, the exit level outcomes from the prospectus of HRM diploma, as well as the key attributes identified from interview data.

Table 4:2: Summary of triangulated HRM attributes

MUT Graduate attributes (source: MUT Academic Identity document)		HRM graduate attributes
Basic skills and understanding	<ul style="list-style-type: none"> • Able to communicate effectively in English • Able to source and use appropriate information • Computer literate • Has discipline-relevant professional skills • Familiar with the workplace • Able to move between jobs, thus remaining employable for life 	<p>Key attributes from primary data</p> <ul style="list-style-type: none"> • Communication Computer skills Critical thinking • Critical cross-filed skills • Entrepreneurship • Independent learning • Curiosity and awareness of current affairs • Information management and analysis • Practical knowledge • Teamwork • Working independently • Technical skills • Social responsibility • Knowledge of HR legislations <p>HRM Diploma Exit level outcomes (Source: HRM diploma prospectus 2023)</p> <ul style="list-style-type: none"> • Co-ordinate and contribute to the management of some aspects of all of the four role clusters related to Human Resources Management and Practices. • Recruitment and induction of new employees. • Contribute to the development of employees. • Contribute to the establishment and improvement of labour and employee relations (including contributing to employee assistance and wellness programmes). • Adhere to legislative requirements and organisational policies and procedures when coordinating some of the core processes related to Human Resources Management and Practices. • Promote best human resources management practices in an organisation. • Contribute to the monitoring of Health and Safety at the workplace. • Identify strengths and areas for improvement in own learning through self-reflection and reflection on organisational Human Resources Management and Practices.
Knowledge and intellectual ability	<ul style="list-style-type: none"> • Possesses both general and in-depth disciplinary knowledge • A critical and analytical thinker • Has research skills • Intellectually curious • Committed to further learning 	
Workplace skills and applied knowledge	<ul style="list-style-type: none"> • Able to function in any work environment and thrive • Able to apply knowledge to solve problems • Entrepreneurial and resourceful • Able to work independently • Creative and innovative • Able to adapt to new/different workplace practices and cultures • Accountable and ethical • Environmentally responsible 	
Interactive and personal skills	<ul style="list-style-type: none"> • Leadership ability • Independent and confident • Adaptable and resourceful • A socially responsible and ethical local citizen • A connected ‘global citizen’ • Flexible and responsive to diverse environments • Positive, self-motivated and entrepreneurial • Willing to work with and learn from others 	

SABPP core competencies for HR (source; SABPP competency model)

- Leadership and personal credibility
- Organisational capability
- Solution Creation and Implementation
- Interpersonal and communication skills
- Citizenship for the future

Source: adapted from MUT Academic Identity, HRM 2023 Prospectus and SABPP.

In Table 4.2, there appears to be a significant nexus and alignment between the graduate attributes in MUT's Academic Identity document and those emphasised by participants during the interviews in the domain of basic skills and understanding. Computer skills, practical skills for the workplace, communication, and some professional skills such as teamwork seem to be well integrated with institutional graduate attributes. The key skills emanating from primary data emphasise a broad range of attributes, including independent learning and critical thinking, which can be linked to workplace adaptability and employability as reflected in the Academic Identity. However, Table 4.2 illustrates that the programme's exit level outcomes and primary data attributes seem to focus on different aspects. Whilst interview data depicts overarching broad skills aligned to the field of HRM, the programme's exit level outcomes appear to focus more on the specific discipline-specific HR domain knowledge.

In the domain of knowledge and intellectual ability, the alignment between primary data and the institution's graduate attributes is evident in Table 4.2, though primary data accentuates cross-disciplinary and more practical skills. The exit level outcomes appear to be silent on this aspect. For the domain Workplace Skills and Applied Knowledge, both sets of datasets underline the importance of students working independently and adapting to different workplace practices, whilst the programme exit level outcomes are concentrated on HRM disciplinary knowledge like health and safety. Lastly, on the dimension of interactive and personal skills, Table 4.2 demonstrates a strong alignment between primary data and academic identity, particularly regarding social responsibility, critical thinking, and communication skills. It is worth noting that primary data appear to emphasise practical skills. Although the programme's exit-level outcomes do not explicitly mention these attributes, the implied necessity for interpersonal skills is evident through the focus on human resources management, adherence to legislative requirements, and self-reflection.

4.5 Findings from bibliometric review

In relation to the fourth research objective, a bibliometric review was conducted in the interest of investigating the integration of 4IR-aligned graduate attributes into the HRM curriculum aiming to enhance the employability and future readiness of graduates. Issues of database selection, search string, inclusion and exclusion criteria are explained in section 3.7.2., whilst in this section the results are presented.

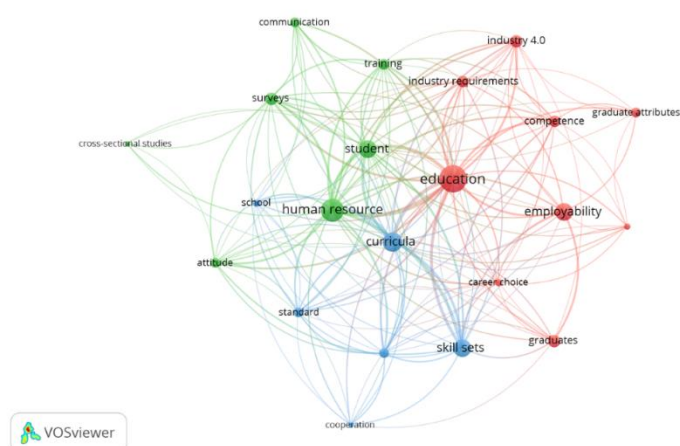
4.5.1 Analysis

VOSviewer was used to analyse the data extracted from Scopus. VOSviewer is an open-source bibliometrics tool for visualising bibliometric networks with special text-mining features. It uses visual elements based on mapping techniques to transform CSV data into diagrams or clusters (Hafezad & Abdullah, 2021) and distance-based visualisations of bibliometric networks, and the distance between two visualised nodes indicates their interrelatedness (Chae et al., 2020). VOSviewer is a tool that generates maps of networks by using distance-based calculations to represent the proximity of nodes. The font size differentiates the citation concentration, with larger fonts indicating more citations for a particular study (Oraee et al., 2017).

Co-occurring words

The analysis below shows the co-occurring words and their cluster analysis. A total of 1672 keywords occurred for the 228 articles. The minimum co-occurrence was three keywords, which surfaced 170; however, 22 remained after thesaurus analysis.

Figure 4.4: VOSviewer analysis



Source: Author’s own creation.

Table 4.3: Keywords cluster analysis

Occurrences	Keyword	Average publication year	Average citations
Cluster 1 (19 keywords) (Red)			
6	Career Choice	2019	4
16	Competence	2018	14
91	education	2018	14
39	employability	2019	12
12	Graduate attributes	2018	11
16	Graduates	2018	12
20	Industry 4.0	2019	22
17	Industry requirements	2017	24
5	Universities	2019	18
Cluster 2 (7 keywords) Green			
11	Attitude	2017	13
13	Communication	2018	8
4	Cross-sectional studies	2020	11
65	Human resource	2018	12
39	Student	2018	10
20	Surveys	2018	14
15	Training	2016	10
Cluster 3 (6 keywords) Blue			
4	Cooperation	2018	7
47	Curricula	2018	13
11	Organisation management	and 2018	12
7	School	2017	7
39	Skills sets	2019	8
11	Standard	2016	14

Source: own creation.

4.5.2 Cluster one: Graduate Attributes in the Context of Industry 4.0

The red dots on the map represent this cluster and encompass nine co-occurring keywords. These are career choice, competence, education, employability, graduate

attributes, graduates, industry 4.0, industry requirements, and universities. It has an average publication year of 2018. These keywords are intricately linked to the evolving landscape of graduate attributes in the age of Industry 4.0. The present study designates this as an integrated framework focusing on aligning academic qualifications with the dynamism of the Industrial Revolution. This framework underscores the importance of universities in shaping the attributes of graduates to be compatible with the requirements of modern industries. In an era where Industry 4.0 dictates the pace, aligning graduate attributes with industry needs becomes paramount. Such an alignment ensures that graduates are educated and employable, possessing the competence necessary for the contemporary workplace.

According to Barabash et al. (2022:), the onset of Industry 4.0 demands a paradigm shift in how universities approach the concept of graduate attributes. The ever-changing nature of industries requires a dynamic and flexible academic curriculum, ensuring graduates are adept at navigating the challenges of the modern workplace. Moreover, the focus is on technical know-how and soft skills, preparing graduates for multifaceted career choices. Furthermore, integrating graduate attributes with industry requirements is no longer a luxury but a necessity. As Thirunavukarasu et al. (2020) and Roopchand and Ramlowat et al. (2019) pointed out, the gap between academia and industry has often been a point of contention. However, with the rapid advancements in technology and the ushering of Industry 4.0, this gap needs to be bridged more than ever.

In South Africa, the HRM diploma is essential, equipping graduates with the skills and knowledge to navigate the dynamic HR landscape. The introduction of Industry 4.0 globally has brought challenges and opportunities, necessitating re-evaluating the graduate attributes in HRM education in South Africa. Universities, being the cradle of these attributes, play a pivotal role. In the age of Industry 4.0, they must ensure that the curriculum is academically sound and industry-relevant. South African industries, particularly HR, are undergoing rapid digital transformation. As a result, graduates must be competent in traditional HR practices and new digital tools and platforms.

According to Aliu and Aigbavboa (2020), the South African landscape increasingly emphasises data-driven decision-making, automation, and digital talent

management. Thus, graduates need to be equipped with skills that blend traditional HR knowledge with the tenets of Industry 4.0. Industry advisory bodies in South Africa play a crucial role in shaping the future of education. In collaboration with academic institutions, these bodies must ensure that graduates' attributes align seamlessly with the evolving industry needs. The alignment is about technical acumen and instilling a mindset of adaptability, lifelong learning, and proactive engagement with technology.

This cluster suggests a pressing need for South African universities and industry advisory bodies to collaboratively revisit the HRM diploma's curriculum (Marx & de Swardt, 2020). The goal should be to produce graduates who are not just employable but also future-ready, capable of steering South African businesses through the complexities of Industry 4.0. South Africa stands on the cusp of integrating Industry 4.0 into its industrial and academic fabric, and the alignment of graduate attributes in HRM diplomas with industry requirements becomes indispensable. A concerted effort from all stakeholders can ensure that South African HRM graduates are globally competitive and locally relevant.

4.3.3 Cluster two: Cluster on HRM Education Methodologies and Graduate Attributes

This cluster is represented by the royal blue dots on the map in Figure 4.4 and comprises seven co-occurring keywords. The keywords are attitude, communication, cross-sectional studies, human resource, student, surveys, and training. These keywords are intrinsically linked to the methodologies and attributes central to HRM education and practice. The blend of soft skills such as Attitude and Communication with empirical research methods, mainly cross-sectional studies and Surveys, symbolises modern HRM education's foundational structure. This blend ensures that students have the interpersonal skills and the analytical tools vital for the profession. Garousi et al. (2019) noted that HRM education's evolution globally underscores the importance of marrying soft skills with data-driven methodologies. Given the multifaceted nature of HR roles, the ability to communicate effectively, coupled with empirical insights, becomes paramount.

Surveys and Cross-sectional studies, as methodologies, offer a snapshot into the prevailing HR practices and sentiments at a given time. This empirical approach

provides educators and practitioners with real-time insights, enabling them to adapt and tailor HR strategies and practices accordingly MacDonald et al., (2022). The inclusion of training in this cluster highlights the continuous and evolving nature of HRM. As HR trends shift and industries evolve, continuous training ensures that HR professionals remain at the forefront of their field. As Basavaraj and Aranha (2021) pointed out, in the dynamic world of HRM, professionals need to be lifelong learners, perpetually updating their skills and knowledge.

For South Africa, this global trend in HRM education holds significant implications. Given the country's unique socio-economic landscape and cultural diversity, HR professionals must be adept at navigating complex interpersonal dynamics while being data-savvy. This sentiment is echoed by Du Toit and Koorsen (2022: 359), emphasising the blend of soft skills and analytical prowess in the South African HRM context.

In South Africa's unique socio-economic landscape, the global HRM educational trends, represented by the royal blue dots, hold vital implications. The nation's rich cultural diversity demands HR professionals with adept attitudes and communication skills who can bridge varied workplace cultures and foster inclusivity. Moreover, the emphasis on data-driven methodologies like cross-sectional studies and surveys underscores the need for South African HRM curricula to be globally aligned and locally responsive, equipping graduates to address the nation's distinct HR challenges. Furthermore, with South Africa's focus on skill development and the fourth industrial revolution, training becomes even more paramount, emphasising the continuous upskilling of HR professionals in a rapidly evolving economic and technological environment.

4.5.4 Cluster three: Cluster on HRM Educational Standards and Organizational Management

Cluster three is depicted by the green dots on the map and features six co-occurring keywords: cooperation, curricula, organisation and management, school, skills set, and standard. This cluster has an average publication year of 2017. These terms are intrinsically intertwined, painting a picture of the evolving landscape of HRM education and its organisational underpinnings on a global scale.

The world of HRM education is witnessing a transformative phase. The cluster keywords hint at a multifaceted approach to HRM education, where soft skills like cooperation complement more structured components like curricula and standards. The emphasis on "Skills Sets" resonates with the global narrative where the HR profession is no longer about mere recruitment and personnel management. In today's digitised, globalised work environments, HR professionals are strategists, organisational culture custodians, and change agents. They are expected to navigate complex organisational structures, as suggested by Organisation and Management, and facilitate cooperation across diverse teams, often across geographies. According to Rodriguez et al. (2021), the shift towards a more holistic HRM education is not just a trend but a necessity. As businesses grapple with the challenges of the 21st century – from managing remote teams to ensuring employee well-being in the face of global crises – the role of HR professionals has expanded manifold. This necessitates an HRM curriculum that is both comprehensive in its content and adaptable in its approach.

For South Africa, a nation marked by its rich cultural tapestry and unique socio-economic challenges, these global trends in HRM education hold profound implications. The cluster emphasises schools and curricula and suggests a pivotal role for educational institutions. They are the torchbearers, ensuring that the next generation of HRM professionals in South Africa is equipped with the right blend of skills to drive businesses forward. The keyword "Cooperation" holds special significance for South Africa. Given the country's history and diverse demographics, fostering a culture of cooperation in workplaces is paramount. Thus, HRM graduates must be adept at building bridges, ensuring inclusivity, and fostering collaboration.

Furthermore, as Harran and Theunissen (2019) elucidated, South Africa's journey from its past has led to a unique HR landscape. Traditional HR practices coexist with modern, globally aligned strategies. This dual nature necessitates an HRM curriculum deeply rooted in local realities while attuning to global best practices. This cluster paints a vivid picture of the future of HRM education in South Africa in the context of global trends. It suggests an urgent need for a recalibrated, holistic approach, blending traditional knowledge with modern skill sets and emphasising global standards. As South Africa continues its journey of growth and transformation,

its HRM education can act as a catalyst, producing globally competitive professionals who are deeply sensitive to local nuances.

Globally, HRM education is increasingly recognised for its need for standardisation and a structured approach. Mardis et al. (2018) noted that the emphasis on curricula and standards underscores the international drive for consistency in HRM education. Such measures ensure that irrespective of geographical boundaries, HRM graduates have a harmonious set of competencies. Moreover, the Organisation and Management concept in the educational framework has gained traction, suggesting a move towards more professionalised and systematic educational practices (Barabash et al., 2022). The element of cooperation in the academic realm also cannot be understated. Garcia-Esteban and Jahnke (2020) highlighted that collaborative efforts are shaping the future of HRM curricula, with academia, industry, and policymakers coming together.

According to Harran and Theunissen (2019), South African institutions need to blend interpersonal attributes and data-driven methodologies in crafting modern HRM curricula. This combination ensures that graduates are effective communicators and adept at leveraging empirical data for HR decisions. The emphasis on training indicates the importance of continuous professional development. As Othman (2013) highlighted, in the dynamic world of HRM, professionals need to be lifelong learners, constantly updating their skills and knowledge. This is especially true with the rapid technological advancements influencing HR practices.

4.6 Conclusion

Chapter five provided a comprehensive presentation and interpretation of the results of the study. The results were generated through Atlas.ti, presented thematically and illustrated through stanky charts. Beyond the presentation and interpretation, the results are triangulated with secondary data, thus providing an overview and the confluence of primary results, programme's exit-level outcomes and the SABPP competencies. In the following chapter, I discuss the findings, synthesise findings with theoretical framework and present a model for curriculum development.

CHAPTER FIVE: DISCUSSION AND SYNTHESIS OF FINDINGS

5.1 Introduction

The previous chapter expansively presented the results emanating from the empirical and non-empirical data analysis. In this chapter, I provide an in-depth discussion of the findings from the preceding chapter. This chapter's prime objective is to synthesise the findings with related literature through a meticulous evaluation of the findings in the context of the current literature, thus drawing a nexus between previous studies and the current study. Accordingly, this offers a coherent overview of the main outcomes of the study. Furthermore, against the backdrop of the LCT theoretical framework, I attempt to relate the findings to the theoretical tenets adopted in the study. Towards the end, I present a curriculum model for embedding graduate attributes in the HRM diploma in the context of UoT.

Before I dwell into the crux of this chapter, it is important to note that the discussion herein and the overall lenses of the study should be read and understood within the worldviews of interpretivism as the philosophical foundation of the study. As we have seen in section 3.4.2, the central hallmark of interpretivism is subjectivity (du Plooy-Cilliers, 2014), and its doctrines view facts as fluid and context-based (epistemology) (Saunders et al., 2012). It considers reality as subjective social construction (ontology) involving textual descriptions of human experiences (metatheory) (Pham, 2018; du Plooy-Cilliers, 2014). Additionally, value-free research is not necessarily an obsession of interpretivists (axiology). From a methodological perspective, hence the study adopted a qualitative approach. Therefore, the discussion is done with these interpretivism canons in mind, that the study grapples with the subjective human experiences of lecturers involved in the HRM programme within the context of a UoT classified as an HDI. As such, we should view the findings in their context and not necessarily with a view to generalise the claims made in this dissertation.

5.2 Discussion of findings

The discussion is structured around the study's objectives, aiming to demonstrate the study's outcomes in relation to the objectives. As we have seen in the literature review section, higher education institutions emphasise integrating and implementing graduate attributes into the disciplines. Griesel and Parker's study (2009) underlines,

among other things, the interface between the higher education industry in the face of a 21st century knowledge-driven global society. In South Africa, graduate employability is a cause of concern for stakeholders (Graham & De Lannoy, 2016; Harry & Chinyamurindi, 2020), and as such, participants appear to be wary of this concern.

5.2.1 Integration of graduate attributes into the HRM curriculum

The significance of proper integration of graduate attributes into the curriculum is averred by the likes of Thompson et al. (2008), without which there would be a disjuncture between what the curriculum offers and implements and the desired outputs (graduates) of the said curriculum. Interview data presented in the previous chapter suggests that integrating graduate attributes into the HRM diploma curriculum is a continuous, comprehensive, and multifaceted approach. Based on the participants' experiences, the graduate attributes are seemingly integrated at the early stages of programme development. Participants highlighted the significance of ensuring that the graduate attributes are embedded into the programme's exit level outcomes and cascaded to the module outcomes to ensure that HRM students are exposed to and instilled with the attributes right from the beginning of their diploma journey. The data shows the need also to align the incorporation of graduate attributes with the programme's overall goals, thus ensuring that the module content, learning objectives, and teaching activities are well structured to reflect the desired attributes. Oliver (2013) stresses this constructive alignment, whereby graduate attributes are mapped along the outcomes and assessments.

Moreover, the graduate attributes of the programme appear to be in sync with the broad institutional graduate attributes. This is further attested to by secondary data findings, which demonstrate, in the main, a significant alignment between the graduate attributes in the Academic Identity document and those emphasised by participants during the interviews. This alignment to institutional attributes is vital given the unique focus of UoTs to produce graduates who are employable and ready for the world of work (Bastges-Lienshöft et al., 2021). However, the institutional attributes may often be at odds with the department's epistemology (Jones, 2013), meaning that the department needs to ensure that the discipline's core specialisation should not be compromised in the quest to align with institutional attributes. Jones

(2013) posits that such an integration should fit with the disciplinary and departmental culture, epistemic frames, and teaching practices.

Concerning the key graduate attributes highlighted by participants and whether these attributes are theoretically or practically orientated, interview data highlighted critical HRM attributes. These attributes include ethics, information management, practical knowledge, technical skills, curiosity, entrepreneurship, critical thinking, communication, social responsibility, teamwork, and independent learning. Participants highlighted that these attributes are emphasised throughout all programme levels to ensure graduates are well-prepared for work. Participants acknowledged the dynamic working environment in the field of HR, as accentuated by Ressia and Shaw (2022), who cited that graduate attributes should account for these dynamics. Although one participant highlighted that students need to have the ability to adapt to the rapid technological advancements in the field of HR, there is a generally low degree of congruence with literature in some aspects of attributes about 4IR for instance. Primary data does not emphasise the HRM attributes in the era of 4IR, as reflected in the literature. In this regard, Malik, Budhwar and Srikanth (2020) and Ressia & Shaw (2022) highlighted the use of advanced technologies like data mining, intelligent agent technologies, and enterprise resource and planning systems (ERPS), which ushered new data management practices which had impacted HRM practices.

Beyond the world of work, there was an emphasis on entrepreneurship skills and acknowledging that graduates are members of society in general. Entrepreneurship is against the backdrop of the high levels of graduate unemployment in South Africa. Participants strongly felt that it is vital for students to be exposed to entrepreneurship and to have the opportunity to develop an appetite for entrepreneurship and an entrepreneurial mindset. In line with Nussbaum (2010) and Mtawa et al. (2021), and based on primary data, MUT's graduate attributes and the SABPP competencies, there appears to be an awareness and desire to instil generic attributes to make graduates meaningful members of society.

Triangulated with the exit-level outcomes, there appears to be a disjuncture between what participants reported and the exit-level outcomes. The exit-level outcomes are more focused on HRM domain knowledge, whilst participants alluded to the broad

attributes required in the field of HRM. However, some attributes alluded to in the findings find expression in the modules like Language English (communication), End User Computing (computer skills, technical skills), Labour Law (HR legislations), Business management (entrepreneurship, interpersonal skills) and Labour Relations (teamwork, interpersonal skills) (2023 MUT Prospectus). Overall, interviews and secondary data accentuate more practical skills, whereas students are involved in practical activities that train them for real-world scenarios. There also appears to be some emphasis on cross-disciplinary acumen and HRM theoretical knowledge. Considering Paadi's (2014) assertion that workplaces have evolved and that the role of HRM professionals should also change to adapt to the changing work environment, HR graduates must be equipped for these changes. It is also worth noting that, according to Tefese and Mphahlele (2018), employers look beyond the disciplinary expertise or technical knowledge traditionally forming the core of most university courses.

5.2.2 What influences the integration of graduate attributes into the curriculum?

Literature shows that internal and external factors affect the conceptualisation of graduate attributes and that different institutions approach graduate attributes differently (Ipperciel & El Atia, 2014; Mahon, 2022; Pauli & Raymond-Barker, 2016). It means that what influences the integration of graduate attributes at a UoT may differ from that of a traditional university. In this respect, interview data indicates that the department prioritises stakeholder inputs, especially from industry advisory bodies and industry professionals, in programme development and review. As such, the department's focus is ensuring the curriculum is aligned with industry trends and demands. The high influence of the industry appears to be in tandem with the mandate of UoTs, that their focus should be more on preparing students for the world of work (Sibuqashe, 2019). Moreover, besides the mandatory statutory bodies, the department undertakes informal reviews to accommodate industry dynamics and ensure that the programme stays relevant.

As Mahon (2022) noted, the industry appears to have had an increasing role in higher education in recent years. Even from a statutory perspective, academic departments must constitute and consult industry advisory bodies in curriculum development. The interest of industry in this regard is justified by the fact that from

the industry perspective, a skilled workforce is essential (Mahon, 2022), and from the institution, students must study what is in line with industry and that graduates are employable. This symbiotic relationship appears to be mutually beneficial for industry, the university/department and graduates.

Internally, interview data shows that institutional graduate attributes are also considered in the design and review of the programme. Notwithstanding Jones's (2013) point regarding disciplinary epistemology, aligning to the overall institution/s attributes is important considering the institutional type within which the department is operating. In the Academic Identity document, the institution acknowledges the changes in the education landscape and intends to differentiate its graduates in the sector by defining its graduates in tandem with the 21st-century world of work, including the economic demands prevailing in South Africa. Beyond the integration of programme design and review, primary data shows that the graduate attributes are cascaded down into module and module outcomes after consultation with key stakeholders internally and externally. To this effect, participants gave examples of a few modules, such as Language English and End User Computing, specifically designed to cater for attributes such as communication and computer skills. Participants further alluded to various activities and assignments to develop certain graduate attributes. By achieving these attributes, as Chiwara et al. (2017) aver, the employability of graduates would thus be enhanced.

The interview data further highlights an integrated and holistic approach towards assessing graduate attributes in the programme. Participants stressed that the attributes are not necessarily assessed separately but are integrated into various aspects of the curriculum at all levels. In this regard, Radloff et al (2008) argued that attention should be paid to the assessment of graduate attributes because assessment tends to define curriculum and drive staff and student behaviour (Ramsden, 2003; Biggs & Tang, 2007). It allows for a comprehensive evaluation of student proficiencies, knowledge, and skills, thus allowing students to simultaneously develop and demonstrate multiple attributes and capabilities. Moreover, participants underscored the importance of incorporating graduate attributes into different assignments and activities to encourage students to take on several roles and reflect on their learning. The emphasis on reflection means that students are encouraged to engage with the learning and critically reflect on their own understanding and

development of graduate attributes. The interview data also shows the alignment of assessments with module outcomes.

5.2.3 The extent to which the graduate attributes that are reflected in the HRM curriculum are aligned to the industry advisory body requirements

For students, developing graduate attributes is in their interest for future job prospects (Shivoro et al., 2018), and we have seen earlier that it is also in the interest of both industry and university/department. Given the integration of attributes and the external and internal influences discussed earlier, which revealed a strong influence of industry, it is logical that the quest of discussion turns to the extent to which the graduate attributes reflected in the HRM curriculum align with industry as reflected in the third objective. Although the HRM prospectus does not explicitly state the graduate attributes, it outlines the exit-level outcomes. In this case, the exit level outcomes and the key graduate attributes alluded to by participants are considered as the disciplinary and overall attributes. As indicated previously, the findings attest to a high degree of industry involvement in the design and review of the programme, which is in congruence with Taylor and Calitz's (2020) observation that industry advisory bodies are vital to academic departments. The authors proffer that these bodies provide meaningful feedback on curriculum development concerning industry graduate attributes and programme quality. As literature (Refae et al., 2016; Sener, 2014) shows, academic departments use industry bodies to strengthen the programme, enhance programme quality and shape course content. Given that the department collaborates mainly with the SABPP, the HR Standards by the same body are used as a benchmark herein. The role of the IPP appears to be minimal in so far as the department is concerned.

An analysis of alignment between the SABPP's HR core competencies, attributes from primary data and the programme's exit level outcomes show a considerable degree of alignment, although some elements do not align. The SABPP core competencies emphasise HR professional competencies on leadership, personal credibility, solution creation and implementation, organisational capability, interpersonal skills, communication skills, and citizenship for the future. In this regard, an analysis of the programme's exit level outcomes and key attributes alluded to by participants reveals a high degree of correspondence with numerous SABPP HR core competencies. For instance, interpersonal skills, teamwork, and

communication align directly with the core HR competencies of SABPP, whilst the promotion of HRM best practices and critical thinking also show alignment with the solution creation and implementation competencies. A partial alignment to the SABPP's core competencies can also be seen in attributes such as social responsibility and the contribution to health and safety monitoring. However, the absence of direction alignment can be seen in attributes such as entrepreneurship, information management and analysis, computer skills and critical cross-filed skills. This calls for a more nuanced approach to preparing graduates to meet the dynamic demands of the modern HR world of work. As such, it is important to bridge the gap to ensure that graduates are better equipped with a comprehensive skillset in line with the evolving landscape of the HR industry. Given the detailed discussion of findings with previous works, the subsequent interest of the study was to contextualise the findings through the adopted framework so that we can have a deeper theoretical understanding of the degree of influence on and alignment of HRM curriculum to industry requirements.

5.2.4 The integration of 4IR-aligned graduate attributes into the HRM curriculum aiming to enhance the employability and future readiness of graduates.

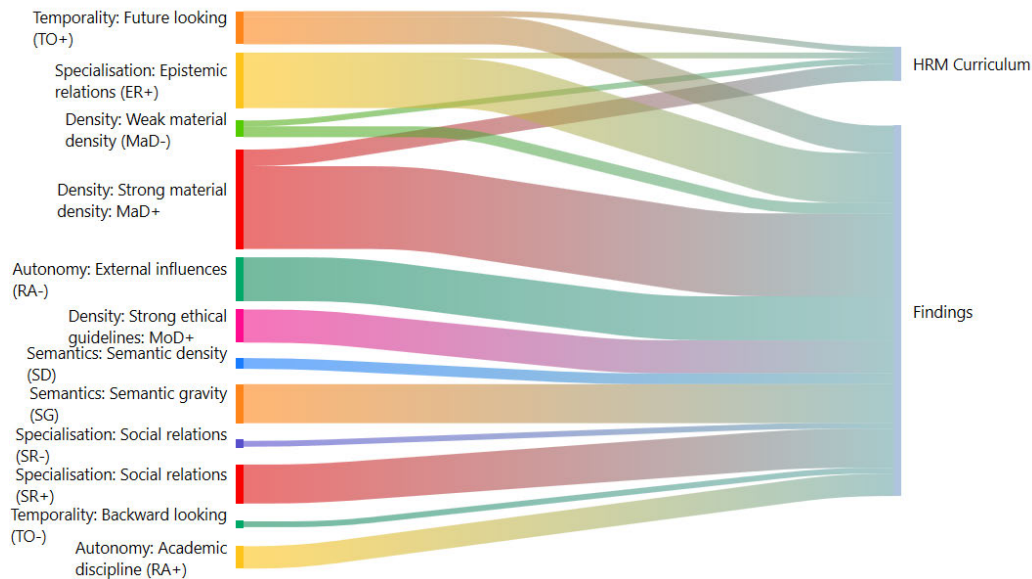
Concerning the fourth objective, the findings of the bibliometric review underscore the pressing need for the HRM curriculum to align with the skills demands brought about by 4IR. It underscores the importance of integrating graduate attributes, such as soft skills and technical know-how, into the curriculum to ensure that graduates are both employable and prepared for contemporary work, as Penprase (2018) accentuated. Consistent with empirical findings, the bibliometric review highlights that collaboration between academic institutions and industry advisory bodies is essential to bridging the gap between academia and industry. This collaboration is even more critical for UoTs, the emphasis of which is evident in the works of Masinde and Roux (2020) and Garraway and Winberg (2019), as UoTs are required to ensure that graduates are ready for work.

5.3 Synthesis of findings to the theoretical framework

Following the comprehensive discussion of findings, it is befitting to wrap the discussion with a brief synthesis of findings through the lenses of LCT as the

adopted theoretical framework. Figure 5.1 represents the outcomes of analysis on graduate attributes reflected in the findings and HRM prospectus for 2023 in relation to the dimension of LCT, namely autonomy, density, temporality, semantics and specialisation.

Figure 5.1: LCT framework synthesis model



Source: author’s own creation.

Autonomy

In terms of autonomy, the high degree of RA- suggests that the programme’s curriculum appears to be mainly influenced by external factors, which could be attributed to the need to align the curriculum and graduate attributes to industry. The department’s final autonomy on the programme and alignment to the institution’s graduate attributes is reflected by a low RA+. However, the nature of knowledge and competencies still reflects a strong alignment to the discipline.

Density

The material and moral resources that graduates should attain are reflected along the MaD+, MaD- and MoD+ continuum. In this regard, Figure 5.1 illustrates an overwhelming MaD+, meaning that the department has a strong intention on key material constructs that underpin the programme, as reflected in the findings and programme curriculum. For instance, there is a strong emphasis on practical skills, entrepreneurship, HR cognitive skills and the employability of graduates. A strong

MoD+ depicts a strong emphasis on ethics as reflected in the data and SABPP core competencies integrated into the programme. Less MaD- can be attributed to a strong MaD+, ascribed to other graduate attributes related to broader societal imperatives, like social responsibility, curiosity, and current affairs awareness.

Temporality

Regarding the temporal position and orientation of the programme, in terms of whether the past influences the programme curriculum, Figure 5.1 shows a strong TO+. This strong TO+ can be attributed to a strong emphasis on preparing HRM graduates for a future workplace in the field of HR, including entrepreneurship path. The low TO- is attributed to the few instances where evidence suggests that there are elements of adhering to how things have always been done at an institutional level, particularly in attempts to align to institutional attributes.

Semantics

The organisation of principles underpinning the HR practice in the context of the programme's curriculum appear to emphasise strong SG, meaning that the primary concern is the building of disciplinary knowledge and instilling attributes over time (throughout all levels of the programme) in terms of contextual HR field application. Low SD suggest minimal condensation of meaning, which could be attributed to the fact that the focus of the study was not necessarily on determining or examining this aspect.

Specialisation

Regarding the distinctiveness of the programme and its graduate attributes and the curricular's relationship to discipline knowledge and society, Figure 5.1 depicts a strong ER+ and SR+, implying a strong emphasis on disciplinary and HR specialised knowledge in terms of attributes and focus of the programme. In this regard, the primary knowledge relates to the discipline, whilst the relation of the programme to the specific dispositions characterise is slow (SR-).

In summation of the synthesis, it is apparent that the HRM curriculum exhibits notable characteristics across various LCT dimensions. External factors aligning with the industry's needs demonstrate a low level of autonomy for the department. However, the competencies and knowledge epistemology remain closely aligned to

the discipline. Material density and moral degree strongly emphasise ethical consideration, practical skills and entrepreneurship. Temporality reveals a futuristic approach focusing on preparing graduates for the future of the HR workplace, as opposed to a backward focus. Semantically, the programme appears to be characterised by a strong prominence of HR disciplinary knowledge, whilst specialisation underscores a robust focus on graduate attributes specific to HR rather than generic attributes. Against the backdrop of this theoretical synthesis, including the discussion of findings, the question of embedding graduate attributes emerged and is presented in the next section.

5.4 Systems approach to embedding graduate attributes at UoT

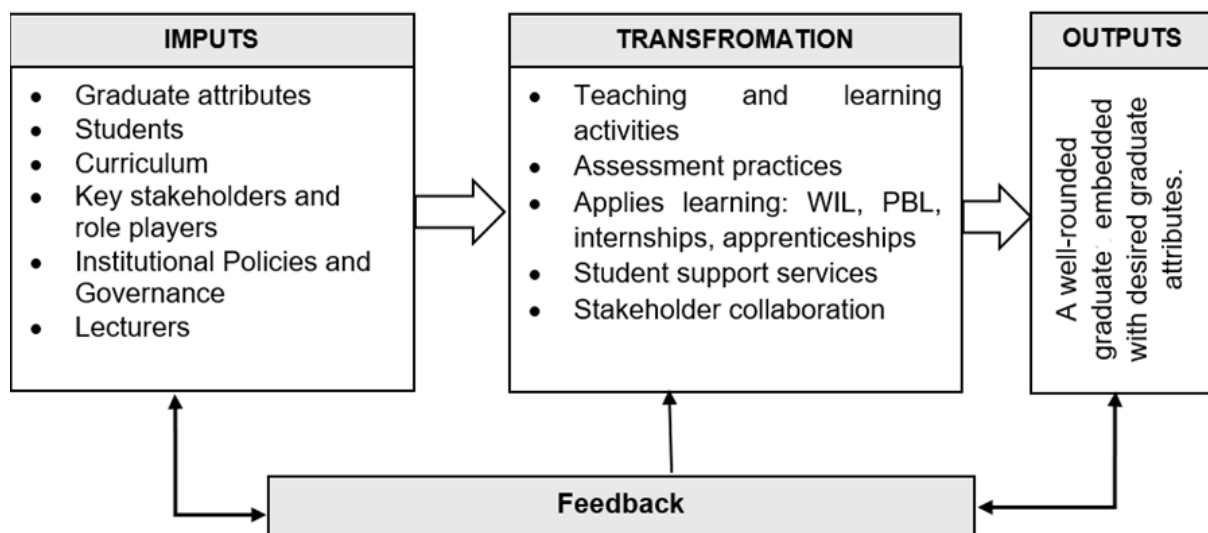
It is apparent that the integration and alignment of graduate attributes assume a multifaceted approach and is characterised by the involvement of internal and external stakeholders. Following the comprehensive discussion and synthesis of the findings from this study, a few critical questions emerge: How can graduate attributes be embedded in the context of a UoT? Are academic departments solely responsible for embedding graduate attributes? What is the influence or role of the university ecosystem on embedding graduate attributes? To complicate matters, the critics of graduate attributes (Gamage et al., 2023) argue that describing attributes does not translate to evidence of such attributes. With these questions in mind, in this section, I conceptualise the embedding of graduate attributes through a systems approach with the hope that such a conceptualisation would shed some light on a holistic, institutional and integrated approach to embedding graduate attributes in a curriculum in the context of a UoT.

To understand the embedding of graduate attributes, it is arguably not enough to view graduate attributes as merely a product of teaching and learning and the responsibility of academic departments and lecturers; instead, the thesis advanced herein is that graduate attributes should be seen as an integral part of the university system, a complex phenomenon, rather than the mere sum of its constituent tenets because the interrelationship between parts of the university plays a critical role for embedding attributes. Students experience the institution as a whole university ecosystem, not merely academic departments and lecturers. Thus, the whole university system inevitably influences the attributes that students acquire during their study time at an institution.

To further contextualise my conception of the system theory concerning graduate attributes, I use the lenses of Banathy (2000) and Groenewegen (1993), that the university system can be regarded as being orientated towards a goal of producing graduates with specific attributes, which is attested by the findings of this study. Critically, the goal is to ensure that not only graduates possess specific attributes but are also ready for the world of work. Those graduate attributes are intended to prepare them for industry and employability. To achieve the goal, the outputs, which in this case would be graduates, should be embedded with the desired graduate attributes that would enable them for employability and industry, where the environment, comprised of industry, internal structures, graduates, students, and role players such as CHE and DHT, constantly provides the university with feedback regarding its graduates (outputs). As such, the systems approach enables an appropriate analysis of the critical tenets and input and transformation factors for embedding graduate attributes.

Figure 5.2. below illustrates that a holistic approach to embedding graduate attributes involves multiple facets of the system’s tenets, categorised into three main components.

Figure 5.2: A systems model for embedding graduate attributes.



Source: Auhtor's own created model.

5.4.1 Inputs

Per Figure 5.2, the inputs comprise all the ingredients required to produce a graduate with the desired attributes, including the graduate attributes, programme curriculum, key stakeholders, institutional policies and governance, lecturers and students.

5.4.1.1 Graduate attributes

Regarding graduate attributes, the specific attributes or skills that students should possess upon graduation need to be identified and defined. The growing interface between higher education and the working world, including the imperative skills required for the economy and society, means that academic departments and institutions shall clearly distinguish themselves in graduate attributes. To this effect, studies conducted by Mahon, 2022; Shivoro et al., 2018; Tefese & Mphahlele, 2018, corroborated by the findings of the study, demonstrate that the issue of developing graduate attributes is in the interest of all involved; the institution, the academic department, and industry. Therefore, at an institutional level, generic graduate attributes should be delineated. Because the epistemology of a specific department may not be catered by the generic attributes (Jones, 2013), the department needs to carefully craft discipline-specific attributes.

5.4.1.2 Key stakeholders

The key stakeholders in this context depicted in Figure 5.2 mainly involve the department and industry advisory bodies. Consulting industry advisory and professional bodies in curriculum development is a significant requirement to ensure that the attributes crafted by the department are aligned with what is needed by the industry. The vital role of industry bodies is underscored by Taylor and Calitz (2020) concerning industry graduate attributes. For Sener (2014) and Refae et al. (2016), these bodies enable academic departments to be abreast of the needs of the industry in terms of skills, knowledge, and attributes. Notably, UoTs are distinguished (Sibuqashe, 2019) by the emphasis on responsiveness to and fulfilment of the needs of the industry, including the relevance of programmes. Professional bodies are essential to programme accreditation for professional programmes, including influencing graduate attributes and assessments. Programme accreditation serves as a critical gateway for the future employment of graduates. Other notable

stakeholders include other universities and alumni, who provide valuable input and feedback on the relevance of graduate attributes and the programme.

5.4.1.3 Curriculum

The programme's curriculum is another core ingredient of the inputs in the system, and in this scenario, it involves the integration of graduate attributes into the curriculum. Typically, such an integration pertains to aligning graduate attributes with exit-level outcomes, course content and learning outcomes, as shown in the findings of this study. In this regard, some graduate attributes can be conceptualised as an integrated component of the course curriculum or as a supplementary curriculum (Barrie, 2007). The former conceptualisation means that such attributes are taught as a fundamental part of the course, whilst the latter implies that the attributes are viewed as less critical than the disciplinary attributes. The curriculum can further encourage interdisciplinary modules which promote a holistic understanding of various subjects and their practical application. However, though multidisciplinary is encouraged, including aligning to institutional attributes, it is not a misnomer for the graduate and curriculum attributes to be more discipline orientated. The study results demonstrate a strong MaD+, meaning that the department has a strong intention on key material constructs which underpin the programme. To ensure that every graduate leaves the university with the requisite attributes, attributes relevant to the discipline and for employment and life need to be embedded in the curriculum, which means that they are explicitly taught and, most importantly, assessed.

5.4.1.4 Lecturers

Lecturers are also an integral part of inputs, and as such, they need to understand graduate attributes. Barrie (2007, p. 441) states that:

“Academics understanding generic attributes helps in part to explain the reasons for the limited implementation of graduate attributes within university courses. For instance, if academics do not understand their institution’s espoused generic attributes of graduates to represent relevant, important university learning outcomes, they are unlikely to incorporate them in their courses or teaching.”

Barrie effectively insinuates that academics, who are the coalface of teaching the desired attributes, must be aware of the generic and discipline attributes. This

awareness would allow them to incorporate graduate attributes in teaching, learning and assessment activities. A UoT-focused study by Sibuyashe (2019, p. 168) attested that academics do not always understand integrating graduate attributes into assessments and curricula. Therefore, beyond awareness, attention should also be paid to empowering academics with knowledge and skills for integrating graduate attributes in teaching. Furthermore, collaboration between academics and departments is crucial to enhancing knowledge sharing and understanding of the cultivation of graduate attributes.

5.4.1.5 Institutional policies

Develop institutional policies that prioritise embedding graduate attributes within the broader educational framework. Foster a culture of continuous improvement through regular reviews, feedback mechanisms, and integrating best practices from within and outside the institution.

5.4.1.6 Students

In this scenario, whilst the previous aspects of the inputs focused on the ingredients needed to transform students, this scenario considers students as the raw material that needs to be transformed into graduates. Understanding the nature and calibre of students that a typical UoT enrolls from the high school system is very important. Evidence shows that First-entering students in South African universities are underprepared for the academic demands of university. From the studies by Lekhehle (2020), McKay (2016) and Penprase, (2018), it is evident that universities face a myriad of challenges, including high failure rates by first years, difficulty to transition into university, and two in three first year students fail at least one module during first year of study at university. Understanding these challenges is important, as most students enrolling at UoTs typically come from poor backgrounds, including schools with limited resources. Therefore, transforming these students into graduates with desired graduate attributes requires special attention.

5.4.2 Transformation

The essence of transformation pertains to the fact that students undergo a certain transformation process during their study, during which they are ideally embedded

with desired attributes, knowledge and skills predetermined in inputs. In the scenario of Figure 5.2, transformation involves the activities and environment that students are exposed to through the period of study, which in this case include teaching and learning activities, assessment practices, applied learning, student support services, stakeholder collaboration and the overall institutional culture.

5.4.2.1 Teaching and Learning

In the context of UoTs, Daniels and Brooke (2014) accentuated that the teaching and learning strategies and activities favour the connection of learning with the world of work. This is because of the need to prepare for the industry's needs (Holmes, 2013) per the dictates of the labour market (Bastges-Lienshöft et al., 2021), meaning that the teaching and learning within a department should be aligned accordingly. In this respect, diverse teaching and learning strategies are important to foster active student engagement, practical application of knowledge, and the development of desired graduate attributes. In terms of teaching and learning, beyond what is taught (generic or discipline attributes), it is worthy to focus on how the curriculum is taught. For instance, looking at teaching attributes through constructivist lenses puts the students at the centre of teaching graduate attributes, where a student is expected to take ownership of their learning, actively participating in it, thus acquiring the desired attributes.

5.4.2.2 Assessment practices

Assessment is one of the fundamental bedrocks of the teaching and learning process and the student's overall journey towards becoming a graduate. Weller (2016) asserts that assessments play a vital role in fostering attributes and skills which would assist students to succeed beyond graduation, whereas lifelong learning can be inculcated (Boud, 2000). As such, the importance of assessing graduate attributes is further emphasised by Radloff et al. (2008). However, assessing graduate attributes is difficult, as El Atia et al. (2021) posit that attributes are generic and often abstract knowledge, skills and attitudes. Radloff et al. (2008) stated that designing and implementing assessment activities related to graduate attributes is often the litmus test for academic staff. In this regard, academics need to be trained and capacitated to design and implement multifaceted assessment approaches that go beyond the assessing subject knowledge and the student's

ability to demonstrate competencies of graduate attributes. Hughes and Barrie (2010) state that influential professional stakeholders influence assessment practices, especially in professional programmes. This influence is particularly evident in highly regulated disciplines like engineering professional bodies such as the Engineering Council of South Africa (ECSA), which prescribe graduate attributes and the associated assessment criteria. In such cases, the assessment practices adopted by the department should align with the respective professional body.

5.4.2.3 Applied learning

Given the practical emphasis on UoTs, applied learning is integral to the curriculum thereof. Applied learning allows students to apply content and knowledge from the classroom to real-world problems through hands-on experience (Jach et al., 2023), thereby allowing students to develop skills and attributes which would have otherwise not been developed in the classroom. The benefits of applied learning at university are well documented (Mayhew et al., 2016; Trolan & Jach, 2019). Evidence suggests that students, including employers, derive value from applied learning regarding outcomes and development (Jach et al., 2023) as students tend to be prepared and familiar with the work world. For UoTs, WIL is a popular strategy for exposing students to applied learning and is mostly part of the core curriculum regardless of the discipline. Through WIL, students can gain hands-on experience in their field of study, allowing them to apply classroom knowledge in a practical setting (Moalosi et al., 2021; Rowe & Zegwaard, 2017). In the context of MUT, for instance, students are expected to undergo WIL for at least three months, where students develop work readiness skills and attributes in the real working world. Besides WILL, PBA is another venue where students can develop skills and attributes through challenging, authentic questions and carefully created tasks. Moreover, mentorship and peer-assisted learning programmes also serve as important avenues for students to develop skills such as teamwork, leadership abilities, communication, accountability and empathy.

5.4.2.4 Stakeholder collaboration

The influence of role players in the conceptualisation of graduate attributes, including assessments in cases of professional qualifications, collaboration is even more important. Additionally, UoTs need a strong collaboration with industry and

professional bodies, considering that applied learning is integral to curriculum implementation. The industry provides WIL opportunities for students, including other applied learning opportunities such as internships and apprenticeships.

5.4.2.5 Student support services

The university system is inherently comprised of various support structures for students and staff, including extracurricular activities, which play a vital role, especially in developing generic attributes and in building different aptitudes, attributes and skills. Support services such as career development programmes, writing centres, tutorship, mentorship, counselling and entrepreneurship programmes assist students to develop attributes and skills that academic programmes would not necessarily impart. By engaging and participating in these opportunities provided by the universities, students are exposed to the practical application of learned skills in real-world settings. Given the challenges universities face and the profile of most first-year students enrolling at UoTs, support services are critical.

5.4.4 Outputs

Regarding the output, we are looking at the end of the programme's product, which is the graduate imbued with the desired graduate attributes.

5.4.5 Feedback

As depicted in Figure 5.2, feedback is an essential part of the system, which in this case means that the products of the system (graduates), the alumni, employers who employ the graduates, and all stakeholders provide continuous feedback for continuous improvement. The feedback can include programme reviews, which include industry advisory bodies, professional bodies and graduates of the programme as to whether the programme's outputs are competent in all the desired attributes.

Though a systems approach can be potentially useful for embedding graduate attributes, I should indicate that its applicability may be more suitable for a UoT context with more emphasis on applied learning. In other university or department types where there is less emphasis on applied learning, the systems approach may not be relevant as it is presented here. Nonetheless, given that the central thesis of the systems approach views the embedding of graduate attributes integral part of the

university system, it provides a useful framework beyond UoT context to embedding graduate attributes beyond a mere departmental conception. The university is thus considered a complex system that students go through in their journey to becoming graduates. Therefore, the interconnected and intertwined constituent tenets and parts of the university, as viewed through input-transformation process, play a pivotal role in providing students with a fertile environment and opportunities to develop certain attributes.

5.5 Conclusion

This chapter delved into an in-depth comprehensive discussion of the study's findings through a synthesis of literature and theoretical framework. After the summary and discussion, I synthesised the study's findings with the lenses of LCT, thus providing a comprehensive understanding of the integration and alignment of graduate attributes, including the programme's knowledge disposition. The next chapter is the last chapter of the study, and it provides a summary and recommendations.

CHAPTER SIX: SUMMARY AND RECOMMENDATIONS

6.1 Introduction

The previous chapter provided a comprehensive discussion of the findings in tandem with literature and theoretical framework of LCT. In this last chapter, I wrap up the study with a summary and recommendations emanating from the findings.

6.2 Summary of the findings

The summary of findings hereunder is provided against the research questions of the study, the aim of which is to demonstrate whether the research questions were achieved or not.

Question 1

How are the graduate attributes integrated into the curriculum of the Diploma in HRM at a selected UoT in Durban?

The investigation related to this research question reveals that the conceptualisation and development of graduate attributes in the HRM programme at MUT is a multifaceted approach involving various key stakeholders. This approach ensures that the attributes align with institutional attributes enshrined in the Academic Identity document of MUT. The incorporation of attributes commences in the early development stages of the programme, permeating through exit-level outcomes, modules and module outcomes. The findings indicate key attributes such as ethics, communication, technical skills, critical thinking, information management, curiosity and social responsibility. These attributes are constantly emphasised across all program levels. Noteworthy is the programme's emphasis on preparing graduates for the professional workforce as a UoT, thus prioritising practical skills through practical activities that simulate real world scenarios. Furthermore, the findings depict a considerable focus on HRM discipline knowledge and cross disciplinary acumen. Given the significant influence of industry on shaping graduate attributes, the department's collaboration with industry bodies such as the SABPP highly impacts the integration of attributes into the curriculum.

Question 2

What influences the integration of graduate attributes into the curriculum of the Diploma in HRM at a selected UoT in Durban?

A complex interplay of external and internal factors influences the conceptualisation and integration of graduate attributes in HRM programmes. External factors appear to significantly influence the programme, as manifested by a pronounced pervasiveness of a strong RA- and a corresponding low RA. Effectively, the findings revealed that the programme is orientated towards cultivating graduate attributes aligned with the needs of the industry, especially in preparing HR graduates for the workplace. Industry advisory bodies and professionals play a vital role in shaping the HR programme's curriculum to meet the trends and demands of the industry. In this regard, a strong collaboration with the industry body, the SABPP, exemplifies the department's commitment to industry alignment. The SABPP also accredits the programme. Despite this high degree of pronounced external influence, the findings show that the department still maintains autonomy, thus ensuring graduate attributes also align with the institution's broad attributes. This nuanced balance between internal institutional autonomy and external industry alignment illustrates the intricate dynamics shaping the integration of graduate attributes in the program.

Question 3

How are the graduate attributes that are reflected in the HRM curriculum aligned to the industry advisory body requirements?

From the analysis and triangulation of primary data, an extensive alignment is particularly evident with SABPP core competencies and the programme's exit level outcomes on attributes such as interpersonal and communication, solution creation and implementation, personal credibility, organisational capability, citizenship for the future and leadership. However, some exit-level outcomes do not seem to find expression in the SABPPs' core competencies, which include health and safety monitoring and social responsibility. Interestingly, the core competencies of the SABPP do not mention entrepreneurship, which was emphasised in primary data. The focal point of attributes expressed in primary data appears to be more aligned with the institution's generic attributes, which could be attributed to the autonomy

mentioned earlier, and the institution's core curriculum outlined in the Academic Identity.

Question 4

Why are the graduate attributes that are reflected in the HRM curriculum aligned to the industry advisory body requirements in the way that they are?

The alignment and integration of graduate attributes in the HRM programme with industry advisory bodies appear to be driven by several interrelated factors. Firstly, the department's commitment to preparing graduates for the needs and contemporary HRM working world. With evolving industry standards and demands, the curriculum is thus designed to imbue graduates with the necessary attributes, skills and competencies that align with industry practices. Secondly, relationship with the industry bodies such as the SABPP plays a vital role. The SABPP and industry professionals provide valuable inputs and insights regarding competencies required by employers, industry trends and HR best practices. Through this collaboration, the department ensures that the HRM diploma curriculum is responsive to industry needs and mirrors standards set by experts and professionals in the HR field. Thirdly, the department ensures alignment with the institutional graduate attributes. The alignment with industry and institutional attributes, including programme accreditation by SABPP, enhances the marketability of graduates. In summation, the alignment of graduate attributes with the demands of industry appears to be a strategic approach to bridging the gap between theory and practical needs of the industry.

Question 5

How can the HRM curriculum align with the demands of 4IR, ensuring that graduates possess the necessary attributes needed in the contemporary workplace?

Investigation with regards to this last research question pointed to the need to safeguard that the HRM curriculum is adapted to the skills required by 4IR. This would ensure the integration of relevant 4IR related skills and technical knowledge which are crucial to enhance graduates' employability and readiness for modern workplaces. The bibliometric review findings further reaffirmed primary findings

regarding the need for collaboration between academic institutions and industry advisory bodies to bridge the gap between academia and industry.

6.3 Recommendations

The study's recommendations, emanating from the findings, are advanced in this section. In this regard, three recommendations for practice and one for future research are offered.

6.3.1 Recommendations for practice

6.3.1.1 Strengthening collaboration with industry

The findings of the study point to a strong collaboration with the industry to ensure that the curriculum reflects the needs and demands of the industry. For UoTs, it is suggested that departments foster and cultivate strong relationships with industry to ensure that beyond the curriculum alignment, students are also provided with opportunities for applied learning.

6.3.1.2 Emphasis on diverse attributes

An emphasis on diverse graduate attributes is recommended, as findings depict a high degree of discipline and industry emphasis. While a focus on industry-related graduate attributes is essential, it is suggested that departments also consider broad attributes such as interdisciplinary knowledge and 4IR associated attributes. This would ensure that graduates are exposed to holistic skills and qualities and thus become well-rounded graduates.

6.3.1.3 Balance on autonomy and external influence

The curriculum appears to be highly influenced by external factors, as illustrated in the findings. It is suggested that a delicate balance should be maintained between industry influence and the autonomy of the department to preserve the department's and institutional autonomy. This is to ensure that the programme retains its differentiation, and unique identity and also addresses broader goals of education.

6.3.1.4 System approach for embedding graduate attributes

The discussion and synthesis of the systems theory in section 5.4 demonstrate that a systems approach can be potentially useful for embedding graduate attributes, especially within the context of UoT where applied learning is a key feature of the

curriculum. It is therefore suggested that academic departments within UoTs consider a systems approach to embedding graduate attributes. This would entail viewing embedding graduate attributes not just as the responsibility of the academic department, rather, as a transformative journey of students as they experience the university system as a whole. The university is thus considered a complex system that students go through in their journey to becoming graduates.

6.3.2 Recommendations for future research

Given the capacious outline and delineation of the systems approach, an opportunity arises for future research to examine the possible application of the systems theory for embedding graduate attributes within the context of other disciplines and traditional universities. It is common course, as seen in Chapter 2, that graduate attributes have become increasingly important as universities strive to produce graduates equipped with the attitudes to succeed in their chosen careers and contribute to society.

6.4 Conclusion of the study

This study sought to explore the integration and alignment of graduate attributes within the HRM diploma curriculum, and scrutinised the extent to which the programme's graduate attributes align with industry advisory bodies requirements. Literature professed the growing emphasis on graduate attributes and employability in South African higher education, which reflects the broader commitment to producing graduates who are able find jobs. For UoTs, the imperative to offer career focused programmes and curriculum which responds to the needs of industry is paramount. Thus, UoTs have the responsibility to graduates who are prepared for the world of work. In this regard, collaboration with industry advisory bodies and professionals is critical to achieving a curriculum which responds to the needs of industry. Industry advisory bodies play a critical role in developing a curriculum that aligns with industry, including the conceptualisation of graduate attributes by providing academic departments with industry insights.

This study was underpinned by qualitative research and interpretivist philosophical posture. In that respect, purposive sampling was used to select a sample of six experienced HR lecturers to unearth insights. The findings of the study depicted a

significant alignment of HRM diploma graduate attributes with the expectations of industry. Moreover, the findings highlighted that the integration of graduate attributes into curriculum is a multifaceted process that involves active participation from multiple stakeholders. As a result, drawing on literature and synthesis of insights from findings and LCT dimensions, a systems approach to embedding graduate attributes was proposed. In light of the findings of the study, it is suggested that academic departments foster and cultivate sustainable relationship with industry partners, which should extend to ensuring that students are provided with applied learning opportunities. In the end, I consider that the objectives of the study were successfully achieved.

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Annexure A: Gatekeepers' letter



Research Directorate

UMLAZI KWAZULU-NATAL
PO Box 12363 Jacobs 4026 Durban
Tel: 031 907 7450

01 November 2022

REF: RD1/24/2022

Mr Phillemon Sithole
Mangosuthu University of Technology

Dear Mr Sithole

PROTOCOL: 'Exploring the integration and alignment of graduate attributes in the Human Resources Management (HRM) diploma to industry advisory bodies requirements.'

The MUT Research Ethics Committee considered your application at their meeting held on 07 October 2022. It is my pleasure to inform you that permission to conduct the research project above was granted.

The approval is valid for two years from 07 October 2022. Any changes to the project must immediately be brought to the attention of the MUT Research Ethics Committee.

Your acceptance of this approval denotes your compliance with South African National Research Ethics guidelines (2004) and the MUT Research Ethics Policy, Procedures and Guidelines

Good luck with your research.

Yours sincerely,

Dr A Mienie
Director: Research

Annexure B: HSSREC ethics approval letter



07 August 2023

Mashango Phillemon Sithole (222115483)
School Of Education
Edgewood Campus

Dear MP Sithole,

Protocol reference number: HSSREC/00005826/2023

Project title: The integration and alignment of graduate attributes with the industry advisory bodies' requirements in the human resource management diploma.

Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 11 July 2023 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 07 August 2024.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8350/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

Annexture C: Informed consent form

Information Sheet and Consent to Participate in Research

Date:

Dear Sir/Madam

My name is Mashango Phillemon Sithole and I am a postgraduate student doing Master of Education in the School of Education at UKZN under the supervision of Prof S. Reddy. I can be contacted at [REDACTED] and via email sitholemp@outlook.com.

You are being invited to consider participating in a study that involves research about the integration and alignment of graduate attributes with the industry advisory bodies' requirements in the human resource management diploma.

The aim and purpose of this research is to (describe in lay terms). The study is expected to enroll (how many participants in total, how many in each arm, how many other sites, and where). It will involve the following procedures (describe). If you decide to participate in this research, I would like to ask your permission to record the interviews, which will take between 10 to 15 minutes to complete.

Participation in the research bears no foreseeable risks. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your views on the integration and alignment of graduate attributes into the HRM programme. The envisaged implication of the study is that the findings of the study will assist universities to better and deliver HRM programmes which would equip graduates with the relevant and necessary attributes and skills needed to succeed in the workplace. The study is expected to provide insight into contemporary graduate attributes at UoTs, and how are graduate attributes are embedded into curriculum. This important given the emphasis of UoTs on career focus and employability of graduates.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number _____). Furthermore, MUT has given ethical approval for the study (REF: RD1/24/2022).

In the event of any problems or concerns/questions you may contact the researcher at [REDACTED] and via email sitholemp@outlook.com or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Participation in the research voluntary, you elect to not take part. You may withdraw or refrain from participating at any point without providing any reason. In the event of refusal/withdrawal of participation the participants will not incur penalty or loss of treatment or other benefit to which they are normally entitled. To withdraw prior interviews, simply alert me via email or telephonically, then you will be removed from the list of interviews and interview schedule. Should you wish to withdraw during the interviews, simply alert the principal researcher of your wish to withdraw; the interview will be stopped immediately, and any information you would have provided up to that point will not be used. Should the researcher have any reason or be compelled to not proceed with the study, you will be informed promptly of such and that your participation is no longer required.

There are no costs which you will incur as a result of participation in the study. There are no incentives for participation either.

Your identity and any personal information will be protected. In other words, your name will not be used in any research summaries to come out of this research, and I will also make sure that any other details are disguised so that nobody will be able to identify you. All interview recordings will be stored in a password protected system, and the data will be handled in line with the POPIA. Only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to interview recordings. Nobody else will have access to your interview information. In reporting, quotes from interviews will be used when research findings are presented and discussed.

CONSENT (Edit as required)

I _____ have been informed about the study entitled the integration and alignment of graduate attributes with the industry advisory bodies' requirements in the human resource management diploma by Mashango Phillemon Sithole.

I understand the purpose and procedures of the study to be that I will take part in interviews, which will take between 10 to 15 minutes to complete.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at [REDACTED] and via email sitholemp@outlook.com.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to:

Audio-record my interview / focus group discussion YES / NO

Signature of Participant

Date

Signature of Witness

Date

(Where applicable)

Signature of Translator

Date

(Where applicable)

Annexure D: Interview guide sample

Annexure A

DRAFT INTERVIEW GUIDE

SECTION A: BIOGRAPHICAL INFORMATION

1. Gender	Male	Female			
2. Highest qualification					
3. Designation					
4. Department					
5. Experience in teaching and curriculum development (tick)	None	1-3 years	3-6 years	6-9 years	10+ years
6. Name of industry body which you belong					

SECTION B: MAIN QUESTIONNAIRE FOR LECTURERS

THEME ONE

7. How are the HRM graduate attributes **integrated** into the curriculum of the Diploma in HRM overall, and in terms of:
- Exit level outcomes
 - Module outcomes
 - Assessments: how does the department assess graduate attributes?

THEME TWO

8. Are the graduate attributes that are reflected in the HRM curriculum **aligned** to the industry advisory body requirements?
- How does the department of HRM ensure such an alignment when developing and reviewing the curriculum?
 - What are the graduates' attributes that the department considers to be important for the future of work in the field of HRM?
 - To what extent are the HRM graduate attributes aligned to institutional graduate attributes at MUT?

Annexture E: Turnitin report

Mashango Phillemon Sithole | Draft Dissertation 3


1 of 1

Match Overview

13%

Rank	Source	Match Percentage
1	journals.ufs.ac.za Internet Source	1%
2	scholar.ufs.ac.za Internet Source	1%
3	www.journals.ac.za Internet Source	1%
4	Submitted to Mancosa Student Paper	<1%
5	repository.up.ac.za Internet Source	<1%
6	journals.sagepub.com Internet Source	<1%

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UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

THE INTEGRATION AND ALIGNMENT OF GRADUATE ATTRIBUTES WITH THE
INDUSTRY ADVISORY BODIES' REQUIREMENTS IN THE HUMAN RESOURCE
MANAGEMENT DIPLOMA

Mashango Phillemon Sithole
222115483

A dissertation submitted in fulfilment of the requirement for the degree of
Master of Education (Higher Education).

SCHOOL OF EDUCATION

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