THE CONCEPTUALISATION, IMPLEMENTATION AND MANAGEMENT OF RESEARCH-LED TEACHING IN A DEVELOPING COUNTRY UNIVERSITY.

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DECLARATION

I, Changu C. Batisani, declare that this thesis is my own unaided work. It is submitted for the Degree of Doctor of Philosophy in Education at the University of the Witwatersrand, Johannesburg and School of Education. It has not been submitted before for any other degree or examination in any other university.

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Changu C. Batisani

15th day of July__ 2020_____at_____

ABSTRACT

This thesis demonstrates that while there is a university rhetoric concerning how research and teaching are linked, the ideals and practices of these linkages are not obvious in both research–led and teaching–led universities. A division of labour among teaching staff and research staff persist in the two types of universities to the extent that this link becomes questionable. In an investigation of how research–led teaching (RLT) is conceptualised, implemented and managed in a teaching university in Botswana, this thesis identifies misalignment between institutional systems, structures and resources with RLT initiatives. Perceived institutional incentives, cultures of individual academic staff/ lecturers do not encourage the implementation of RLT. This tension therefore calls for higher education (HE) managers to deploy pragmatic strategies to actualise the link between research and teaching through aligning systems, resources, structures with university research - led teaching link strategies.

The study adopted multiple theories to focus and organise an investigation of RLT in the context of a teaching university transiting to being a research–led university. The 7S McKinsey management model, aided in understating the general implementation and management of a strategy while Taylor's model for managing the research and teaching nexus was critical in understanding the implementation of RLT in a university environment.

The methodological approaches involved data collection within a concurrent mixed methods. The data were collected from institutional documents, focused group discussions with three groups of students, interviews with lecturers and a

student survey. The study employed thematic analysis and descriptive statistics to analyse the data.

This thesis has uncovered key findings under four broad areas, namely, “conceptualisation”, “value”, “approaches in RLT” and its “management”. In terms of how RLT is valued by lecturers and students, it is evident in this study that research-led teaching is valued because it has the potential to satisfy the needs of the labour market by enhancing graduate employability. This belief has also impacted on how the teaching approach is conceptualised. Beyond the confirmation of previous findings, the study proposes another dimension of conceptualising RLT that is influenced by the consumerist approach to Higher Education. It defines RLT as teaching that is based on the needs of the market. The approaches to actualising RLT were, therefore, those that involve students in research, field work assignment and researching the labour market and student needs. The study further reveals that RLT is not fully implemented because the university under study has adopted a passive approach to management, where the implementation is left to individual lecturers and the faculty.

The study concludes with a contribution to theory by suggesting an implementation and management model that emphasises the need for systems, resources and structures that support RLT in a university setup. In terms of practice, it makes a contribution by coming up with other ways in which RLT can be understood, actualised and managed.

Key words: Research – led teaching, research teaching link, implementation, management, active management, passive management, conceptualisation.

DEDICATION

My thesis is dedicated to my late father Mr Zwambeli Kenosi who passed on towards the end of my PhD journey. His belief in the value of education and most importantly educating the girl child has pushed me this far. I am forever grateful *daddy*, for the time we spent together, the talks and debates we have had and the life experiences you have shared. Inculcating a culture of 'everything possible though difficult' has made the completion of my study a reality. My dear mothers; Motlalepula Kenosi and Nsagwa Batisani, you have always been a true shining example of the strength of a woman. Your being was the foundation of my ability to balance between family, work and study.

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LIST OF ABBREVIATIONS

FGD - Focus Group Discussion

HE – Higher Education

HEIs - Higher Education Institutions

HRDC – Human Resource Development Council

HRM-Human Resources Management

IBS - Inquiry-Based Learning

KPIs - Key Performance Indicators

MIS - Management Information Systems

NDP - National development Plan

ORD - Office of Research & Development

RLT - Research – Led Teaching

SCL – Student-Centred Learning

TCL-Teacher-Centred Learning

CHAPTER 1 : SETTING THE SCENE

Introduction

Higher education regulators, the industry and society have certain expectation about the kind of students produced by tertiary education institutions. They expect production of students who can work independently in complex environments and have the capacity to identify and solve problems outside the university (Smyth et al, 2015). In line with this argument is the view that higher education institutions (HEIs) are compelled to address these expectations by aligning them to their mandates. Therefore research–led teaching has become a highly used concept by HEIs. It defines the quality of undergraduate teaching, it is used to address issues of demands on 'employability' and justify the rising cost of higher education learning (Clark & Hordosy, 2019, Smyth et al, 2015). It is therefore not surprising that activities that aim to involve under graduate students in research have gained a lot of attention in university education worldwide (Brew & Mantai, 2017; Healey, et al, 2010). This trend is found in both research and teaching-intensive universities. In Southern Africa, particularly in Botswana, universities are expected to involve students in research for a number of reasons including, among others, increased research cooperation, internationalisation of education and the challenge associated with how to engage undergraduate students in research (Janjuan, 2014). It is against this background that, since the nineteenth century, universities have continued to search for excellence in both research and teaching (Simons & Elen, 2007) in order to improve the quality of teaching and learning (Brew & Mantai, 2017).

Based on the claims, the concept of research-led teaching (RLT) has therefore become a widely adopted one in a variety of disciplines. However, the conceptualisation, implementation and management practices associated with it have seldom been researched (Taylor, 2007). Much has been said about the link or the relationship between research and

teaching activities from different angles (Deakins, 2006; Hattie and Marsh, 1996; Brew, 2006; Jenkins, Breen, Lindsay & Brew, 2003; Zamorski, 2002).

It is however still not clear how it is conceptualised and actualised in HE. The lack of clarity can be noted in some academics who see themselves more as teachers than researchers and whose work is often vocational in emphasis (Boyd, O'Reilly, Bucher, Fisher & Morton, 2010). According to Boyd et al (2010), in teaching-dominated universities, research forms a smaller portion of its workload. The status of a university, therefore, also determines the position of lecturers/academics as far as research and teaching are concerned. Though these varying contexts at university and individual levels exist, RLT has become a popular strategy for universities to strengthen the link between research and teaching in order to achieve excellence in both academic activities.

The inclusion of RLT is influenced by the notion that, in 'knowledge society' universities are places where knowledge is shared or transmitted, through teaching. They are also places where knowledge is created through research (Bosch & Taylor, 2011; Scott, 2002; Geschwind & Brostrom, 2013). Students in a knowledge-based economy entering a global economy must have knowledge and acquire core professional competencies like, communication, analytical and critical thinking skills (Brew, 2006; Wilkin, 2014) that will assist them in understanding the world they live in (Jenkins & Healey, 2005).

There is also an increasingly tense competition for students, university funding and in the struggle for position in the institutional status hierarchy of universities. RLT therefore increases the chance of retaining undergraduates in academic programmes and increasing the chances of enrolment into graduate programmes (Brew, 2006) that are likely to contribute to university research output and impact. The research culture of a university thus increases the chance of high placement of a university in the institutional status hierarchy. In the midst of

all this is the notion that the fact that teaching that is research-led is being cited more and more often makes a research-led university attractive to the outside world, potential students and funders.

Thesis statement

The changeover from a teaching to a research-led university while challenged by numerous factors can be navigated successfully if attention is given to strategically implementing and managing all RLT initiatives in the university, faculty and departments. Systems in the form of policies and policy guidelines that define and explain how RLT is understood and implemented must be put in place in order to inculcate the culture of research-teaching integration. Furthermore, implementing policies and policy guidelines and structural support is also critical for effective management and continual improvement of the transition.

General background of universities

The birth of universities dates back to the 11th and 12th century when they were predominantly teaching oriented institutions. The little research that was done back then was mostly in pursuit of knowledge generation (Bemmet & Diaz, 2011). They continued to evolve into formal organised institutions from the 12th to the 18th century as teaching institutions until the 19th century. The birth of research universities as noted by Altbatch (2011) began in 1809. It was introduced by Wilhelm Von Humboldt through the establishment of the University of Berlin. It placed emphasis on the fact that academics must persue research. Since then his model of a university began and continues to play a significant role in education and national development. Most importantly, it became an indispensable driver of nations' industrial and development processes (Altbatch, 2007). The Humbolt research university model became critical for academic and national economic development such that countries like Britain, Japan and the United States started adopting it

in the 19th and 20th centuries. Today, universities in Europe and America have leading research universities, with global models that are used as benchmarks by other countries such as China, Brazil and African states also seem to be following the same trend (Sidney, 2017).

1.3.1 Universities today

Primarily, the function of a university is to teach and impart knowledge to search for and discover truth through research (Okorosaye-Orabite, Paulley & Abraham, 2012). Therefore, the teaching and research mission of a university are central to its responsibility. Intrinsically, their role in a contemporary world is to train people to work effectively in their changing political, economic, social and technological environments (Altbatch, 2011). Considering that an important percentage of gross national product (GNP) for African countries and the globe goes to support its universities, this befits universities to engage in activities that will aid in country's socio-economic development without moving away from their teaching role and scholarly activities (Coker-Kolo & Darley, 2013). A lot is therefore expected from HEIs beyond teaching, learning and research and community engagement. Coker-Kolo & Darley (2013) observe that society, countries' economies and governments expect HEIs to engage in human resource development, research to develop new knowledge and make a contribution to economic and public policy through research.

It is through this inevitable changing role of universities that there is formidable change that has been influenced by outside forces (Brew, 2010). University funding has decreased and student numbers increased substantively leading to a mass education system. Universities are also faced with considerable competition for resources, increased government pressure and heightened public accountability and scrutiny.

In reaction to these outside pressures, collegiality culture in universities has transformed to managerialism (Archer, 2008). This transformation has led to loss of autonomy by individual

universities and academics hence affecting their professional identity. Historically, academics and universities were regarded as a community of scholars with potential influence on policy makers but because of managerialism, this has changed.

Overall these changes have bearing on how research and teaching are perceived and how they relate to one another. In today's university, research seems to be a top priority inside and outside universities (Annala & Makinen, 2011) and more and more academics are expected to increase the university research output. To a large extent, these distinctive priorities have further separated research and teaching which is contrary to the Humboldtian ideal of research and teaching unity in universities.

1.3.2 Background to research and teaching unity.

International discourse on the research and teaching relationship can be traced back to Wilhem Von Humboldt's (1767–1835) vision of the University of Berlin in the 19th century. (Annala & Makinen, 2011). According to him, teaching and research are inseparable work of an individual scholar and university. They exist to advance knowledge by critical investigation and not just to teach. Teaching should be based on the objective search for truth and students should be involved in this search. In this sense, a university is defined by the student and academic community that are engaged in a shared task of knowledge generation.

Informed by the Humboldtian ideal, there have been various studies addressing the nonexistence of linkages between research and teaching. According to Hattie and Marsh (1996), the widely held view that research and teaching are inseparable is a long-term fable because research and teaching are independent of each other (Hattie & Marsh, 1996).

Other non-believers see the integration of teaching and research as a possible source of conflict with lecturers being forced to focus on one of their roles while partially neglecting

the other. The two university activities compete for time and resources and result in teaching probably being neglected because of 'better' incentives given to research and publications (Marsh & Hattie, 2002). Furthermore, universities' internal processes unintentionally place research and teaching on competing grounds or even making one more important than the other. For example McLean and Barker (2004) have ascertained that universities see research as deserving a higher status and reward than teaching.

According to Neal (2009), in most universities, scholarly success is measured by research output. The paradox in this is that lecturers who are more inclined to teaching may not want to take part in research and scholarly activities, while those who want to identify with research may be so engrossed in their research that they are reluctant to teach. The 'research excellence' expectation therefore, to some degree, draws academics from practical application.

Although there are these diverging views about research and teaching relationship, there is an argument that the two have a positive relationship because, teachers who see themselves as researchers are more likely master their discipline or be good teachers (Hattie & Marsh, 1996). Therefore academics/lecturers continuously stress the positive relationship that can be derived from linking research with teaching (Brew, 2003; Brew & Boud, 1995). They emphasise that the close linkages of research is apparent for the enhancement of the quality of teaching and the student learning experience. Enhancing the link between research and teaching by encouraging a positive relationship is a desirable aim of universities (Hattie and Marsh, 1996). Zetter (2002) highlights that in a research-intensive/research-led institution, the linkage is beneficial to teaching practice and to the enhancement of student experiences.

1.3.3 Background of the university under study

The University of Botswana (UB) is not an exception to the changing roles of universities today nor is it an exception to the effects posed by debates around teaching and research unity. It is the first autonomous university in Botswana and since its inception in 1982, it focused on 'education of educators' (Agachi, 2019, Bailey, Cloete, & Pillay, 2009). The university operates with eight faculties; the Faculty of Business, Faculty of Education, Faculty of Engineering and Technology, Faculty of Health Sciences, Faculty of Humanities, Faculty of Science, Faculty of Medicine and Faculty of Social Sciences. The university has been offering undergraduate programmes and introduced its first postgraduate programmes in the late 1990s. At the moment, post graduate programmes are offered across all faculties. The university also has a number of research centres and centres of study.

Since its inception, the university focused primarily on teaching as it was a career-oriented university, providing broad undergraduate instruction with emphasis placed on dissemination of knowledge to the student. Therefore, for UB to be a research-intensive university, it had to intensely improve research uptake and emphasise on research that contributes to national development. To the nation, it became a key institution for national innovation systems, enhancing competitiveness in the global economy. The university's transformation was therefore influenced by both external and internal pressures which according to Taylor (2007; 2008), form the basis for the relationship between research and teaching.

Schmidt & Langberg (2007) state that the external pressures are more to do with competition for higher education (HE), limited resources and the demand for HEs to respond to the interests of the stakeholders. The internal pressure results from the changes that have taken place in HE landscape. For example society and student expectations as well as funder expectations have a bearing on the internal operations of a university.

1.3.3.1 External drivers for transformation

The university, being a university that was seen as contributing to national development, was bound to respond to national and stakeholder expectations. Firstly, there was a concerted systematic effort by Botswana to improve research and innovation capabilities which commenced in 1998 through the approval by the national assembly of the Science and Technology Policy (Government of Botswana, 1998). This policy was actualised through National Development Plans; (NDP 10), 2009 – 2015 and (NDP 11), 2015 – 2021. In actualising these plans, the Botswana Human Resource Development Council (HRDC) was established as a high level single support agency to the Ministry of Education and Skills Development (MoESD) to act on behalf of the Government with regards to providing a holistic approach to human resource development that focuses on the country's strategic issues and is also sustainable.

The HRDC is charged with the responsibility of providing policy advice on matters of notational human resource development. It is also responsible for the coordination promotion and implementation of this policy. It has, since its inception, called for HEIs to produce students with skills that are needed for Botswana's labour market. This call was motivated by concerns in the Botswana labour market that there is a mismatch of skills that come from tertiary education and what the labour market really needs. This outside pressure has, over time, justified the changing role of tertiary education in Botswana. There is a demand for quality, efficiency, effectiveness and responsiveness to the needs of industry. These expectations speak directly to the contribution of higher education to the knowledge society where all students have to be researchers. The belief is that when students are engaged in research, they will gain training that will enable them to cope with the challenges and advancements in their societies (Scott, 2002). Based on this background, educators at

university level have found it imperative to provide education that is embedded in research to fulfil their educational role in a knowledge-based economy.

Thirdly, economic pressures forced the government to restrict the level of support for the university while still requiring it to accept increasing numbers of students (Studman & Tsheko, 2007). This change meant that the university now had to find ways of raising funds. It now depended on the massification and commercialisation of higher education. Massification and commercialisation of higher education meant that student enrolment increased. This position challenged the university to address more vigorously the issue of quality, efficiency and effectiveness and, most importantly, the effort to integrate teaching and research. Tabulawa (2007) notes that because massification involves heterogeneity of students, it also brought in the issue of complexities of student expectations. They demand education and lifelong learning hence the need for more diverse innovative curriculum. This increasing level of student expectations and quality assurance has forced lecturers to come up with ways of linking research with teaching in course delivery and research activities (Taylor, 2008).

1.3.3.2 Internal drivers for the transformation

Internally, the university recognised that research forms part of the intellectual environment and also provides gives an opportunity to integrate research experiences and skills into the curriculum (University Research Strategy; 2008). It also saw the need to have a high proportion of research-active staff so as to provide a distinctive environment in which to advance approaches for RLT and learning (Studman & Tsheko, 2007).

The university has, therefore, shifted from only training skilled personnel for the civil service, to focusing on its role in national development. The notion of knowledge society and university contribution to the country's national development agenda are stated and

operationalised in the university long-term strategic plan. It also mentions the production of high level skills, research and innovations. Nevertheless, the university research activity has not been satisfactory despite the development of a research policy in 2002. Bailey et al, (2009) note that it did not have a 'strong research culture' because of its status as a teaching university. Bailey et al (2009) also observes that the university has not been doing well to attract international ranking agencies' eye in critical areas of teaching and research, citations and staff student outlook. The university is therefore in the process of enhancing research capacity and engage students in a research culture to make them experience learning as a liberating and joyful experience.

The result of the developments posed by internal and external pressures discussed has forced the university to strategically position itself on a national and international landscape. It has focused on research for strategic positioning and also for diversification of funding sources through research and attracting students, especially international students. Moreover it is now focusing on increasing postgraduate graduates and involving undergraduates in research activities to inculcate a culture of research.

1.3.3.3 The university response to external and internal environmental pressures

Mayson & Schapper (2012) observed that universities in similar situations adjust their strategies and policies to optimise their position within the ranking system and respond to the national and international landscape. The university understudy indeed given the situation saw the need to intensify its research agenda by developing a research policy in 2002 whose main goal was;

> '….to develop a research culture that encourages and rewards excellence in research, innovation and development, builds research capacity, generates resources, builds knowledge which enhances teaching and outreach activities and leads the university

> towards the realisation of its Vision and Mission'. (University of Botswana research policy, p.3)

Moreover, the policy further acknowledged the need to link research with teaching and 'encourages research-teaching nexus' (University of Botswana Research Policy p.3). The policy was followed by the development of a research strategy whose aim was to broaden and further encourage participation of research by most academics at the university through increasing the number of graduate students at the doctoral level and through more graduate programmes (UB Research strategy, 2008).

With regard to teaching and research relationship, it seeks to improve on ways of integrating research with teaching (UB research strategy, 2008) by promoting RLT.

It also sought to enrich curriculum by promoting inquiry-based attitudes among students through the Learning and Teaching Policy. The Learning and Teaching Policy also

> "encourages and supports RLT that incorporates up-to-date research perspectives, processes and findings into the curriculum. In supporting RLT, the policy is based on the principle of 'intentional learning', which puts an emphasis on pedagogical strategies that encourage active learning, the achievement of learning outcomes and the development of self-directed independent learners who have learned how to learn" (UB Learning and Teaching Policy, 2008).

However, the lack of clarity on how RLT should look like and how it should be actualised is a challenge in HE (Zarmoski, 2002) and UB is not an exception to this. It is against this context that this study seeks to explore the conceptualisation, implementation and management of RLT in a teaching university in Botswana.

1.4 Conceptual overview and operational definitions

In this section I define the critical concepts that emerged from the literature. These terms were critical in facilitating understanding of issues as they emerged from the study.

1.4.1 Research-led teaching (RLT)

A number of terms are used and often used interchangeably to describe RLT. Jenkins et al, (2007) for example describe it as 'research-teaching relationship' and Elton (2001) termed it as the 'research-teaching nexus' while Healey and Jenkins (2005) use 'inquiry-based learning' to refer to RLT. In this study, RLT is used to refer to teaching that reflects learning that involves students in research either as knowledge producers or as knowledge consumers. It was critical in helping understand the different ways in which RLT is conceptualised and actualised in a teaching university setting.

1.4.2 Implementation

Implementation is the execution of plans or strategies to achieve long-term goals of an institution. The concept focused the study in acquiring deep understanding on how RLT is actualised by different lecturers from different disciplines. This understanding has assisted in revealing that, RLT can be achieved by putting together structures, systems, culture, resources and people.

1.4.2.1 Structures and systems

Structures and systems speak to the way different parts of the institution are linked together. These parts aid in the execution of the university business. The structures are decision-making bodies for the implementation of RLT. Systems are the policies and policy guidelines that direct the implementation and management of RLT.

1.4.2.2 Institutional culture

Culture refers to the different practices of an organisation or institution. In this study I have used the different practices in teaching and research to understand RLT implementation and management in the Faculty of Humanities. These practices showed a variety of ways in which the faculty responds to the different needs and expectations of the external and internal stakeholders. It also demonstrates its ideological values in shaping the implementation and management of RLT.

1.4.3 Management

Management are the control mechanisms that are put in place to monitor and evaluate the implementation of RLT strategies and plans. The term is important as it demonstrates the institution's commitment to a project, strategies or an activity. For example, According to Taylor (2007) implementation of RLT management can either be active or passive. Passive management leaves everything to individual lecturers to implement RLT while active management ensures planning, implementation and evaluation of the activities related to RLT.

1.5 Theoretical overview

Considering the rapid changes in the HEIs land scape, RLT being context-driven (Brew, 2010) in nature and changes in stakeholder expectations, this study adopted a multi-theoretical approach that enabled me to come up with new ways of understanding RLT conceptions, implementation and management. Using the incompatibility and compatibility model of research and teaching (Robert, 2007), Lewin's change management model, Taylor's model for the research-teaching nexus and the teaching models, the study uses concepts to organise the research.

1.5.1 The relationship between research and teaching

The compatibility and incompatibility theory of research and teaching (Mclean & Barker, 2004) was used as a lens to understand the diversity that exists in the conceptualisation and, ultimately, the actualisation of RLT. Robert (2007) and Mclean & Barker, (2004) compatibility and incompatibility theories of research and teaching, Hattie and Marsh (1996), Marsh and Hattie (2002) and Troweler and Wareham's (2007) model for explaining the negative, zero and positive research-teaching relationship aided as a frame for the understanding of lecturers' ideological stance in as far as RLT is concerned. In addition Marsh and Hattie (2002) further use their Scarcity Model, the differentiated model and the divergent reward to explain why the relationship must be negative.

1.5.2 Implementation and management theoretical grounds

This thesis sought to understand how RLT is actualised and managed; therefore, it was imperative to identify a lens for understanding the implementation and management practices. Lewin's change management theory facilitated in giving a general understanding of managing change in complex university environments that are transiting from being teaching-led to research-led. Additionally, Taylor's (2007), model for the management of the research-teaching nexus and the 7S McKinsey management model complemented each other in coming up with a holistic framework for understanding the implementation and management of RLT as indicated in Chapter 3.

1.6 Problem statement

Although research and teaching have often been regarded as complementary in enhancing the quality of student learning, pressures inside and outside universities threaten the unity

between the two activities. As a result there is still no coherent model to implement and manage RLT in universities (Annala & Makinen, 2011).

Issues have been identified that make this unity difficult. These issues are mostly at disciplinary level, institutional level and individual level. At an individual level, academics perceived research and teaching to be competing for time and resources. It is from this perception that academics find it difficult to maintain a balance between the two academic roles.

Even though the value of linking research and teaching is recognised globally, academic perception of teaching being regarded as of lower rank compared to research (Chalmers, 2011) and this leads to investment of their time on research.

Studies show that academics share the same sentiments that their careers are advanced by research more than teaching; hence striving for teaching excellence may hinder the chance of promotion (Young, 2006). Consequently developing teaching excellence among academics becomes problematic because of its lower status in academic work.

Another pressure that arises as a result of societal expectation is that there is still considerable conflict between academic and professional aspects of learning in academic disciplines. There is tension about education as a discipline and 'education for working' which are critical in achieving RLT (Parietal, 2014). 'Education about a discipline' denotes a form of education that is largely scientific and research focused while 'education for working' portrays more practical elements. From this conflict, a question on whether teaching should be research-led or market-led becomes inevitable.

Issues that make research-teaching integration possible or impossible have been identified. For example, it is clear that lecturer's research endeavors and teaching responsibilities do not

automatically overlap or inform each other (Schapper & Mayson, 2010). There are also claims that research seems to be valued over teaching. Additionally the workloads of academics and changing higher education expectations make it difficult for them to focus on both areas (Schapper & Mayson, 2010).

1.7 Purpose statement

In line with the background above, this research explores RLT understandings of lecturers and students and establishes how it is actualised and managed at individual and faculty level.

The study also explores academics/ lecturers beliefs on RLT; identify existing gaps between policy and practice, the different perspectives of RLT and challenges among stakeholders in realisation of its goals. By so doing, the research adds knowledge on implementing and managing RLT with the hope of developing a holistic approach to managing RLT in a university setup to ensure continuous improvement of practice. This purpose was achieved through answering the research question that follows.

1.8 Research question

The main question of the study is:

How might universities transiting from teaching to research-led institutions conceptualise, implement and manage RLT.

1.8.1 Sub-questions

The above over-arching question was broken down into a number of sub-questions;

1. What convergences and divergences exist in the way RLT is understood by various groups and individuals at UB Faculty of Humanities?

2. How is RLT valued by staff and students in the university, particularly in relation to enhancing the quality of teaching and learning?
3. In what ways is the idea of RLT integrated into university curriculum?
4. What management implications and challenges are associated with the implementation of RLT in universities and how are these interrogated?

1.9 Overview of methodological approaches

The study adopted a multi-methodological approach for purposes of understanding the complexity of the subject under investigation. A concurrent mixed-method approach using both quantitative and qualitative research approaches to collect data was adopted. The quantitative data was nested into the qualitative approach in order to corroborate the results from the students' focused group discussions (FGD) lecturers' interviews and documents review.

1.10 Research site

The University of Botswana has three campuses in some parts of Botswana; one in the capital city Gaborone, one in Maun and one in Francistown. The study was conducted in the main campus of the university in Gaborone which consists of faculties of humanities, business, science, medicine and social sciences as shown on figure 1.1. The focus of the study was on the faculty of humanities, which places emphasis on studies that focus on deepening understanding on what it means to be human. The departments in the faculty include, languages (French, African languages and English respectively), Media studies, History and Library and Information services.

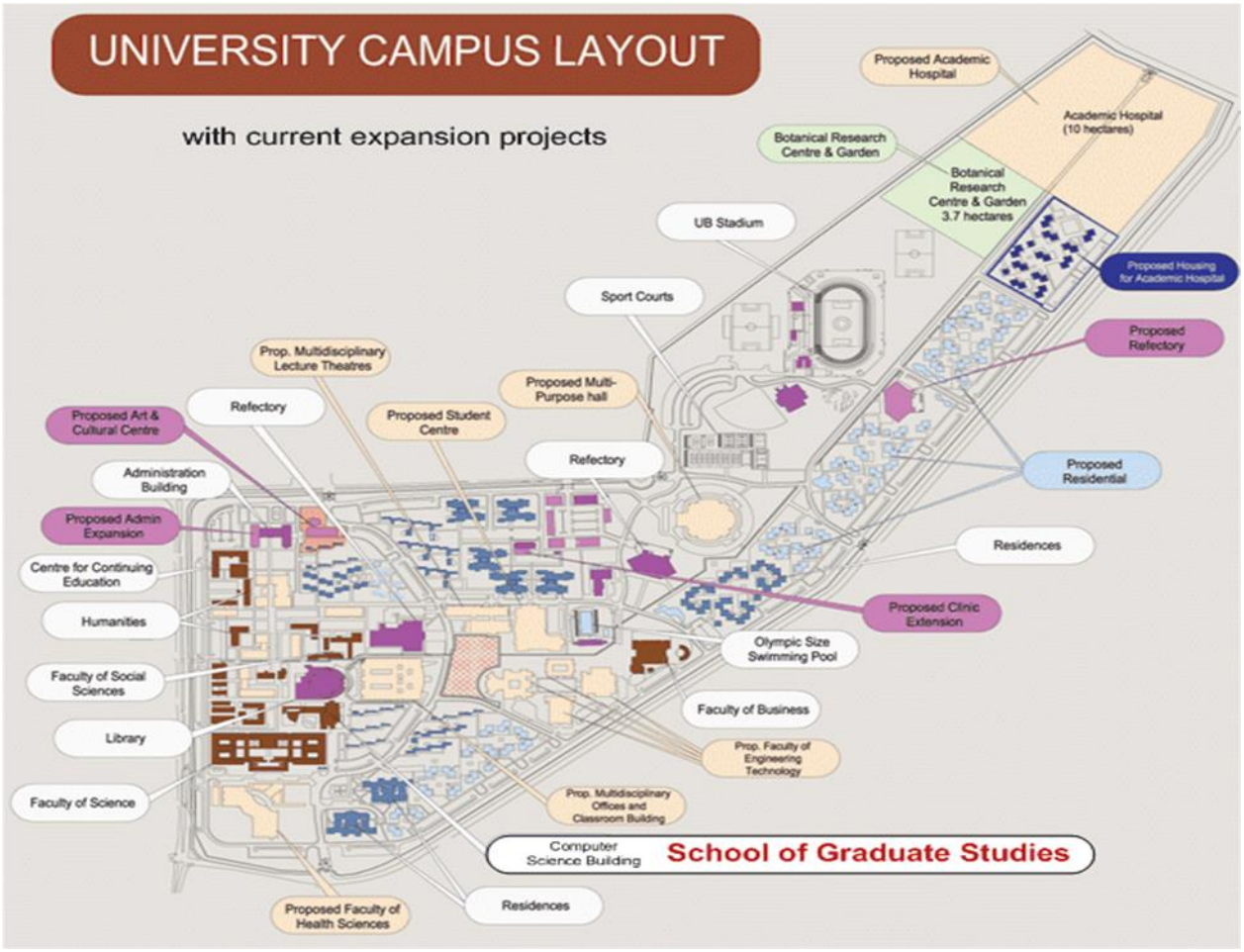


Figure 1.1. Layout of the University of Botswana.

1.11 Significance of research

There is a considerable national and international interest in strengthening the unity between teaching and research in undergraduate experience through inquiry-based pedagogies (Petrulis & Levy, 2012; Jenkins & Healey, & Zetter 2007) hence the significance of this study. This unity is believed to have a significant contribution in preparing students for the world of work. Though there is this belief, there are debates that universities are failing their students in as far as preparing them for challenges of the professional world. This study therefore moves beyond the debates on the unity to proposing ways in which it can be actualized to benefit students' learning and universities. Dimensions explaining the conceptualization of RLT from the context of universities in developed states have been put

forward by Healey (2005). This study makes a contribution to these dimensions by providing an understanding from the context of a teaching university in a developing country. Additionally its contribution to theory is seen in the proposal of a model that seeks to explain how teaching universities in developing countries can effectively implement and manage RLT. The study is relevant to all academic staff from different disciplinary backgrounds and university policy makers as it seeks to avail different strategies of maintaining effective implementation and management of RLT in universities.

Moreover, universities across the globe are under pressure to showcase their contribution to society in terms of preparing students for employment and how they make contributions to industry and business. In terms of practice, this study informs curriculum development, possible development of performance measures for teaching and learning, teaching policies in the University of Botswana and other similar universities. Additionally, studies in RLT management are limited (Taylor, 2007), hence the research seeks to unveil a theoretical foundation for the management of RLT at faculty and institutional level.

1.12 Intended contribution

The study will contribute to methodology, theory and practice. In terms of methodology, it presents another way of investigating the research-teaching nexus/research-teaching link. While Taylor (2007) has adopted interviews with academic staff to investigate a similar study, this study has adopted multiple methodologies with both academics and students for purposes of corroborating the findings. There is also a gap in the involvement of students in the RLT discourse. In investigating students' understanding and experiences this study seeks to close this gap.

In terms of theoretical contribution, the study makes a contribution to the different understandings of RLT given that these variations are context-driven. It shows how the

university's external environment, university history, culture and beliefs have influenced the way RLT is conceptualised by students and lecturers. Beyond the understanding, I will demonstrate how these understandings can influence the implementation and management practices in a university. This is done by mapping a model that shows how RLT can be effectively implemented and managed in a teaching university, an aspect that is missing in the research-teaching link/nexus discourse.

The study further makes a contribution to practice and policy. In terms of practice, it explores the different ways in which RLT is actualised by lecturers and students. For policy, it highlights the critical aspects and principles that need to be considered during the development of RLT frameworks particularly for universities that are transitioning from being teaching-led to research - led.

1.13 Preview of the rest of the thesis report

The thesis is divided into seven chapters as follows:

Chapter 1 provides background information to the topic and key words underpinning this study. It explains in detail the background and how it is related to theoretical and methodological choices made in this study. Most importantly it captures an explanation of the importance of my study to higher education and my intended contribution to discourse on RLT its implementation and management.

Chapter 2 reviews the literature on conceptualising research-led teaching in higher education and seeks to explore the different ways in which RLT is understood. It further explores the benefits enjoyed as a result of its implementation by the institutions, faculties and individuals. The chapter reveals that there are contextual factors contributing to the way RLT is understood. These contextual factors include the concepts of research and teaching and the

relationship between research and teaching. The chapter describes different ways of defining RLT. The chapter concludes by highlighting the challenges and opportunities in implementing and managing RLT.

Chapter 3 presents models and theories that focus on the implementation and management aspect of RLT. It argues that expectations posed by the external environment make it necessary for HEIs to employ a corporate management model. It further presents empirical evidence for the conceptualisation and management of RLT, identifies gaps and demonstrates how my study intends to close them.

Chapter 4 discusses and defends my methodological choices and research design. It outlines research ethical issues and how the data were collected and analysed.

Chapter 5 is a presentation and analysis of the findings from the lecturers' interviews and the document review.

Chapter 6 is a presentation and analysis of findings from students focused group discussions and surveys.

Chapter 7 discusses the findings and analysis from Chapters 5 and 6 and draws conclusions about RLT in the faculty. It further discusses the implications of the study to policy, theory and practice.

1.14 Chapter summary

This chapter has provided a background to the study and defined some of the key concepts that aided in organising the thesis. Most importantly, it puts forward an argument that, while RLT is an important activity that claims to demonstrate HE contribution to a knowledge-based economy, a number of factors threaten this intent. These factors include, among others, the incentives for research and teaching, competing time and resources for the

activities and the complexity in the conceptualisation, implementation and management of RLT. The conceptualisation is context driven as academic staff and HE managers have different views on what it is and how it is actualised. These diverging views make it difficult for HEIs to manage it. Therefore this research contributes to the body of knowledge other views on RLT conception, actualisation and management in the context of a teaching university in a developing country. To further justify the gaps that this chapter has put forward, the next chapter presents evidence on the discourse on key concepts in understanding the conceptualization of RLT.

CHAPTER 2: RESEARCH-LED TEACHING CONCEPTUALISATION IN A UNIVERSITY SETTING

> *'Research activity can and does serve as an important mode of teaching and a valuable means of educating the great mass of students as well as the elite performers, for the inquiring society which we are rapidly moving.'*
>
> *Clark, 1997, p. 243*
>
> *'How can teaching be led by research when we all have demands on our time, increasingly limited opportunity for research, student groups that are expanding in size and often a widening portfolio of modules to teach?'*
>
> *Drummond, 2012, p. 67*

2.1 Introduction

This chapter defines key concepts that are commonly used in the research-teaching relationship discourse. It is heavily informed by Clark's (1997) and Dummond's (2012) contrasting arguments, as quoted above. These arguments form the basis for extensive debate in the relationship between research and teaching in higher education. Of interest in this debate is the movement from showing how research productivity enhances teaching quality (Hattie & Marsh, 1996), to exploring how research and teaching are related. This shift is also seen in the effort made by HEIs to be research-led in their teaching (Healey, 2005; Van der Rijst & Visser-Wijnveen, 2011; Brew, 2001). This drive is based on the general assumption that the two benefit each other. It is, however, astonishing that not many institutions have put in place specific policies that monitor or develop and maximise the benefits of bringing the two together (Jenkins et al, 2003). The root cause of this shortcoming can be located in a number of factors including the complexity of the research-teaching link, lecturer beliefs of

what research is and what teaching is (Brew, 2003), how the two are related and the different typologies and understandings of RLT.

Based on the given background, this chapter argues that there is no single way of integrating research with teaching. The plurality in the practice of research teaching integration comes from the different ways in which the concepts that underpin RLT are understood and valued by different parties. It is therefore significant to understand the concepts that seem to arise frequently when talking about RLT. This is important in developing descriptions of indicators that assist in understanding the concepts and their aspects.

I present this chapter by discussing four sections: the factors that influence various conceptions of RLT, the definition of RLT, the benefits of RLT and the challenges faced in implementing RLT.

2.2 Factors contributing to various understandings of RLT

RLT can mean many things to different people depending on the institutional context. The context of a university is composed of a number of factors (Brew, 2003). In this research, I call them the contextual factors determining the ways in which RLT is understood. These factors contribute to the way things happen in a given setting. Table 2.1 shows some of these contextual factors and their various elements.

Table 2.1: Contextual factors influencing RLT conceptions (Own)

Contextual Factor	Elements
Research	Types of research Level of research Academic discipline
Teaching	Mode of delivery Learning philosophy Academic discipline
Lecturer	Teaching role Scholarship role Academic discipline
Student	Level of ability Level of study
University	Type of university Strategy
National	National culture Politics

The ways in which scholarship, research and knowledge is understood have varying consequences on how research and teaching are integrated (Brew, 2003). Lecturers' beliefs about the teaching-research relationship may be mediated by their general beliefs about what teaching and research are. This notion therefore challenges the assumption that there is a universal definition of RLT and the relationship between research and teaching in higher education. It also suggests diversity in the roles played by lecturers and students in defining and actualising RLT in a university.

In Table 2.1, the university context implies that there are various universities with different histories and cultures that influence their strategy for research and teaching (Taylor, 2007; Brew, 2003). For instance, research and teaching universities will have different conceptions and implementation strategies for RLT for the following reasons. Teaching universities are career-oriented, providing undergraduate instruction by placing more emphasis on

dissemination of knowledge as was the case for medieval universities (Fram and Lau 1996). Research universities, which are sometimes referred to as research-intensive or research-focused universities, are key institutions for national innovation systems, enhancing competitiveness in the global economy. Dill and van Vught (2010) cited in Balán (2012) and Altbach (2007), observed that these universities produce scientific and technical knowledge, educate new generations of researchers and academics, train highly skilled personnel for industry, government and society at large. Moreover, Altbach (2007) perceives them to be a vehicle for reducing the distance between academia and industry and also between basic research and applied research.

The national context, suggests that government policies and societal expectations will have an impact on university teaching and research strategies. Schapper & Mayson (2010) argue that national policies have, in fact, catalysed the existence of the tension between research and teaching. It is, therefore, appropriate to claim that the research-teaching link is, to a large extent, facilitated by external conditions that create an unproductive environment for this link. From this line of argument, I tie the notion of national context to Brown's (2005) observation that there has been a shift toward strong research orientation in European and developing countries' universities in order to support national ambitions.

In a nutshell, these factors underwrite the divergent relationship that exists between teaching and research and how the two are understood in higher education (Brew, 2003; Healey, 2005; Robertson, 2007).

The varying definitions can also be influenced by lecturers' and students' beliefs**.** Brew (2003) reasons that the different 'beliefs' or ideologies held by lecturers about what research and teaching are, influence how RLT is understood implemented and managed. In this research, 'belief' is the overall thoughts and conceptions while 'conception is a belief

concerning a specific concept' (Visser-Wijnveen et al, 2009, p.674). In this research, beliefs are considered important factors that contribute to lecturers' actions because their actions are based on some form of theory or ideology they hold about research–led teaching.

In the next section, I will define concepts that constantly emerge when trying to cross-examine research-teaching integration: research-teaching relationship, research-led teaching, research and teaching.

2.2.1 'Research' and 'teaching' conceptions

Different ideas about what constitutes 'research' and 'teaching' may have consequences on how the two activities are brought together (Brew, 2003). These terms are often used in a university setting to mean different things depending on the context of a university, faculty or academic discipline. The diverse meanings have significant implications on the way an institution, a department and an individual lecturer conceptualise RLT.

2.2.1.1 Conception of 'research'

Literature on the conceptualisation of research has shown that the way the term is defined differs significantly among scholars and in everyday life. Brew (2001), for example, describes it as a 'multifaceted phenomenon' while Griffiths (2004) sees it as a phenomenon with no single accepted meaning. Given these views, it is not surprising that studies that sought to understand how academics and students in research–led and teaching-led universities conceptualise 'research' surfaced (e.g. Bills, 2004; Kiley & Mullins, 2005; Kyvik, 2015; Meyer et al, 2005; Prosser et al, 2008; Visser-Wijnveen, et.al 2009). The main objective of these studies was to come up with a foundation for explaining the various ways in which the research teaching nexus unfolds in an HE setting.

Visser-Wijnveen et al. (2009) show in their study that there are significant differences in how academics or lecturers conceptualise knowledge and research. Similarly Kyvik (2015), in a survey on Norway university lecturers, found that a majority of staff in humanities characterised their research as basic, while a minority defined it as mainly applied.

Akerlind (2008) has identified key themes from various studies on the conceptualisation of research. These include gathering information and collecting data from the field, constructing knowledge and achieving a deep understanding of concepts or theories. Similarly, Meyer et al (2005) found eight categories of research conception among students, namely:

1. Research can be seen as the gathering of information with the intention of finding solutions to a problem.
2. Research is the search for the truth.
3. Research is about an investigation and discovery that seeks to make a contribution to existing knowledge.
4. Research is about analytical and systematic inquiry that serves a particular purpose.
5. Research is a never ending endeavour that determines new knowledge from old and recent facts.
6. Research is the re-exploration of present knowledge.
7. Research is about reviewing old issues to come up with new understandings or assumptions or it is a check for the validity of old ones.
8. Research is problem-based in that it identifies a problem, examines it and come up with solutions to the problem (Meyer et al, 2005).

2.2.1.2 Conception of ‘teaching’

Several studies on teachers’ views about teaching have uncovered a variety of beliefs about it (Samuelowicz & Bain 2001). These studies have revealed two styles of teaching; teacher-centered/content-oriented/information transmission and student-centered (Belo et al, 2014; Visser-Wijnveen et al, 2009). What is common in these studies is the view that teaching ranges from acquiring knowledge, to acquiring knowledge and skills for the development of concepts. These conceptions therefore suggest that teaching can either be teacher-focused or student-focused. For example, teaching as the ‘acquisition of knowledge’ is believed to be teacher-focused while the rest of the conceptions portray teaching that is student-focused with the involvement of student activities and discussions.

Teacher-centred conception

Brown (2005) defines a teacher–centered activity as teaching that is mainly concerned with dissemination of information by the lecturer to the extent that students are just receivers of knowledge. In this teaching model, students assume surface methodologies to learning (Belo et al, 2014); that is, students at this point are regarded as passive recipients of disciplinary content. For a teacher-centred approach, students focus on mastering the content in the material for purposes of writing exams. Consequently, learning on the part of the learner is achieved through listening and reading. The learning outcomes are then assessed through the use of objectively scored tests i.e. students take tests.

Student-centred conception

The student-centred is grounded on the constructivist philosophy that views learning as socially constructed. Constructivist teachers believe that students benefit more from learning when they actively participate in the practice of constructing meaning and knowledge (Cubukcu, 2012). In student-centred situations, students are in charge of their own learning.

They interact with the phenomena, concepts in literature and ideas presented by their lecturers / teachers (Brew & Boud, 1995), through deep learning approaches (Healey, 2005). Deep learning is perceived as an effective way of learning in higher education as it allows students to be involved in active and inquiry-based learning (Biggs, 2003; Healey, 2005). The active involvement of students, in a way, helps them to construct knowledge. The two positions of teaching can further be explained in two settings: the inquiry-based classroom vs the traditional classroom.

Inquiry-based learning

Incorporating research in undergraduate teaching is underpinned by the concept of inquiry-based learning (IBL). This kind of learning is believed to positive effects advancing the connection between research and teaching (Sproken-Smith & Walter, 2010). IBL is a process of teaching that emphasises activating students by involving them in knowledge creation, project-based and problem-solving, learning.

There is significant evidence from the literature pointing to various concepts that try to define IBL. For example, concepts like student active learning, along with problem-based learning, case-based learning and project-based learning are widely used to define IBL. This is indicative of the fact that IBL is inclusive of a range of activities.

Cheesman (2015) has summarised the distinction between IBL and the traditional classroom as shown in Table 2.2.

Table 2.2: Inquiry-based classroom vs traditional classroom (Cheesman, 2015)

	Traditional classroom	Inquiry-based classroom
Characteristics	Teacher-centred Passive learner Emphasis on right answers Rhetoric conclusions Lots of memorisation Students are empty vessels that need to be filled Students work as individuals	Student-centred Active learner Alternative hypotheses are elicited Conceptual and process-oriented Students have prior experiences that can be built upon Group work teaching is the norm
Implications for teaching and learning	Curriculum begins with the parts of the whole, emphasises basic skills. Strict adherence to a fixed curriculum is highly valued. Materials are primarily textbooks and workbooks. Learning is based on repetition. Teachers disseminate information to students. Teacher's role is directive, rooted in authority. Assessment is through testing corrects answers. Knowledge is seen as inert. Students work primarily alone.	Material emphasises big concepts, beginning with the whole and expanding to include the parts. Pursuit of student questions and interests is valued. Materials include primary sources of material and manipulative materials. Learning is interactive, building on what the student already knows. Teachers have a dialogue with the students making them create their own knowledge. Teacher's role is interactive, rooted in negotiation. Assessment includes student works, observations, and points of view as well as tests. Process is an important product. Knowledge is seen as dynamic, ever-changing with our experiences. Students work primarily in groups.

2.2.2 Research and teaching relationship

To understand the relationship between research and teaching, one need to be mindful of the fact that it is context driven. This observation makes its understanding complicated and complex. Its conception is dependent on the context of a university and the academic disciplinary space (Brew, 2006; Schapper & Mayson, 2010). Both theoretical studies (Badley, 2002; Brew, 2003; Hattie & Marsh, 1996) and empirical studies (Robertson, 2007; Zamorski, 2002) have been done in order to understand the research and teaching link. In these studies, authors use terms such as, 'teaching-research nexus', 'research-based teaching,'

or RLT, to explain how research and teaching are related. These studies also argue for a zero, negative and positive relationship between research and teaching. The terms alluded to are also used by different authors to describe the different ways in which the linkages between research and teaching can happen.

It is evident that the diversity in how the research teaching link is conceptualised makes it a complex phenomenon. In dealing with this complexity, Trowler and Wareham (2007) have come up with a model that seeks to give typologies of the relationships. This model was a development from Coate et al. (2001) who identified a range of relationships, including, a positive, 'a negative and an independent relationship'. The model added two additional mixed relationships. This model suggests that teaching can positively influence research and research can negatively influence teaching and the other way round. Table 2.3 shows the different types of relationships alluded to.

Table 2.3: Typology of the relationship between research and teaching (Elken &Wollscheid, 2016)

Integrated relationship (1) Research and teaching are not distinct; considerable overlap (if not identical)	
Positive relationship (2)	
Teaching has a positive influence on research	Research has a positive influence on teaching
Independent relationship (3) Research and teaching are independent of each other (neutral relationship)	
Negative relationship (4)	
Research has a negative impact on teaching	Teaching has a negative impact on research
Teaching positively influences research; research negatively influences teaching (5)	
Teaching negatively influences research; research positively influences teaching (6)	

2.2.2.1 Integrated relationship

The integrated relationship is born from the view that research and teaching are actually the same activity complementing one another such that students and lecturers benefit from the synergies achieved.

2.2.2.2 Negative relationship

According to Marsh and Hattie (2002) and Hattie and Marsh, (1996) the two activities can disadvantage each other because of a lack of adequate time for both activities to be performed. As a result, teaching may be neglected when lecturers are engaged with their research and publications (Marsh & Hattie, 2002). Furthermore, universities' internal processes unintentionally place research and teaching on competing grounds or even make one more important than the other. For example, lecturers' performance evaluation criteria, funding and time allocated to teaching and research perpetuate the research teaching divide (Brew, 2006; Jenkins et al, 2007). McLean and Barker (2004) ascertain that universities see research as deserving of a higher status and reward than teaching. Similarly, Neale (2009) also shares the same sentiments by arguing that lecturers gain recognition and prestige from scholarly publications and attraction of research grants. This observation goes to show that scholarly success gives an institution a strong influence and recognition. It is therefore not surprising that a high research performance has become every lecturer's common goal (Chen, 2015). It is from this perspective that research and teaching can be seen to have a negative impact on one another. The above realities about the two activities of a university may lead to lecturers focusing more on research than teaching.

2.2.2.3 Independent or zero relationship

Some authors claim that research and teaching are independent of each other; they are not in any way related. They just happen to operate in the same place in a university setting (Hattie & Marsh, 1996; Neale, 2009). It is against this reasoning that there are some claims that, doing research does not make someone's teaching better (Hattie & Marsh, 1996). Similarly, Neale (2009) observes that the two activities are different enterprises. Teaching is about sharing or disseminating information and research is about the finding out this information.

2.2.2.4 Positive relationship

Moeung (2013), Brew (2003) and Jenkins (2004), Brew & Boud (1995) have argued for the existence of a positive relationship. For this reseason, there is a strong belief that teaching and research coexist in a university teaching and learning space. Bringing teaching and learning together is believed to be critical in improving the quality of teaching and learning in higher education.

The positive relationship also comes from an argument that 'teachers who conduct research and who are also good researchers are likely to be good teachers' (Elkom & Wollscheid, 2016). They are believed to be able to master, deeply, their discipline content (Hattie & Marsh, 1996) thus making them good teachers. From the student side, Healey (2005) recognises that students benefit more from this linkage when they are actively engaged in research. The engagement contributes to students' deep understanding of the subject, especially when they are involved with research. Though there are numerous positive effects that research has on teaching, Becker and Kennedy (2005) have observed that the effect of teaching on research is often overlooked.

Teaching impacts positively on research in a number of ways: 1) during teaching, one gains further understanding and this impacts positively on research; 2) teaching evokes the unearthing of new thoughts and initiates thinking around these thoughts; 3) teaching involves the preparation for class by engaging in literature search; 4) teaching sometimes involves availing data for an illustration during a lecture; 5) Teaching can lead to a lecturer finding out something that was discovered during a class discussion. These deliberations may lead to new ideas for further investigation (Becker & Kennedy, 2005).

Having presented these typologies, it can be argued that they form the basis for the varying ways in which the research teaching relations can be shaped in higher education. The shape and form of these relationships may differ according to academic discipline, institutional context, course level and subject matter (Elkem & Wollscheid, 2016). I also observe that the different typologies can be an indication that linkage can be analysed from a number of viewpoints and with diverse elements of analysis (Elkem & Wollscheid, 2016) including, students' year of study; academic discipline and a lecturer's career.

Overall, the contextual factors discussed show that RLT will and can appear in different forms. They also suggest that different lecturers will choose to understand and actualise these concepts from different dimensions, using various actions for implementation (Chen, 2015). It is through this thesis that I sought to understand RLT from the perspective of two units of analysis: the teaching and research relationship (staff as a unit of analysis) and the research and learning relationship (students as a unit of analysis) (Healey & Jenkins 2009; Elkem & Wollscheid, 2016).

2.3 What is research-led teaching?

RLT is difficult to define but the underlying principle is that it is the kind of teaching that engages students with scholarly research as a focus for learning and in so doing, promotes deep learning rather than surface learning (Smyth et al, 2016). It is a way of teaching in which students have the opportunity to interact with the most recent research findings and the conduct of research under supervision of their lecturers. Zamorski (2002) further explains that it can be viewed as teaching that is mostly informed by the lecturers' or other peoples' recent research. It can also be realised when pedagogy or content of the course emphasise research to be done with or by the students.

Griffiths (2004) defines RLT as a distinct method of teaching through which research-intensive universities define their teaching quality. This teaching is believed to be suitable for the most able students who will later be problem solvers in the world of work or societies they live in. It can be argued that Griffiths's definition marks a distinction between the existence of two types of universities: the research and the teaching university. It supports the argument made earlier that the type of university heavily contributes to how RLT is understood, implemented and managed. This notion is critical for this research that was conducted in a university that is transitioning from being teaching intensive to being a research intensive university.

RLT is therefore seen as two linked, but separate ideas. First, it is an approach of teaching that exposes students to the research findings and/or literature. In this approach, lecturers use their own research findings as lecture content or case study assignments. The main objective of this approach is to give students the opportunity to interact with the most up-to-date literature and research methodologies. In the second approach, students are engaged in the conduct of research. In this model students are made to experience the whole research

process of coming up with a problem, designing a research strategy, collecting data and writing a research report (Smyth et.al, 2016). It is worth noting that these definitions and models of RLT in university undergraduate and postgraduate levels seem to share essential factors that encourage IBL across all disciplines (Drummond, 2012).

There are many other dimensions of RLT, for example, a university is said to be research-led in its teaching when: teaching is done by staff active in research; there is evidence of research enhanced teaching and learning, research-aligned teaching and teaching-led research. These dimensions are typified by two RLT scenarios. Firstly, RLT occurs when students are taught by lecturers who are engaged in research around their discipline (Jenkins et al, 2007; McLean & Barker, 2004) and they share findings of their ongoing research. Secondly, it takes place when students are being taught by active researchers and ultimately become active learners and researchers themselves. The lecturers in this regard use their research and research of others to inform teaching.

The definition of RLT can further be examined through three models. Firstly, research-based teaching encourages a curriculum that places emphasis on activities that encourage students to search for information (inquiry-based activities) rather than the acquisition of content (Healey, 2005; Jenkins & Healey, 2005). The research experiences of lecturers in the process of inquiry are highly incorporated into student learning activities. In this context, RLT involves a two-way interaction between the student and the teacher. An example of research-based learning is when students engage in their own research, either in groups or as individuals (Drummond, 2012).

Secondly, RLT is said to exist when teaching is research-informed. This implies that teaching draws consciously on systematic research into the teaching and learning process (Jenkins & Healey, 2005). This method is also referred to as ‘pedagogical research’ (Boyer, 1990;

Drummond, 2012). It is worth noting that this approach contributes to effective teaching and continual improvement of practice. Hence this approach assumes that teaching is research-led if teaching practices are informed by research findings.

Lastly, research-led teaching environment can also be characterised by a research-oriented teaching method. This is a teaching method that has gained popularity in both teaching and research intensive universities (Ali & Abba, 2019). In this method, lecturers assume the role of an instructor by guiding students through the process of identifying problems and try to understand or solve them. Lecturers are therefore there to assist in the exploration that seeks to solve problems. In this case, the curriculum places more emphasis on understanding ways of producing knowledge (Jenkins & Healey, 2005). In this approach the lecturers' research experience is brought to bear in that teaching will demonstrate that research methodologies and theoretical approaches emerge from specific research in the past. Lecturers use their knowledge generation experiences to guide and support the student in the same process. Students' engagement in this process develops their critical thinking skills, evaluative skills and the ability to use 'use knowledge to slove problems' (Ali & Abbi, 2019, p 2).

Informed by these definitions and scenarios, it can be concluded that in implementing RLT students can either be consumers or producers of knowledge as shown on Figure 2.1.

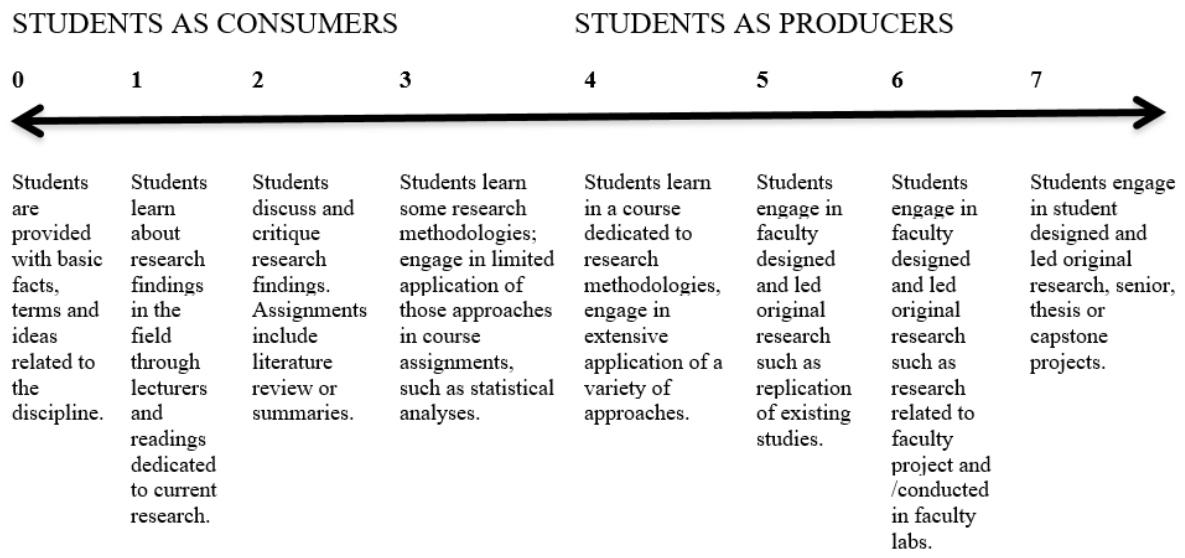


Figure 2.1 Continuum of undergraduate involvement with research (Elkem & Wollscheid, 2016)

2.4 Benefits of RLT

In reviewing literature around RLT and its implementation, I observed that RLT can have numerous benefits. For instance, student involvement in a research environment has been associated with the enhancement of student learning and and the development of work skills (Adedokun & Burgess, 2011). Similarly, implementing RLT in a university is said to be of great strength in an era where research excellence is valued by the market or the external environment in which the university operates. Therefore the benefits can be seen in the student and for the institution.

2.4.1 Benefits to the student

The benefits of RLT can be seen while a student is studying and later on when students start working (Brew, 2006; Brew, 2003; Jenkins et al, 2007). For example Robertson and Blackler (2006) have observed that RLT can have a significant bearing on the way students see their studies beyond understanding their discipline to career development. As such, Brew (2003)

argues that RLT is a method of teaching that can be used to initiate students into a community of researchers. It also enhances students' soft skills and enriches their skills for employment and lifelong learning. Valter and Akerlid (2010) have observed that skills such as observation, analytical and interpretive , discussion abilities, library search, presenting findings and ability to use generated knowledge in real life situations are valuable for students who go on to the world of work outside the field of education.

Engagement of students in RLT activities develops their capacity to learn independently and it is from this that Healey (2005) and Jenkins et al (2007) suggest that the RLT strategy impacts on the way students think of their post-study career options. For example, Allin (2011) has asserted that students who are involved in research projects during undergraduate are likely to proceed to do a post graduate qualification in their discipline. Likewise Cheesman (2015) has also confirmed this notion by arguing that undergraduate experience has a significant relationship with the likelihood of students choosing a research career.

Healey (2005), conducted a study on the perceptions of students on a learning environment that integrates research with teaching. In this study students expressed that they benefit from being engaged in the process of research and being taught by researchers. They indicated that they consider a university as credible if it has a community of researchers who teach in it (Healey, 2005). Students benefit from the research conducted by their lecturers through their involvement in research or through association with lecturers' work (publications or conducting research with lecturers). From this study it can be deduced that for students to benefit from the practice of RLT, they need to be aware of lecturers' research activities or products.

2.4.2 Benefit to the institution

Integrating research with teaching in academic work makes university education distinct thereby facilitating the institution's competitive edge (Mayson & Schapper, 2010). Such a university attracts the best students and lecturers. More students would want to enrol for undergraduate or postgraduate study because of the learning experience in the institution. (Jenkins et.al, 2007).

Research output is a factor that contributes to the university ranking. RLT is a strategy that has the potential to generate additional research output or knowledge creation which makes a university attractive to the public eye. This notion comes from the general belief that the most effective universities are those engaged in research and scholarship. Lecturers in these institutions are excited by their jobs and they transmit the excitement to the students. It is assumed that lecturers in these universities transmit the excitement motivated by their research to the classroom.

2.5 Challenges and opportunities in RLT

Though there are benefits that come with implementing the RLT strategy in higher education, there are challenges hindering its realisation. This drawback is due to the contradictory effects resulting from the demand for HE to meet certain performance outcomes in order to have a competitive advantage (Schapper & Mayson, 2010). For example, there is a belief that research plays a significant role in developing knowledge based economies and addressing social ills. It is for this reason that it seems to be given more priority (Ramsden, 2009). It is therefore not surprising that higher education seems to focus more on research than teaching (Bak and Kim, 2015; Cashmore and Ramsden, 2009; Chalmers, 2011). This notion emanates from a number of factors. For example, indicators that have traditionally been used to qualify an excellent university often quantify research superiority (publications and grants) whereas

superiority in teaching is not easily captured by quantifiable measures (Elkem & Wollscheid, 2016). This observation has led to a call for the need for HEIs to have a favourable reward system for teaching (Brew, 2003; Hattie & Marsh, 1996; Horta et al, 2012) because, at present, the university reward system is believed to be a source of tension between research and teaching.

Chalmers (2011) also notes that lecturers see teaching as an activity that is ranked lower than research in their institution. The preference of research over teaching is somewhat a strategic choice that the institution needs to take in order to have a competitive edge. This strategic direction is due to a number of issues affecting today's higher education.

Firstly, the reputation of a university and its growing influence of university ranking across the globe has given research some prestige over teaching. These rankings have intensified so much that they are used as a yard stick for judging the performance of a university (Bak & Kim, 2015). The judgement is based on the university research outputs and research grants. This has had a pronounced consequence on the business of universities because prospective students now look at the university ranking when choosing a HEI. Also, university funding from government is made on the basis of university performance in terms of its ranking (Hezelkorn, 2011; Shin & Toukoushian, 2011).

Secondly, universities are now expected to take a lead in national and economic development. They are believed to have the pontential to translate their research findings into marketable intellectual products. In response to this trend, university administrators have put more emphasis on research and assume that the research intensity in the university significantly impacts on the quality of teaching in a university (Bak & Kim, 2015). This development is evidenced by a growing discourse in research management as one important strategic activity within a university.

2.5.1 Research Management and research teaching integration

In order to address the external expectations alluded to, the concept of research management has gained importance among higher education institutions (Collis, 2004, Dell, 2014). Research management is the deliberate governance of research activities without being involved in the process of research (Kirkland, 2005). The main objective of research managemnt is to add value to staff research activities in order to increase chances of attracting external funding and increased research outputs. In managing research, support is given to the development of researchers and establishment of research teams, directing researchers to research activities that are relevant and impactful to external expectation and and activating a research culture. Therefore, research managers ensure that researchers are aware of collababoration and funding opportunities and support academics on how to write winning grants according to funders/donor guidelines. In view of this observation, Kirkland and Ajai-Ajagbe (2013) assert that research management involves giving guidance to academics to so that research that they are engaged in gives a university a competitive advantage. The management of research also ensures that researchers meet their contractual agreements with research funders and donors in a timely manner. Research dissermination is also another critical component of research management that emphasise the effective sharing of research findings society and appropriate, commercialised. Vincent-Lancrin (2009) suggests that the shift to strategically manage research activities comes from the emergence of academic research funding from external donors. Consequently, there are now established research centres within universities (Harris, 2010; Philbin, 2011; Sá, 2008). The question that remains unanswered is whether research management in universities recognises the synergy between teaching and research and subsequently addresses it adequately. With these developments, there is a body of knowledge that acknowledges the attempts made by HEIs to promote teaching excellence.

The quest to enhance teaching quality has led to the establishment of policies and strategies that support RLT in HEIs (Schapper & Mayson, 2010; Taylor, 2007). However there seems to be a big gap in the institutional intent and the implementation of RLT (Brew, 2006; Hattie & Marsh, 1996). This may be due to a claim that lack of commitment for policy implementation of RLT exists at all levels of a university, particularly in academic staff (Schapper & Mayson, 2010). Schapper & Mayson (2010) believe that RLT can only be fully implemented if faculties and university managers take it upon themselves to ensure that they create an environment that is supportative, encourage and recognise the actualisation of the research teaching nexus (Schapper & Mayson, 2010).

Schapper and Mayson (2010) propose four crucial principles that can assist in guiding the implementation of RLT (Table 2.4).

Table 2.4 Principles to guide implementation of RLT (Schapper & Mayson, 2010, p648)

Principle	Action by the University
Principle 1	The university acknowledges that despite the current research findings that suggest a negligible relationship between teaching outcomes and research outcomes that it nonetheless supports strengthening the links between research and teaching across the university.
Principle 2	The university encourages and resources faculties and discipline areas to develop an evidence base to provide exemplars of RLT.
Principle 3	The university accepts that the relationship between research and teaching is complex and dependent upon disciplinary approaches to knowledge creation and knowledge sharing.
Principle 4	The university acknowledges that there is no 'one best way' to embed RLT across all faculties, departments and or disciplines. (Schapper & Mayson, 2010, p. 648).

Similarly, Taylor (2007) investigated issues that influence the management of the nexus between research and teaching to find out how the research-teaching relationship may be organised and influenced by practice. The research identified key drivers that shape the

commitment to teaching-research nexus. These drivers are characterised by ideological and environmental factors. These factors are discussed in detail in the next chapter where theories underpinning the understanding of implementation and management are discussed.

De Weert (2004) also identified four managerial pressures affecting the research teaching relationship as financial support, national research priorities, implementation of new university government structure and the two-cycle structure of bachelors and masters. To begin with, research financial support is increasingly being separated from that meant for teaching activities. Money for research is taken away from universities and transferred to research councils which distribute grants more selectively. Also, there is an issue of prioritising research based on national agenda and societal problems. This trend has led to changes in research structures and infrastructure. There is evidence of the 'establishment of separate research organisations, making research more competitive on an international scale'. Thirdly, the implementation of new university governance structures is transforming the traditional task-oriented organisation into a market-type of organisation. As a result, managerial aspects of teaching and research work processes are emphasised and academics' traditional freedom as professionals is put under pressure. Lastly, the two-cycle structure of the bachelor and masters system tends to create a divide between undergraduate and graduate levels as research training is concentrated on the latter. To a large extent, these changes perpetuate the 'divide between research and teaching' (Brew, 2003) as they give research greater prestige compared to teaching. Over and above that, it can be argued that focusing on exposing graduate students students to research more than undergraduates can deprive undergraduates of the quality teaching that is believed to be a result of the research teaching integration.

2.6 Chapter summary

This chapter reviewed literature that focused on research, teaching and the research-teaching relationship as concepts that are deemed significant to this study. These concepts are important because the nature and meaning of RLT depend on what they are believed to be by individuals, departments, faculties and institutions. Lecturers' and students' beliefs coupled with diversity in meaning are critical in this study for the reasons that follow. Diversity in the way RLT is understood suggests that there is no single way of integrating research with teaching. Institutional or individual beliefs and values are essential lenses for interrogating the meanings and characteristics of RLT because it suggests that there are preconditions that contribute to one's understanding of RLT.

There is also a strong belief in the link between research and teaching for the reasons alluded to earlier. Yet there seems to be an agreement that the reward, incentives and the way research and teaching are managed in a university reject the research-teaching link. This study positions itself in such complexities surrounding the implementation and management RLT. The next chapter focuses on theorising the implementation and management of RLT by critically discussing the theories of implementation and management so as to come up with a lens for understanding RLT at faculty and intuitional level.

CHAPTER 3: THEORISING THE IMPLEMENTATION AND MANAGEMENT OF RLT IN A HIGHLY COMPETITIVE HIGHER EDUCATION ENVIRONMENT.

3.1 Introduction

The preceding chapter defined concepts underpinning my study and noted that there is little literature in the way RLT is implemented and managed in a fast-changing university environment. The chapter also observed that today's university business is characterised by the desire for institutional excellence and competitiveness. Universities strive for excellence in both teaching and research (Ramirez & Tiplic, 2014). The competitive higher education environment is driven by a number of factors. Emphasis is put on education and its role in economic development with beneficiaries of education constantly testing and evaluating its quality (Stimac & Simic, 2012). These dynamics of the higher education environment point to some new indispensable features that it has developed (Maringe & Gibbs, 2009), namely 'complexity of the education product', complexity of the social role of the educational institution and competition. Informed by this background, this chapter argues that a university's positive response to expectations posed by the external environment signifies the demise of the traditional idea of the university as a self-managing, collegial and autonomous institution and the birth of a corporate managerial model (Baines & Taylor, 2012; Bosch & Taylor 2011) premised upon an hierarchical, line-management form of governance.

The implementation and management of RLT thus cannot be divorced from this turning point. The previous chapter noted that RLT is and can be used as a strategy that contributes to economic development and institutional excellence thus needing to be strategically managed for the realisation of the institutional competitive edge. Consequently, the adopted theoretical framework for my study is located within the strategic management process. This chapter

reviews literature advanced in the area of strategy implementation. The chapter starts by locating the study within the strategic management process with emphasis on the strategy implementation models, frameworks and theories. This decision was made because the study was only looking at the conceptualisatiom, implementation and management of RLT. To further identify gaps in the literature, specifically on the implementation and management of RLT, empirical literature was reviewed, guided by the research questions and the identified theoretical framework.

3.2 Theoretical framework

In this section, I discuss my theoretical framework. A theory is a way of knowing something works based on the evidence and testable observations. A theory can be constructed through studying what other authors have found out from similar studies (Zikmund et al, 2010). Based on this description, this section is devoted to trying to understand what underpins the implementation and management from past studies similar to this one.

A theoretical framework on the other hand, is a logical organisation of concepts and explanations that guides one's study (Troudi 2010). The framework is therefore a lens used to understand the world in a certain way. In view of this explanation, I discuss the concepts that are critical in understanding implementation and management.

3.2.1 Strategic management

A strategy is a long term goal that an institution wants to achieve over a certain period of time while having a competitive edge in a fast changing environment. It aligns the human and financial resources and organisational structures to the goal of an organisation in order to fulfil stakeholder expectations (Johnson et al, 2006). Managers in an organisation make decisions based on their organisational context and this calls for a holistic approach that takes into account significant issues that relate to the formation and execution of a strategy

(Stukalina, 2014). This study investigates how RLT is being realised and managed in order to fulfil the expectations of the external environment. Hence, understanding the strategic management process is key.

3.2.2 Strategic management process

Kaplan & Norton, (2008) note that there are three critical components that uderpin the strategic management process; the strategy planning, the cascading or communication of the plan, discussion around the implementation of the plan and its evaluation. At the planning and communication stage, the implementers and other stakeholders are educated about the strategy, goals are set and performance measures are linked with rewards. The feedback enables evaluation, organisational learning and continuous improvement. Applying this notion to the implementation of RLT, there must be a documented consensus on how it is understood, its objectives and how it is implemented, as indicated in Figure 3.1.

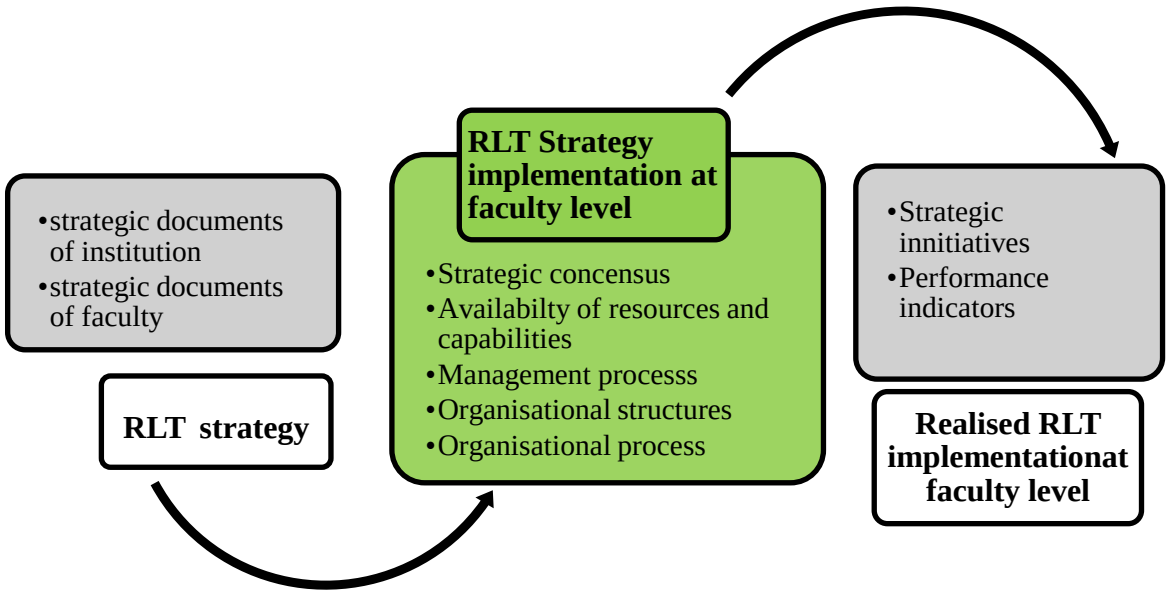


Figure 3.1 Strategic Management Process (Own)

3.3 Strategy implementation

Strategy implementation refers to the process in which resources, plans, structures and systems are put in place in order to attain institutional goals, objectives and fulfil stakeholder/customer expectations (Nyamwanza & Mvhiki, 2014; Alashloo et al, 2005). The process of implementation requires, among other things, policies, procedures and a systematic manner of rewarding the implementers for successfully achieving goals. It is also essential to have in place communication plans to enable monitoring and evaluation of progress made during the implementation process. There is also a need to establish systems that enable the human resource to carry out their strategic roles effectively. Moreover, the institution needs to have champions or leaders who will drive the institutional objectives and continuously improve on how the strategy is executed (Thompson & Strickland, 2003). Successful implementation of plans needs implementers to be aware of two options and make choices appropriately.

3.3.1 Implementation options

Rowley & Sherman (2002) have distinguished two options that are necessary for a successful strategy implementation. The options diverge in the time standpoint. They can either be short-term or long-term.

3.3.1.1 Long-term options

Human resource management structure: the long term options deal with the university's ability to adapt to changes as they emerge by aligning the human resource management (HRM) to a strategy plan. According to Rowley and Sherman (2002) the human resource within an institution change with time and this requires the institution to put in place the Human Resource Management System (HRM) to cater for these changes. This system determines the future direction of the institution and actualise it within a given time. As

changes occur, the current structures within an institution also change (Rowley and Sherman, 2002) to accommodate the changes in human resource as well. The long term options must also consider the institutional culture and traditions that inhibit or facilitate change.

Changing Institutional culture: Culture is a way of life of people and it needs to be incorporated into the strategic change process. This notion is relevant for the ever changing higher education landscape, specifically those that are in a transition to change to meet stakeholder expectations. In doing so, it is important to acknowledge that an institution has a culture that takes some time to erode because people have lived with it and are connected to it. It is therefore critical that change is built on an existing culture. When there is awareness of this culture, university leadership is able to take a deliberate move to prepare staff for the change. According to Shah and Nair (2014), the preparation will enable change implementation to go as planned.

Manipulating the role of tradition: By its very nature, tradition is long term in the sense that it is built onto the establishment or history of an institution. It then becomes an institution's culture. It speaks, to a large degree, to what the college or university has become. It may also be tied with the institutional mission that has over time defined an institution. Strategic planners therefore need to be very sensitive when planning so that positive aspects of tradition are not put in danger.

3.3.1.2 Intermediate-term options

Using the Reward system: the reward system is an essential promoter for implementing a change strategy. Positive results surface if people believe that the change will benefit them (Rowley & Sherman, 2002). Rowley & Sherman goes on to argue that the rewards may take different forms. For example staff maybe given time off to go and perform certain activities. In the case the implementation of RLT the staff maybe given time off to do research. As a

way of rewarding staff, there can be development programmes and recognition. These non-monetary rewards improve implementation while building a desired culture.

Implementation through Participation: In higher education there are decision making bodies that may unintentionally leave out other stakeholders in making decisions. Rowley & Sherman (2002). This lack of participation may led to failure in implementing a strategy.

Goals and key performance indicators (KPI): Effective implementation can also consider setting up KPIs for implementers. These are set of indicators that show that there has been an achievement. They can be qualitative or qualitative in nature.

Developing and using Change champions: In this element, Rowlend & Sherman (2002) argue that there are those people in an organization who have embraced change and are excited about it. They are a valuable resource that can be used to speed the adoption of change strategy. They must therefore be included in the strategic process as change champions. They must be well resourced, trained and supported so that they help other members of staff to adopt the proposed changes.

Using the Faculty and staff development: Shifting the institutional direction may require a look at the human resource base at all levels so that it is aligned with the implementation of a change initiative. This requires the upskilling of human resources appropriate for current needs.

Building on successful systems: An organisation needs to come up with an approach that allows the strategy or change to be implemented in phases. Leaders and planners can deliberately select tasks that they feel will be easier to implement so that they can measure their success and plan for the next phase of change.

3.3.1.3 Short-term options

Using the Budget: Effective strategy implementation, requires that the budget is built into the change initiative or strategy. According to Rowley and Sherman (2002), though budgets for a university are never enough, they are critical for the implementation of the institutions activities. Institutions must, therefore, use the strategy or the change initiative to budget for identified priority areas.

Though Rowland & Sherman's (2002) framework appears to be logical in understanding strategy implementation, it does not take into account the strategy formulation when compared to McKinsey's 7S framework. The framework justifies a majority of the implementation literature which purports that the formulation of a strategy and its implementation are critical processes that are interwoven (Miller, 1997; Mintzberg, 1981; Noble, 1999; Pettigrew & Whipp, 1991).

3.4 McKinsey 7S Model

The strategy implementation tool, McKinsey 7S management model was developed in the early 1980s by the McKinsey Company and has been used to analyse large organisations (Alshaher, 2013). The tool is used to implement a strategy for an institution that is in the process of a transitional change. According to the model, there are a number of internal elements within an organisation that need to be aligned if it is to be successful. This model places emphasis on both the internal and external environment. The elements used all begin with the letter 'S' hence the 7S model. These elements include; systems, structures, skills, staff, strategy, shared value/ superordinate goals and style (Alshaher, 2013). The existence of these elements is based on the assumption that for the organisation to fulfil its day-to-day duties, the elements need to be aligned and connect to each other, as illustrated in Figure 3.2. It also suggests that after the development of a strategy, the seven elements are used to ensure

that the strategy is implemented. Figure 3.2 shows that the shared values (culture) is placed at the center of the model because of a belief that all the other elements are influenced by people's culture (Alshaher, 2013).

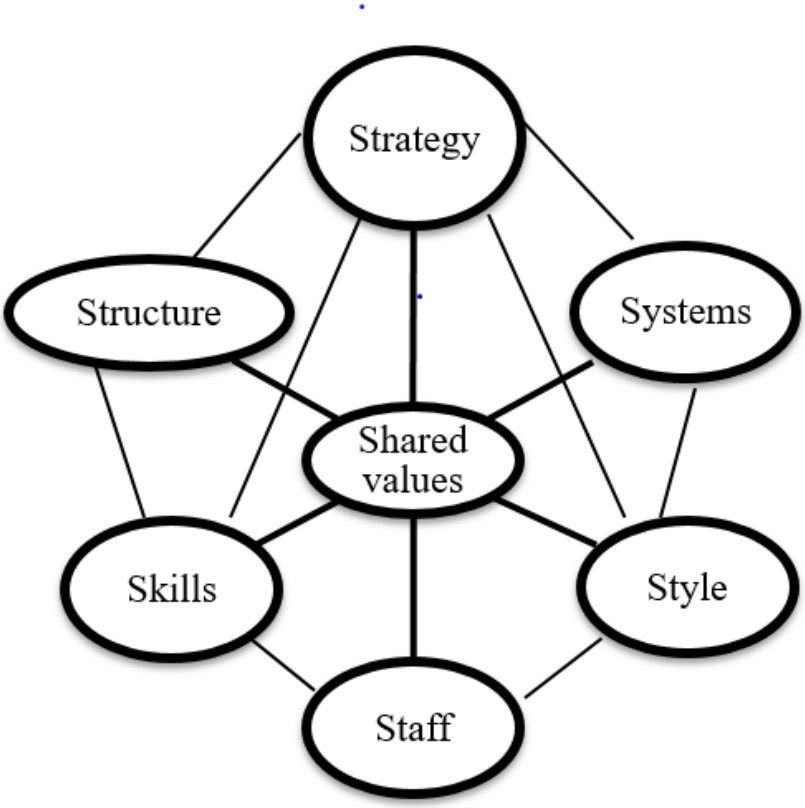


Figure 3.2. McKinsey 7S Model (Peters & Waterman, 1982)

The elements in Figure 3.2 can further be split into two groups: hard elements and soft elements. The hard elements include strategy, systems, and structure. Soft elements are skills, shared values, staff and style. The hard elements are easily accessible and visible. They can be influenced by the management while soft elements are difficult to describe and they are mostly influenced by organisational culture.

The section that follows discusses each of the implementation levers in detail. The first four levers relate to soft elements while the last three relate to the hard elements.

3.4.1 Soft elements

3.4.1.1 Skills

Skills refer to the activities that are done by people or the competencies that they possess in order to perform the respective duties in an organisantion. This is an important element for the study because changes in HE external environment require the development of one or more skills portfolios so that one adapts to the changes. Also, the effective strategy implementation is dependent on the right combination of effort, ability and skills. Analoui and Karami, (2003) suggest that skills can be categorised as skills that relates to performance of tasks, people skills, self-development skills. The skills that are related to performance of tasks include the general abilities, knowledge, talent and expertise a person possesses to perform a task. People-related skills are skills that deal with people interactions, they include effective communication, conflict resolution and ability to get along with others. Lastly, the self-development skills is about a pocess in which one develops him/herselve buy enhancing employment skills. For an organisation to effectively implement a strategy successfully, it needs to contemplate on the combination of these categories (Analoui and Karami, 2003). However, for this study, the self-development skills seem to be the most relevant because students' expectations change with time. Consequently, there is need for HE lecturers to be constantly developing their skills to adapt to these changes.

3.4.1.2 Style

This element of style speaks to the leadership styles. They involve management patterns (overriding managerial viewpoint and common values) by excecutive leaders in an organisation. These patterns can either facilitate or hinder the execution of a strategy. Organisational leadership is therefore critical in the implementation of any strategy. According to O'Reilly et al, (2010), leaders perform two key roles, a guidance role and an architectural role. The architectural role of leaders involves building an appropriate

organisational structure together with systems for controlling and rewarding, while the guidance role involves galvanising commitment and support for the vision and empowering employees. Though this is the case, leaders continue to have a challenge in galvanising commitment among people to embrace change and implement strategies. In addressing this challenge they employ three interrelated activities (Pearce & Robinson, 2007). Firstly they clarify the strategic intent, secondly, they build an organisation and lastly they shape the organisation's culture. The strategic intent implies a clear sense of where leaders want to drive the organisation, the vision and also the expected results. Building an organisation refers to shaping and refining the organisational structure and making it function effectively to achieve the strategic intent.

3.4.1.3 Shared values

Shared values are principles, core values and cultural practices that bring an organisation together for a common purpose. These core values are evidenced by the organisational culture and the general work ethics. The vision and mission statement is an example of a value that ought to be shared by all employees in the institution. Evidently, HE institutions develop and strive to implement and live those values, as is the case in the university under study. The aspect of organisational culture is therefore critical in the process of implementing a strategy.

3.4.1.4 Staff

The element of staff is about the people who perfom different tasks in an organisation and the human resource systems that allow and encourage those tasks to be done. The systems include performance appraisals, training, motivation and morale. Organisations view people as a valuable resource that should be developed carefully, guarded, allocated and retained.

Staffare a strategic asset; management needs to select key people for the implementation of developed strategies (Analoui & Karami, 2003).

3.4.2 Hard elements

3.4.2.1 Strategy

A strategy is the overall plan of action. It stipulates how organisations align their resources with the plan of action to respond to external pressures, customers and competitors. It includes long-term and short-term objectives. The short-term objectives translate aspirations into a particular year's targets for action. The development of clear objectives provides clear guidance of where an organization wants to be after a certain period of time. This clarity thus gives staff an opportunity to act accordingly. It also acts as an influential instigator, facilitating effective implementation of a strategy (Stukalina, 2013). The main emphasis of the 7S model is that the other six elements must complement a strategy for it to be successfully implemented. This emphasis comes from an observation that the development of a strategy is seen to be an easy task to do compared to its implementation.

3.4.2.2 Structure

Structure describe the shape of an organisation and how it organized. It focuses on the roles roles, responsibilities and accountability relationships. The concept of structure is underpinned by the structural-functionalist perspective of organisations. Early theorists such as Durkheim (1947) and Weber (1947), interpreted each part of an organisation in terms of how it contributes to the effectiveness of the whole organisation. Role positions and their relationships in an organisation are shown through these structures (Alvarez & Robin, 2000).

An organisation exists to serve a certain purpose that is defined by its establishment. The Faculty of Humanities is a structure within a university and within it there are committees, departments and boards that ensure the proper functioning of teaching and research. Policy

guidelines are developed to enable the effective functioning and relationships of the structures in order to accomplish certain goals and objectives. The highest structure of an organisation is responsible for setting up goals which are guided by the mission(Gayle et al, 2003). Hitt et al, (2005) argue that when a structure's elements (reporting relationships) are properly aligned with one another, that structure facilitates effective implementation of the organisation's strategies.

3.4.2.3 Systems

While structures is about the size and shape of an organisation, systems speaks to the the technical infrastructure that is used by employees on a daily basis to excecute its mandate. In this research the element includes policies and policy guidelines that facilitate the implementation and management of RLT. This element also includes sub –themes such as the training, management information systems (MIS), budgeting and accounting systems.

From the above description I note that the 7S framework is logical and balanced in nature in the sense that it acknowledges the role played by the 'hard' and 'soft' aspects of an organisation in trying to implement its projects/ activities. Its flaw is that though it considers organisational culture, not much is said about the human aspects of the implementation. For example, little attention is paid to subjects employee motivation and behavioural change.The framework does not say much about the power or the influence that the external environment has on the internal one in as far as strategy implementation and change are concerned.

3.5 Change management model

My investigation was done on a university that has predominantly been a teaching university since its inception and is transitioning to becoming a research intensive university. In the previous chapter I noted that in a teaching university, research is less dominant while a research university is characterised by a strong research culture. The latter is critical for the

implementation of RLT in any university. Also, higher education institutions (HEIs) find themselves having to demonstrate their existence to the external environment/societies they operate in. This pressure calls for a change in the way things are done, particularly teaching and research. The pressure for HEIs to change is brought about by a number of related factors that include the massification of HE, changes in students profiles and expectations, industry need for graduates with both technical and practical skills and the demand of high quality research (Patria, 2012). In the previous chapter, I noted the acknowledgement of RLT as contributing positively to addressing some of the pressures posed by the external environment. It is against this background that understanding organisational change management was significant in this study. It served as a lens for understanding how this transition hindered or facilitated what I wanted to know about the phenomenon.

3.5.1 Kurt Lewin's change management model

There are several change management models that are utilised and modified to suit different organisational contexts. These models may differ in approaches, depending on the situation they confront, but the overall objective is always for the institution or organisation to successfully implement the change process in a smooth and efficient way (Blokdijk, 2008).

Of interest is Kurt Lewin's change management model which continues to inform numerous contemporary change practices in organisations. He argued that a successful change project involves three stages: unfreezing, modification/changing and refreezing (Hossan, 2015).

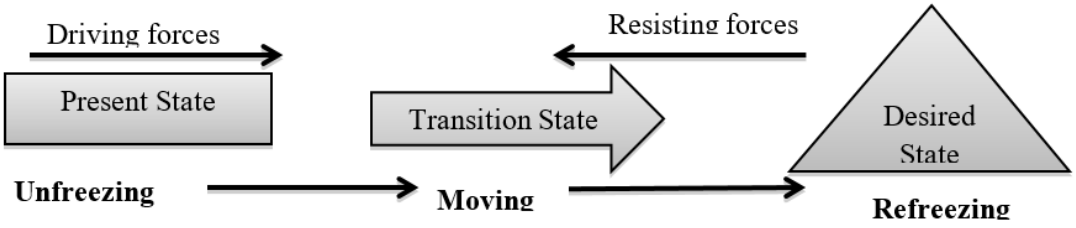


Figure 3.3. Lewin's planned change approach (Lewin, 1951)

3.5.1.1 Stage 1: Unfreezing

According to Lewin, 'stability of human behaviour was based on a quasi- fixed equilibrium supported by a complex field of driving and restraining forces' (Brurnes, 2004). Lewin argues that an impression that change is needed has to be created in order to justify the need for it to happen. Based on the justification, desired behavior is created and solidifies as an organisational norm or culture (see figure 3.3). According to Lewin this means that the equilibrium needs to be destabilised (unfrozen) before old behaviours are discarded (unlearnt) and new behaviours successfully adopted. In disagreement with Lewin's argument, Schein (1996) seem to explain a practical scenario in a fast changing HE landscape by arguing that change, whether at individual or group level is a profound psychological dynamic process. The diverse process may have bearing on peoples understanding of a phenomenon and how it is translated to actions.

Schein (1996) further purports that unfreezing does not just happen. There are two things that are essential during unfreezing; people understand that the current situation is no longer valid and that they are psychologically ready for change. In his view, when psychological safety is not adequately created, the need for change will not be embraced hence people will not be willing to try the unknown. So in the absence of these processes no change will take place (Schein, 1996). This notion explains Lewin's force field model that examined human behaviours that occur when change is implemented. These forces include, the driving force and the resisting force. According to the model, the resisting force reduces the chances of change acceptance (Hossan, 2015).

I view this as a stage at which an institution is trying to institutionalise change hence share Sylva and Amah's (2016) argument that in this phase, it is important to determine the need for change, get support from members and manage doubts by employees.

3.5.1.2 Stage 2: Modification/changing

The second stage of the change model involves transition from the current status to the desired status. This stage may be uncomfortable for the employee and this is where motivation and good leadership is needed to enable the implementation of change. Evident in this stage is training, skills transfer, personnel realignment and sometimes reduction, which are all critical in the change management process. It also involves frequent communication, reduction of rumours and addressing misrepresentation, authorising stakeholders to act and engaging with people through participatory decision making.

3.5.1.3 Stage 3: Refreezing

In the third stage stability is established once the change has been made. During this time, people accept the change and make it a norm (Burnes, 2004).

The model presented deviates from today's HEIs landscape which is ever changing due to the needs of their external environment. In this environment, change is unpredictable in can happen anytime. Consequently, like Burnes (2004), I have difficulty trying to align the inflexibility of refreezing with current thinking of change being a continuous and sometimes, tangled process that needs a lot of flexibility. The last stage ought to be more flexible and not be a firm frozen block. This way 'unfreezing' for the next change might be easier. Lewin's model is concerned with reinforcing the change and ensuring that the desired change is accepted and maintained into the future. The model is easy to understand and is a simple way of implementing change. However, the model seems to suggest that the change process has an end while in fact, it is a continuous process (Hossan, 2015).

3.6 Taylor's Institutional research-teaching nexus management model

In the previous sections, I discussed general management models that are relevant in understanding the implementation and management of RLT. This section discusses a management model that specifically speaks to the management of research-teaching integration in a university. Taylor (2007) argues that in order to shape the commitment to research-teaching integration, two factors are worth considering: the ideological factors and the environmental factors.

3.6.1 Ideological factors

Ideological factors are ideas, philosophies and beliefs about a university that have influence on how research and teaching are integrated. These factors include the 'beliefs and values, pedagogy, institutional mission and student recruitment' (Taylor, 2007).

3.6.2 Institutional mission

In this lever of the model, Taylor (2007) reasons that, the way research and teaching are integrated may be spelt out clearly in the university's strategy documents and mission statement. This deliberate effort to include it in the mission statement demonstrate the institutional philosophy/ideology on the research teaching nexus. The mission statement also shows the university's commitment in actualising the connection between the two university activities. It, therefore, seems likely that any type of institution and its stated goals can make the link between research and teaching possible or impossible. According to Locke (2004), this scenario can happen to any type of university; teaching or research-led. A research–led university can also find it difficult to actualise the link if the primacy of research leads to separation of structures from pedagogic activities.

3.6.3 Values and beliefs

The values and beliefs are about what the lecturers and officers within a university believe in. If there is a strongly held belief within a university in the positive research teaching relationship and that teaching and research cannot be separated, then the implementation is unquestioned. This element of Taylor's model informs my research in the sense that I seek to understand the conceptualisation and value of research-led teaching amongst students and lecturers.

3.6.4 Pedagogy

Under pedagogy, staff emphasise the importance of research improving the quality of teaching and that it is what the students and the labor market needs. Taylor (2007), however, recognises that integration of research and teaching will vary according to subject area and the levels of students' study.

3.6.5 Student recruitment

Under this element, the argument is that research has a great influence on student recruitment. Taylor (2007) contends that academic staff and university managers believe that prospective students want to enroll into universities that are research intensive. This conviction is informed by a belief that active participation in research enhances student's employability skills (Brew, 2015).

3.6.6 Environmental factors

The environmental factors are external factors that impact on how research and teaching are integrated. These are factors that force change in the business of an institution for it to be relevant to all stakeholders. However, in some cases, the institution may have some autonomy to receive, adapt or ignore these outside forces (Taylor, 2007). Since these factors are external to the institution, they may oppose the core beliefs of managers and lecturers in a

given institution. These factors include ‘assessment and accountability, market forces, international and global competitions and a differential funding model’ (Taylor, 2007).

3.6.7 Assessment and accountability

The belief that research is key in defining the success of a university and the professional progression of its staff has a bearing on how teaching and research are linked in a university. University funding is sometimes on the basis of a university research output hence universities would encourage staff to produce more and more research outputs. Professionally lecturers are also incentivised for the production of research outputs. For this reason, Taylor (2007) argues that academic staff uphold a strong division between their teaching and research activities. Teaching and research are separately accounted for in terms of time and resources.

3.6.8 Market force

There is a growing influence of market forces and competition in higher education that makes university managers react in certain ways. Not only that, governments are encouraging competition between HE institutions in order to enhance quality and increase student options. Given this scenario it has been difficult for universities to give equal attention to teaching and research (Maringe, 2005; Taylor, 2007).

3.6.9 International and global competition

Institutions of higher learning aim to be recognised as the best amongst the best in the university rankings. This ranking is often linked to excellence in research. For this reason, universities seek to identify key research strengths to feature high in this ranking. In view of this, it can be noted that these ideas have discouraged the traditional opinions about the teaching and research link. According to Taylor (2007), the opposing forces calls for

particular obligation on the institution to manage the teaching-research nexus more effectively.

Taylor (2007) reasons that the ideological values and environmental values translate to passive and active management as shown in Figure 3.4.

In passive management, a strategy is developed and left to individual staff to interpret. In the case of the research teaching nexus, understanding and actualizing the teaching-research integration is the responsibility of academic staff. Active management, on the other hand, reasons that management in an institution must be fully involved in the development, implementation and assessment of the relationship between teaching and research. The two management approaches are critical in understanding how RLT is implemented and managed.

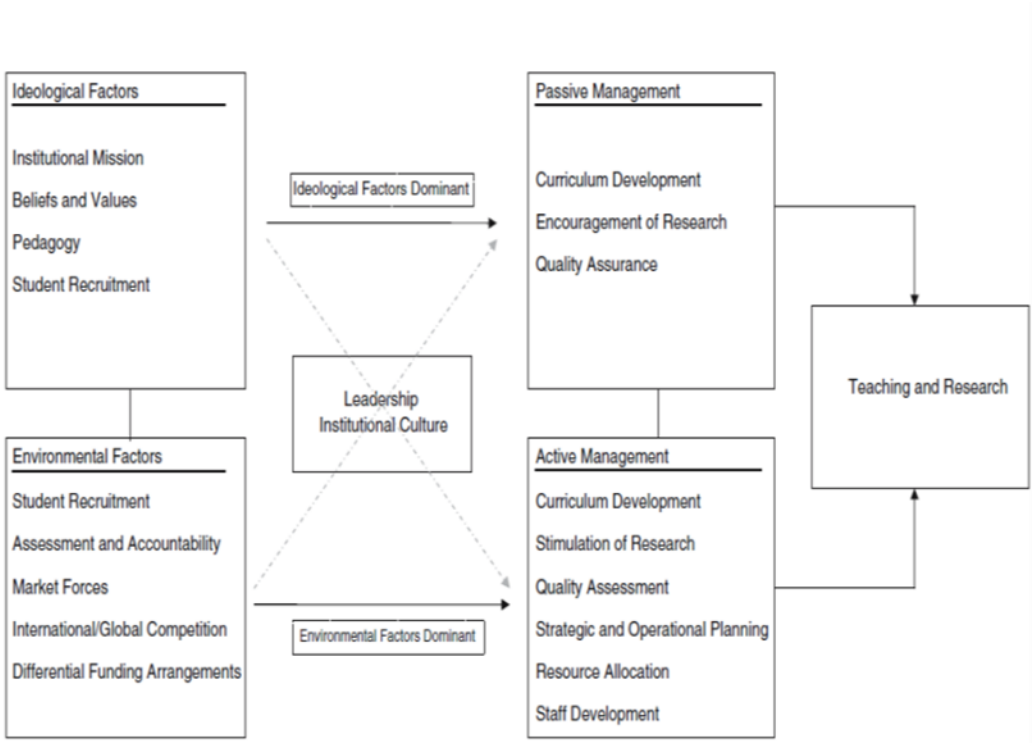


Figure 3.4 Taylor‘s (2007) research teaching nexus management model

3.7 Reflecting on the theories in relation to the research questions

In the previous section, I discussed Rowley & Sherman's (2002) Implementation Options McKinsey's 7S management model, Kurt Lewin's change management theory and Taylor's (2007) research-teaching nexus management model as models and theories that guided the development of a theoretical frame for this study. In this section, I speak to the theory elements critical for this study and how these relate to my research questions.

3.7.1 Importance of institutional culture

The element of institutional culture addresses issues of shared or ideological values, meanings and understandings, organisational practices and behaviours, traditional beliefs, symbols, habits and resistance to change. Taylor (2007) argues that ideological values have an underlying effect on the three factors (student abilities, teacher personal characteristics and faculty management mechanisms). The institutional culture in its nature gives an understanding of how individual values and ideologies contribute to the way RLT is valued, implemented and managed.

Lecturer and student beliefs are important in this study because they contribute to actions and the diversity in conceptualising, implementing and management of RLT. This diversity is key in this study because it helps explain the assumption that there are pre-conditions at the individual and institutional level that are determining the conceptions, implementation and management of RLT. Similarly, Fanghanel (2009) posits that there are four broad ideological orientations that affect the way lecturers view their disciplines; 1) the traditionalists see education as something that must be shared with the students. Students are passive receipts of the education; 2) the vocationalist believe that education in a university must be linked with the industry or the needs of the economy. Its emphasis is on the vocational function of HE; 3) There are those who believe in education for personal growth and the development of a

student; 4) the social constructivist believes that HE is a vehicle for the transformation of the society.

These ideological positions translate to cultural practices, work norms, communication practices and philosophical stances of staff. This analytical lens is crucial in this study as it guides understanding on how an individual's philosophies about their discipline shape how the research-teaching integration strategy is executed and supported. Ideally, these philosophies will have bearing on human resource practices such as selection, performance appraisal and training. Understanding the existing culture in an organisation enables one to identify the aspects that will aid the strategy implementation while also predicting the effects that these cultural components will have on the execution process (Salamzadeh, 2012).

Similarly, when seeking to understand change process, Kurt Lewin posits that change is usually not a smooth endeavour as it can lead to resistance. Faucault (2013) reasons that forms of power correspond to the type of resistance. If resistance is a reaction to power, the characteristics of the power strategy or power relation affect the kind of resistance that subsequently prevails.

3.7.2 External environment

The external environment is critical in this research because it consists of driving forces that are outside the institution but shape the way research and teaching are executed and managed. The external environment influences the development of a strategy and its implementation. For example, global competition, market forces and societal expectations will have a bearing on institutional ideologies and how RLT is implemented and managed. This aspect is particularly important in understanding how RLT is valued in terms of enhancing the quality of teaching and learning. I have argued in the previous sections that HE has become market-driven, constantly responding to market expectations. This means the external environment is

a critical lens for understanding ways of implementing RLT and the consequent management styles of the faculty.

Marketing HE is a concept that describes the exchanges in relationships between parties to ensure that parties in a relationship derive maximum benefit from the product and services. According to Maringe (2005), there are five ways in which marketing can be conceptualised in HE. It can be conceptualised in terms of the institution's ability to compete with other institutions similar to it. It can be product-oriented, that is, it can be about offering products and services that are of high quality. Thirdly, a university can be about selling, that is, creating public awareness about its offerings. The issue of customer satisfaction and what the customer wants also characterises how the university markets itself. Based on this conceptualisation, Maringe (2005), Maringes & Gibbs (2009) further proposes that HEIs must identify their core business and base their marketing on a proposed curriculum centred marketing model: the CORD model. C – stands for contexualisation, meaning that marketing models cannot be universally applied to all contexts of HEIs. So in planning to implement RLT there is need to be sensitive to contexts in which universities operate. For example, in conceptualising and managing RLT there is probably a need to first align the definition of the concept to the needs of those being taught and the labour market. O – which is the orginisational competence, stresses that any changes in an institution needs support from those working in it. They need to be prepared attitudinally and also possess the necessary skills to implement the change. R – stands for Research competence and this means that, research is an intergral part in HEIs. It is needed for those understaking a change initiative because their research skills will enable them to systematically gather data to come up with solutions and evaluate them. D – stands for developing the curriculum. It suggests that when HEIs are developing their curriculum, they must be mindful of what the market wants. Being

aware of market expectation has a significant role to play in ensuring that HEIs make a contribution to society.

Though the CORD model is a framework that explain how institutions of higher education can position themselves in a competitive environment (Maringe & Gibbs, 2009), it also applies to the conceptualisation, implementation and management of RLT for the reasons alluded to.

3.7.3 Management style

Both the McKinsey 7S model and Taylor's research-teaching nexus management model echo the importance of institutional management styles in implementing a strategy. While McKinsey's model is general, Taylor's model is specific to the research-teaching integration implementation and management. The McKinsey model emphasises the dominant managerial philosophies or ideologies and shared values within an institution as contributing to the management styles in an organisation. Taylor (2007), on the other hand, argues that both the ideological values and the external environment will influence how a strategy is managed in two ways. If the ideological values are dominant then the management style will be passive and if the environmental factors are dominant there will be a more active management style in the implementation and management of RLT.

3.7.4 Structures and systems

The structures and systems are interventions that are put in place in support of implementing a strategy and are largely influenced by the organisational culture and the external environment. The different interventions, therefore, help inform how RLT is valued and supported by the institutions in terms of incentivising it, availing financial resources and providing staff with the capacity to implement RLT.

The relationship between the elements of the integrated model is that some elements are the driving forces to implementation (institutional culture, the external environment and management styles) while others are intervening strategies that lead to effective implementation and management of RLT, as indicated in Figure 3.5.

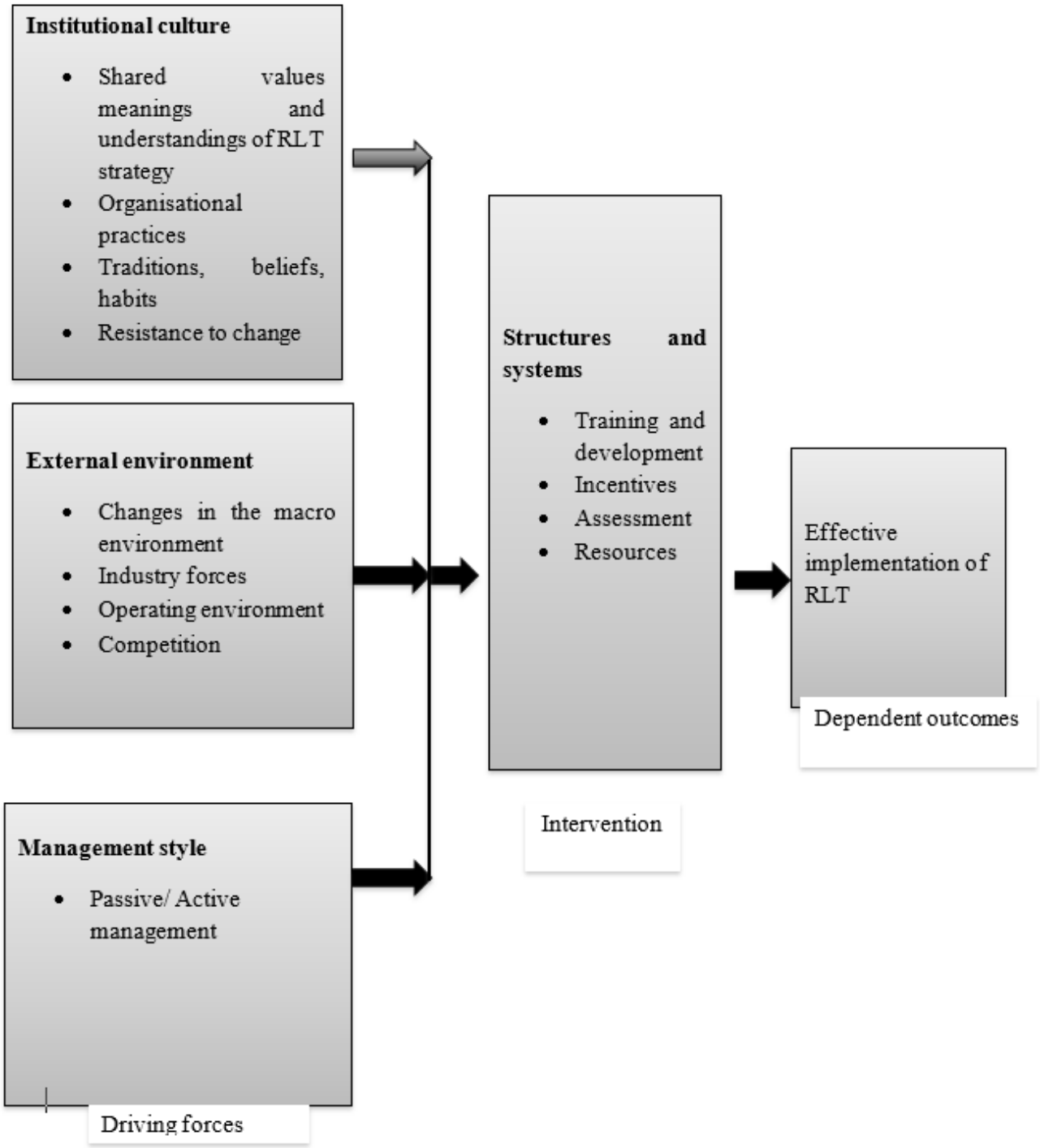


Figure 3.5: A model for understanding the implementation and management of RLT (Own)

3.8 Empirical evidence from studies on the conceptualisation implementation and management of RLT

In this section, I review empirical evidence from studies on the implementation of RLT in higher education. In this section, I present the most important part of the preliminary work that needed to be undertaken in the initial stages of my research. It was my desire to conduct research on something no one has done before, while discovering new realities, expanding on knowledge that is already there and encouraging creativity.

Considering Egger and Carpi's argument (2009) acknowledging the existence of past research findings before one's study is an important part of the research process. I engaged in a search for empirical evidence for a number of reasons. Firstly, I wanted to identify gaps in the existing literature so that I can address them. Secondly, doing so was the only way to ensure that indeed knew knowledge has been generated. With this in mind, this section looks critically at literature in order to identify the gaps that were filled by my research (Majam &Theron, 2006).

It is against this background that the empirical literature review was done. It was meant to establish what is known about the way RLT is conceptualised, implemented and managed in a university setting. Additionally, it is through this exercise that I investigated empirical claims of this published literature and identified the weaknesses or limitations in this body of knowledge.

From the literature review, I observed that studies in the conceptualisation, implementation and management of RLT can be categorised into three themes; 1) There are studies on the conceptualisation of 'research', 'teaching', 'research –led teaching', 2) Students and lecturers perceptions on the value of RLT, 3) The relationship between research and teaching. Over

and above the three, there is very little literature on how research teaching nexus/research teaching link/research –led teaching is managed in Higher Education (Taylor, 2007; 2008).

3.8.1 Ideologies and values of RLT in modern universities

The views and perceptions of students and lecturers on what is believed to be RLT, form part of their ideologies and values. Students, academics, faculties and administrators have put forward a strong ideological stance that there is a positive and mutually beneficial relationship between academic teaching and research success (Roy and James, 2008). This notion goes on to suggest that good researchers make good teachers. Contrary to this believe, are Hattie and Marsh's (1996) research findings from an Australian context . They areviewed 58 empirical studies of the research-teaching relationship to prove or disapprove the relationship between lecturers' individual research and teaching quality. The review made a conclusion that research and teaching are not related. They compete for time and resources.

Hattie and Marsh (1996) in explaining this position, identified three possible categories that explanation the relationship between research and teaching; 1) those who believe in the negative relationship and hold that good researchers are not good teachers. 2) those that advocate for a positive relationship and believe good researchers make good teachers. 3) those who see no relationship between research and teaching. They argue that the strength in either research or teaching does not influence the strength in either one of the two. Malcolm, (2013) took this discussion further through a theoretical study to try and explain the possible negative relationship.

Malcom (2013) argues for three models that explain a possible negative relationship between research and teaching. The first being the Scarcity Model. According to the scarcity model, the two compete for time, resources and academics' commitment. It therefore suggests that the resources invested in the two activities come at the expense of one another.

The second possible negative relationship approach is the differential Personality model, the model suggests that researchers and teachers have different personalities that contribute to their preferences between the two activities. One may want to excel in research and not want to excel in teaching.

The third is the divergent reward system model. The model holds that there are different incentives for research and teaching. Research is privileged over teaching and therefore the rewards are skewed towards it (Malcolm, 2013).

Though Hattie and Marsh (1996) and Malcolm (2013) have presented these findings, they admit that universities must find ways of improving the research-teaching link by creating conducive circumstances for the two to meet. This emphasis can be linked to findings by many researchers (Elton, 1986; Elton, 2001; Elsen et al, 2009; Visser-Wijnveen et al, 2010) who show that lecturers value the link between research and teaching and have great belief in the existence of the link (Robertson and Bond 2002).

This link is often referred to by other researchers as ‘scholarship’ (Brew, 2003), a notion that dates back to the Humboldt higher education ideal; an idea that researchers and students are united in a ‘common pursuit of knowledge’ (Coate et al, 2001).

Empirical evidence from studies carried out seems to echo a contradiction between the ideals alluded to above and current practice. There is an agreement between lecturers and administrators that these tasks are treated differently. Research is given a higher status than teaching (Chen, 2015; Green, 2008; Parker, 2008; Wei & Cheng, 2006) which might be due to problems in identifying quality teaching indicators. These differences can be seen again in the different reward systems (Bennet et al, 2017; Taylor, 2007).

3.8.1.1 Lecturers' and students' perceptions of the research and teaching link

In chapter 2, I noted the definition and characteristics of the link between teaching and research ranging from students as consumers of research to students as producers of research. In this section, I present the perceptions of lecturers and students on the link. These perceptions range from what the research-teaching link is believed to be, to the benefits gained in implementing the research-teaching link.

There is an abundance of evidence from studies conducted in the United Kindom (UK), Australia, South Korea, and Norway on what the link is and what it looks like (Shin, 2011; Smeby, 2003). Some scholars, such as Jenkins et al, (2007), Brew (2003), Taylor (2006) and Healey (2005), argue that research and teaching co-exist, while others like Felman (1987) cited in Gantt and Wakelin (2009) argue that there is a zero relationship between teaching and research. The assertion of a zero relationship has been contested by McLean and Barker (2004) through empirical data gathered from 12 UK universities to assess the progression of undergraduate learning and teaching in history. They argued that though they cannot resolve the issue of wether history teaching must be taught by research active lecturers, active research engagement is not necessary for good teaching. These claims suggest that there is no direct relationship between research and teaching as lecturers who are not research active can also teach. This is the case because Maclean and Backer (2004) suggest research activity is not a requisite condition for teaching but 'a strong condition for developing other teaching goals beyond imparting general skills.

Though there is an argument for a negative relationship, Hattie and Marsh (1996) have advanced arguments for a positive relationship were informed by the conventional wisdom model that proposes a 'devious' relationship which is usually a common belief among academics (McLean & Barker, 2004; Zamorski, 2002). Though there are contradictory beliefs

on the research-teaching link, there is also evidence of an overwhelming belief among lecturers of a symbiotic relationship between research and teaching (Horta et al, 2012; Jenkins et al, 2003; Robertson and Bond, 2003).

What remains unclear in the literature is why the perceived relationship and the positive benefits do not appear in Hattie and Marsh's (1996) meta-analysis? To answer this question, a number of studies (Brew & Boud, 1995; Griffiths, 2004) report that the correlational study restricts itself to a narrow definition of research and teaching. Additionally, the varying conception among lecturers of what scholarship and research is, was not taken into consideration (Brew, 2001), neither were the conceptions of teaching (Ramsden and Middleton, 2008) or knowledge (Robertson and Bond, 2003), which mean different things to different lecturers. The meanings of these concepts are important mediators of the relationship between research and teaching and therefore cannot be ignored.

Neuman (1994) conducted a qualitative study to give an Australian context on the understanding of the research-teaching nexus. The study employed semi-structured interviews on academic managers/leadership, deans and heads of schools in a university that is research intensive. The main objective of these interviews was to find out if there is any relationship between research and teaching. The results of this study have revealed that all the participants believed that the relationship between research and teaching exists and operates at three levels; '1. The tangible nexus; 2. The global nexus; 3. Intangible nexus' (p.161).

'The tangible nexus' relates to instances where teachers/lecturers transmit recent knowledge or facts to students. In this case, lecturers can share with students their ongoing research or research findings from other people's research. Informed by the teaching models discussed in the previous chapter, the tangible nexus places students as consumers of knowledge while adopting the transmission model of teaching.

The ‘intangible nexus’, entails influencing students views on the status of knowledge and their attitude towards knowledge. The ‘global nexus’ focuses more on the departmental or faculty level. Its imphasis is on the impact of research undertakings on curriculum. The tangible and the global level seem to be related because they make emphasis on how research must impact on curriculum development, teaching and on the students.

Another study by Visser-Wijnveen et al, (2010) gathered empirical evidence from the faculty of Humanities of Leiden University; being the oldest university of the Netherlands. It is also regarded as a research intensive university. Data were collected via semi-structured interviews with thirty academics/ lecturers to investigate the typologies of the relationship proposed by Healey (2005) and Griffiths (2004). The typologies consisted of two dimensions of teaching; teaching that emphasised the product of research and teaching that emphasised students as participants or audience in the generation and sharing of knowledge. The study interviewed thirty lecturers from the faculty of humanities. It drew conlusions from the thick descriptions of the ideals of the research teaching linkages as described by lecturers. These ideals were categorised into five areas; ‘show what it means to be a researcher (research-oriented), make research known (research-led), help conduct research (research-based), provide research experience (research-based), teach research results (research-led)’.

Given these findings, I identified gaps by noting that the typologies or models of the relationship do not consider other factors that led to the different descriptions of the relationship. Likewise, Trowler and Wareham (2007) seem to have reservations about the relationship between research and teaching for a number of reasons. Firstly, the conceptions and theorising of the research-teaching link seem to neglect complex factors at different levels, such as disciplinary, space, type of university and the cultures that define groups in a particular setting. Secondly, there is more literature on the side of research benefiting

teaching or affecting teaching and less is said on how the two can benefit or influence one another.

3.8.1.2 Student perspective of the research-teaching link

The student views are also found to be contradictory and complex (Malcom, 2013). A study in Australia by Zamorski (2002) identified differences in lecturers' and students' understanding of the curriculum and research. Hajdarpask et al, (2015) examined the views of two hundred undergraduate students from a research-intensive university also in Australia. The aim of the investigation was to understand student perceptions of the benefits they derive from being taught by researchers, as opposed to non-research staff. The fundamental conclusion was consistent with the findings from other studies (Brew,2006; Brew & Mantai,2017; Schapper & Mayson, 2010; Hajdarpasic, 2015) that found a positive relationship. The results showed that staff engagement with research is critical in encouraging students to take postgraduate courses.

3.8.2 Conceptualisation and implementation of RLT: An African Context

Just like in developed countries, lecturers from universities in developing countries find themselves torn between professional role as teachers and having to address the needs of the labour market (Lubbe 2015). They constantly seek to provide quality teaching and learning experiences while trying to keep the balance between research and teaching, integrate research with teaching and strengthen their research capacities and capabilities. For African universities, achieving this balance has not been easy. There are challenges of; low number of PhD students taking long to complete their studies, limited numbers of funded positions for doctoral and post-doctoral students, high teaching loads and low research budgets, and the absence of a research agenda which reflects the needs of society (Ligami, 2019).

At individual and institutional level, African universities have also observed tensions and contradiction / conflict between the two core activities of lecturers (African Union, 2015). Consequently, these observations impacts negatively on the integration of research and teaching. They also have a significant bearing on how RLT is conceptualised and actualised. It is however evident that, a majority of universities in America, Africa and other developed countries, understand the concept of research – led teaching (Stedman, 2002; Akor, Subari, Jambari, Noordin, & Onyilo (2019) despite the different ways in which they conceptualise it. For example some view it as being one of the teaching methods while others view it as a strategy with different teaching methods.

Ushie & Ogbulezie (2017) reviewed articles and theses on teaching methods in Nigeria, skills need of the 21st century and the 4th industrial revolution. The review further sought to find out how the existing teaching methods impart the needed skills. The study argued that research conducted in Nigerian universities should be translated into teaching. As a result, Ushie & Ogbulezie (2017) argue that RLT must redirect research outcome and use the findings from research for the benefit of student's learning. The utilisation of research are as follows; 'recent research outcomes are built-into the curriculum; research skills are incorporated into assessment tasks which enable the students to conduct research in their disciplines; it also aids the students to learn how to apply the research tools in their disciplines – for instance, simulation software, sophisticated research equipment and primary sources' (p.67). Like other studies that were conducted in the context of Europe and Australia (i.e. Brew 2010; Brew, & Mantai, 2017; Jenkins, Healey, & Zetter, 2007), this study has identified advantages and disadvantages of RLT. The advantages include; in-depth understanding of the skill base of the discipline, enhanced expansion/specialisation of careers paths and transfer of skills for employment, develop independent learning in individual, increased lateral and critical thinking abilities, appreciation of intellectual

property and problem-solving. The disadvantages of RLT according to Ushie & Ogbulezie (2017) are a result of the practises in a university that put tension between research and teaching. For example, they argue that it is difficult to define 50% research and 50% teaching for lecturers. Not only that, they also believe that a good researcher is a good teacher does not hold water. Based on this line of thinking, the two activities are independent of one another.

A study conducted by DeJohn, Frantz & Rhoda (2014) in a university in South Africa investigated academics/ lecturers views and perceptions on experiences of research teaching activities. The study confirmed that lecturers have a clear understanding of research and did try to engage students in the research process. They however argued that trying to integrate research with teaching is complicated by different terms used to mean the same idea; that is research based, research informed, research teaching relationship. Based on these findings, DeJohn et al (2014) concluded that for the research and teaching integration to be actualised, it needs to be facilitated by institutional policy frameworks and strategic plans. These findings are in agreement with Jenkins and Healey (2005) notion that institutional policies and strategies must define how the university or faculty conceptualise RLT and its implementation.

To further speak to the divide between teaching and research, Lubbe (2015) investigated the perceptions of accounting academics and professional accountants in South Africa. The study wanted to find out their understanding of the meaning of research, their role as teachers, and the nexus between teaching and research. The study interviewed lecturers from two universities. According to the findings, accounting lecturers, who see themselves as accounting professionals rather than researchers, habitually have an ambivalent attitude towards research. They see research as valuable for promotion or further studies and not valuable for teaching. These findings are similar to findings from international literature reviewed in a number of ways. I see the issue of disciplinary space alluded to by Drummond

(2012) and Brew (2006). They argued that one's academic discipline and one's interest in research or teaching influences how the research teaching nexus conceptualised and implemented.

This section focused on the context of some African universities and the question is whether these findings are mirror what is the case in Botswana HE landscape.

3.8.3 The research teaching nexus in Botswana

The Botswana government (2008) Tertiary Education Policy-Towards a Knowledge Society clearly sets a goal, 'to increase access to tertiary education, improve quality, and ensure the relevance of the programmes of study…' (p.2). The realisation of this goal, means that there are many elements that need to be put in place. For example, for Botswana the building of a capable and committed academic staff body and nurturing research and innovation at university level is critical (Agachi, 2019). Therefore Botswana's drive ensuring the achievement of this goal is seen in the National Development Plans (NDP) 10 and 11. These plans emphasise a shift from a resource-based to a knowledge-based economy. It is against this backdrop that the Botswana Qualifications Authority (BQA) and the Botswana Human Recourse Council (HRDC) ensures that tertiary education providers demonstrate how they manage research in their institutions. Not only that they expect these institutions to report on their research outputs.

The University of Botswana has sought to contribute to this shift by intensifying research and knowledge creations and be a research-led university by 2021 (Tabulawa & Youngman, 2017). This intention is evidenced by the university's move to put mechanisms of boosting research capacity in place. For example the university sanctioned a number policies including, the Research and Development Policy (University of Botswana, 2002), the Policy on Intellectual Property (University of Botswana, 2004), the Policy on Centres of Study

(University of Botswana, 2004), and the University Research Strategy (University of Botswana, 2008) (Studman & Tsheko, 2007; Tabulawa & Youngman, 2017). Furthermore, UB has one of the best libraries in sub-Saharan Africa and some significant science research equipment, while '63% of the academic staff holds a doctorate qualification' (p.18). One would argue that these are conditions favourable for research-led teaching to be implemented and managed.

Studman and Tsheko (2007) evaluated the above identified strategies for building a research culture at the University of Botswana. The study used a survey method to collect data on 199 lecturers. The study made a number of observations. Firstly there is evidence that the principle of research – led teaching is known to lecturers despite the history of the university being teaching dominated. However my observation from these findings is that though it is known, it is just an aspiration as the findings further revealed challenges associated with the conduct of research as opposed to the implementation of RLT. The second observation made by Tabulawa and Youngman (2017) is that teaching responsibilities have increased in most faculties as a result of increased student numbers. The number of students has led to most staff felling over-committed to teaching. Overall this scenario can be viewed as a distraction for active participation in research and its integration with teaching. It is therefore justified to argue that probably the limited literature on the research teaching nexus, research –led teaching is because African universities realise its importance but constrained by institutional research capacities and capabilities which they are currently finding the need to build.

Studman and Tsheko (2007) study further reported that, of the 199 lecturers 65% alluded to lack of time to do research, too much teaching (69%), too many meetings (49%) and lack of research assistants (42%).

Though not much is known about the implementation of RLT in the University of Botswana, there are some studies done at the UB that speak to the teaching methods used. The basis for these studies comes from an observation that teaching at the university needs transformation for it to cater for students experiences (Bush, 2015). To date, UB through its teaching and learning policy suggests innovative teaching where 'lecturers become pedagogy reformers while students construct knowledge' (Bulawa, Seeco, Kgosidia & Losike-Sedimo, 2017, p.269).

A study conducted by Bulawa et al (2017) though not specifically about RLT, it investigated the mode of content delivery in HE and used UB as a case study. The study was conducted on students from the faculty of education to find out about student perceptions on the teaching methods/techniques used in the faculty. The study revealed that the lecture method is mostly used, followed by group discussions, peer teaching and field work for experiential learning. From these findings it can be deduced that the lecture method is convenient for large teaching load mentioned by Tabulawa and Youngman (2017). It can also be that the method is dominant because of the status of the university as a predominately teaching university.

3.8.4 Positioning my study in existing evidence

Table 3.1 shows a summary of international literature on research-teaching integration. From the literature, various approaches to integrating research and teaching have been identified. There exists literature describing qualitative and quantitative studies that sought to investigate the interplay between research and teaching. Overall, the findings of research studies provided useful insights into stakeholder perceptions of the research-teaching relationship, but made little progress in confirming or clarifying its character or value at sector level.

There is a clear indication that the relationship between teaching and research is complex and so is RLT (Brew, 2003). It is difficult to measure because the core concepts defining RLT are ambiguous.

Healey (2005) has provided a base for the typologies of research and teaching integration that was later modified by others over time. This modification led to the development of different models and the various ways in which students interact with research. Due to the ambiguity of RLT and research-teaching integration, the literature points to possible ways of operationalising the link between research and teaching. There are multiple translations of what RLT is (Brew, 2010; Jenkins et.al, 2007).

Literature that seeks to define the research-teaching integration suggests that it is about the knowledge content or the student's activity (Brew, 2006; Griffiths, 2004; Healey, 2005; Jenkins et al., 2003). It suggests that the integration happens when students are exposed to knowledge content as consumers or generators of it. In view of this, there is a body of literature that seeks to suggest teaching that actualise this link. Griffiths (2004), for example, discusses the different means in which the links between research and teaching can be achieved in academics teaching contexts. Four popular models of the research-teaching nexus, specified as teaching that is; research-oriented, research-led, research-based, or research-informed (Griffiths, 2004). Studies seem to use the labels 'oriented', 'led' and 'informed' interchangeably to discuss the link. This observation makes the differentiation of these forms of integration complex to understand.

There is also a body of literature emphasising that the variety of differences in the research-teaching relationship is dependent on the institution and units within the institution (faculty, departments and discipline). The definition and purpose of the research teaching nexus

cannot achieve clarity because it varies according to academic disciplines (Elton, 2006; Hughes, 2005).

In light of these contributions, there seems to be progress in giving an understanding of what should or can be done to develop the links between research and teaching. This study is contributing to the variety of proposed links applicable to the Faculty of Humanities within a teaching university with the aim of becoming a research-intensive university.

Few research studies have considered the management of research-teaching integration. For example, Neuman (1993) considered the role of academic administrators. Another important contribution is offered by Jenkins et al, (2003) who have used a variety of case studies to indicate possible policy development.

In view of the gaps identified in this section and evidence of literature summary on table 3.1, this research seeks to address a number of issues. Firstly table 3.1 shows that a significant number of studies on RLT and/RTN discourse is from theoretical studies and is of European, Asian and Australian origin. Therefore I make contribution to RLT discourse that speaks to practices in a teaching university in Southern African. Secondly most of the studies are theoretical studies (see table 3.1) which in my view shows limited empirical evidence of studies on RLT. This observation also confirms Taylor's (2007) thought that not much has not been said about the management of RLT/RTN in HEIs. Lastly this chapter has demonstrated that there are many ways of conceptualising RLT and as such, my study adds to knowledge other definition in the context of a developing country university.

Table 3.1 Summary of literature on research-teaching nexus

Title of the study	Authors & Year	Research Design	Context	Key findings/themes
The balance between teaching and research in Dutch and English universities in the context of university governance reforms	Leisyte et al, 2009	Interview & Document analysis	UK and The Netherlands	The university systems treat research and teaching as two independent activities. Funding is on the basis of university performance in research and the same goes for academic assessment.
Examining the research/teaching nexus.	Tight M	Theoretical study		The research and teaching is a necessity for universities today. But it must implemented according to institutional and local context.
The idea research-teaching nexus in the eyes of academics: building profiles	Visser-Wijnveen et al, (2010)	Interview	The Netherlands	Academics identified five profiles of the RTN as: 'teaching results; make researchers known, show what it means to be a researcher, help conduct research and provide research experience'.
The relationship between research and teaching: a meta-analysis	Hattie & March (1996)	Theoretical study	Australia	An analysis of 58 studies have shown no relationship between research and teaching.
Teaching and research: New relationships and their implications for inquiry-based teaching and learning in higher education	Brew (2003)	Theoretical study	Australia	The paper deliberates on different ways in which research and scholarship are conceptualised and then suggests that, if the relationship between teaching and research is to be enhanced it is necessary to move towards a model based on the notion of academic communities of practice.
Research-led teaching: moving from a fractured engagement to a marriage of convenience	Schapper & Mayson 2010	Theoretical study	Australia	This paper supports the link between research and teaching and conclude by proposing a set of principles that are necessary for marrying the two university activities.
Knowledge production and the research-teaching nexus: the case of the build environment disciplines	Griffiths (2004)	Theoretical study	UK	The paper reviews some ideas about the nature and meaning of research, and draws attention to key differences in the modes of knowledge production employed in practice-oriented fields, such as the built environment disciplines, and other fields.

Linking research and teaching to benefit student learning	Healey (2005)	Theoretical study	UK	Undergraduates are more likely to gain more in-depth knowledge when they are exposed to inquiry based learning methodologies.
Imperatives and challenges in integrating teaching and research	Brew (2010)	Theoretical study	Australia	The link of teaching and research cannot fully happen unless the university becomes a partnership where all take part in its growth and development through inquiries at different levels.
RLT and learning in higher education	Zamorski (2002)	Interview	UK	The study provided evidence from students, academics and other members of the university on how they understand and experience RLT.
RLT: a review of two initiatives in valuing the link between teaching and research	Deakin (2006)	Questionnaires & Interview	UK	Students value the link between teaching and research, placing particular weight on RLT and the bearing which it has on the quality of their learning experiences.
A critical evaluation of recent progress in understanding the role of the research-teaching link in higher education	Malcolm (2013)	Theoretical study	UK	Various practice have been categorised, shared and evaluated against broad criteria, but the question about the nature and value of the nexus in higher education remain as yet unanswered within the research theme and within the broader consideration of higher education policy and practice.
The teaching-research nexus: A study on the students' awareness, experiences and perceptions of research	Jusoh, and Abidin (2012)	Questionnaire	Malaysia	Students expressed a great benefit from being involved research activities undertaken at their university. The results of the study could inform the discussion of particular strategies that may be used to strengthen the nexus between teaching and research to benefit the undergraduate learning experience.

3.9 Chapter summary

In this chapter, I discussed the different competing theories and models of implementation and management in order to come up with a theoretical framework that can be used as a lens to understand how RLT can be implemented and managed at faculty and institutional level. There are some strengths and weaknesses observed in the theories and models, therefore, a combination of the different theoretical frameworks within a multi-theoretical framework provides an appropriate lens for this study. As demonstrated in this chapter, the theoretical framework has guided some decisions in the methodological framework that follows in the next chapter.

CHAPTER 4 RESEARCH METHODOLOGY

4.1 Introduction

A research methodology is an articulation and explanation of all decisions made in the overall research process (Creswell, 2009). It entails describing, explaining and justifying procedures to be taken in the entire research process. In view of what methodology is believed to be, it is through this chapter that I outline my methodological choices from existing alternatives. These choices are further related to the process outcome of the research. The previous chapter provided a theoretical background which acts as a lens for understanding the main question:

> *How might universities transitioning from teaching to research-led institutions conceptualise, implement and manage RLT?*

This background did not only underpin the knowledge assertions of the research but also informed how it was conducted. Reflecting on the research question and the theoretical background, I situated this study within the mixed-method research perspective. This choice stems from my personal discontent at the possibility of choosing between the qualitative and quantitative dichotomy. I felt that my research could benefit from the mixing of the two designs. This position was also informed by an observation that careful planned combination of the two data types and analysis techniques can reveal contrasting dimensions of a given phenomenon. This combination often gives an increased chance of in-depth understanding of what is being studied. In the section that follows, I start off by defining the chosen framework while paying attention to the research design. The sections

that follow also explain the philosophical worldviews that underpinned the study and the strategies that were adopted for the investigation and the methods of research. The research method section discusses how I selected the participants, how I used my data collection tools and how I analysed the collected data (Creswell, 2009). Lastly the chapter ends by describing, fully, how my research trustworthiness and ethical considerations were ensured.

4.2 Methodological framework

Creswell (2009) notes that the research methodology is informed by three critical components: research philosophy or research design, the strategy of inquiry and research methods.

Philosophical underpinning

There are philosophical assumptions about the world that underpin any scientific research. Therefore in the section that follows, I discuss how these assumptions informed the way my research was conducted. Creswell (2009) has defined a research philosophy as a set of comprehensible ideas about how data that seeks to describe a phenomenon can be gathered, analysed and used. These ideas condition the researcher to come up with strategies that will be used to collect, analyse and use data. Therefore for this study I made choices from alternatives of interpreting social reality. In so doing, I found the research appropriately locatable in the objectivist and the subjectivist world views.

4.2..1 Objectivist/Positivist world view

Objectivists note that the world exists independently of human consciousness and it is knowable as it is really is. Objectivists, argue that a social phenomenon and its meaning has an existence that is not influenced by the social actors (Bryman, 2001). This means that

human action does not shape a social phenomenon. They claim that the existence of reality that is out there, (Creswell, 2009) has no connection what so ever with feelings of an individual or a group of individuals (McMillan & Schumacher, 2010). This is true of the quantitative research which assesses or measures the causes that influence outcomes. For objectivists, more emphasis is placed on the scientific method, statistical analysis and generalisable findings. Objectivists test hypotheses developed from theories and are also concerned with deductive reasoning through measurement of observable social realities. Consequently, the researcher relies on numerical data to establish cause and effect. Though I agree with objectivists/realists that there can be an 'independent external reality' out there that can be understood through carrying out hypothesis testing and descriptive statistics, I found this belief to be problematic. I failed to believe that one explanation of a reality may be enough to understand the problem I was investigating. I believe that reality can also be constructed and these constructions can have causes and effects that only numbers may not be able to uncover. With this in mind, I tended to lean towards integrating the objectivist's view with the subjectivist's view that truth cannot be determined by numbers.

4.2..2 Subjectivist/intepretivist world view

The subjectivist world view reasons that there is an existence of the world out there that is created by the people who live in it. They construct this world in many different ways through their interactions and lived experiences (Guba & Lincoln, 1994). This world view assumes that realities are constructed, therefore there can never be a reality out there that is independent of human actors (Cantrell, 1993). Therefore its focus is on gaining understanding of the construction of these realities. The subjectivists see the world in the eyes of those who are being studied. As a result, it is interested in first-hand information

that describes people's lived experiences in details. The findings are then presented in such a way that they represent experience and the perceptions from those being studied (Henn et al, 2006). Though the subjectivists advocate for a deep understanding of a phenomenon, the knowledge produced may not be generalised because quantitative predictions cannot be made. Nor can hypotheses be tested with a large population. Additionally, people being interviewed have their perceived reality which may be different from one person to another (Marshall & Rossman, 2006).

The two usually contrasting interpretations of objectivism and subjectivism are supported by a set of explicit and implicit assumptions about social reality which can be further broken down into four interrelated elements: ontology, epistemology, human nature and methodology (Cohen et al, 2000).

4.2.3 Ontology

Ontology speaks to how human actions are shaped and the interaction between social structures and individuals, or the study of being (Crotty, 2003). There are three Ontological assumptions; 1) That there is only one reality or truth; 2) there are multiple realities; 3) That reality is constantly negotiated and interpreted. Ontology therefore places emphasis on what constitutes reality (Scotland, 2012), its form and what can be known about it (Salvador, 2016). It is concerned with human agents' views on what exists or what reality really is. RLT conception and implementation are believed to be context-driven and as such, I seek to present the reality of lived experiences in a particular setting (in a teaching university, that is in Botswana). The uniqueness of the university therefore dictates that I present lived experiences of those under study. Hence these assumptions positioned me as a

researcher to take a stand regarding my perceptions of how things really are and how things really work.

In a nutshell, the preceding descriptions point out that the realist or objectivist researcher takes the ontological position that reality is independent and therefore cannot be influenced by those who know it. On the other hand, the ontological position of a subjectivist researcher is that, reality is made through human experiences of their social world and their interaction with each other (Cohen et al, 2000 p.7).

4.2..3 Epistemology

While ontology is concerned with how reality looks like, epistemology studies knowledge and ways of knowing. It considers understanding that can be picked up by employing different types of investigation and methods of inquiry. In opposing dichotomy between the different methods of inquiry, I decided to move with the pragmatic researcher's effort to replace epistemology with the principle of practicability (Creswell & Plano Clark, 2007). Practicability means that a researcher chooses to collect analyse and mix together any form of data that can assist in answering the research question.

4.2..4 Methodology

The last element in the research process that guided my selection of alternatives is methodology. It underpins the research and its design. Traditionally social research considers quantitative and qualitative methods as incompatible when it comes to reasoning. For example, the qualitative methodologies and methods are associated with inductive reasoning which involves generating a theory. The quantitative methodology and methods are grounded in deductive reasoning, which involves testing hypotheses.

In view of the debates for and against qualitative versus quantitative and the weaknesses and strengths associated with the two, this research borrowed from the pragmatists views. It replaced the connection between methodology and methods and opted for the problem centered plurality methods. I chose the data types and data analysis strategies that were best suited to answer my research question.

Table 4.1 gives a visual summary of how the philosophical elements and the world views informed my methodological choices.

Table 4.1 Elements of the three world views. (Adapted from Creswell and Plano Clark, 2007)

	Objectivist/ positivist world view	Subjectivist/Interpretivist world view	Pragmatism
Ontology	Singular reality	Multiple realities	Singular and/ multiple realities
Epistemology	Distance and impartiality	Closeness	Practicability
Methodology	Deductive	Inductive	Combining

4.3 Justification of methodological choice

Some researchers have coined a phrase ‘paradigm wars’ (Guba, 1990) which deem qualitative and quantitative methodologies incompatible, incomparable, in direct conflict and opposite. Qualitative research lacks generalisability and objectivity Mckim (2017), while quantitative research lacks the opinions and interpretaions of participants.

‘Quantitative research is built on a positivistic and ‘static’ view of reality and because of the objective, ‘disinterested’ position of the researcher, quantitative studies ‘fail to distinguish people and social institutions from the ‘world of nature’ (Chowdhury, 2019, p109). So quantitative researchers do not take into account people’s reaction, reasons behind their action, their historical, lived experience and how it impacts on the action in a ‘thick descriptive manner’. This standpoint did not fit well with my research as I was dealing with a subject that is context driven. For this reason, I needed to take into account lived experiences of participants in my study. The intention of this research was also to come up with a model that informs the implementation and management of RLT. Consequently the need for thick descriptions of lived experiences was critical in informing the development of such a model. Qualitative research was therefore ideal in addressing this shortcoming. However I failed to adopt the use of qualitative research alone because I was aware of the limitations of qualitative data

Informed by debate for qualitative versus quantitative research, I subscribe to Mckim’s (2017) argument that a number of researchers have adopted the use of mixed methods research. The reason behind this choice is to address the critiques for qualitative and quantitative methods. A study on graduate perceived value and quality of mixed methods has reported that they scored it higher and argued that when done properly it caters for every reader regardless of their world view (Mckim, 2017). It is from these arguments that I settled for a combination of the two methodologies.

Over and above these arguments, this thesis demonstrates that there are several benefits that can be derived from mixing the two methodologies. For example, Plano & Ivankova

(2016), Creswell, Plano & Clark (2007) claim the two methodologies can be mixed such that they complement each other as they both have strengths and weaknesses.

This study dealt with a subject that concerned two groups of people; the lecturers and the students. I therefore found it desirable to mix research methods for a number of reasons being for; complementarity, completeness, corroboration/confirmation expansion, and diversity (Caruth, 2013) . Complementarity speaks to obtaining common viewpoints about related experiences or associations. Completeness on the other hand ensures that there is total representation of experiences or associations. By choosing mixed methods, I also wanted to expand my findings to clarify or elaborate on the knowledge gained from another method. The main purpose of my choice was for Corroboration/Confirmation which is used to evaluate the trustworthiness of inferences gained from one method (Caruth, 2013).

The study therefore adopted a concurrent nested mixed method explained later in section 4.5.1. According the concurrent nested research the other method is dominant (Cresswell et al, 2017). In this case, the qualitative method was dominant and the quantitative was less dominant. The combination of the methods were therefore used during the analysis of the finding to achieve a thorough corroboration of study results.

4.3.1 Strengths of mixed methods

According to Gubba (1990) and Creswell, (2009)the purpose of mixed methods can be to triangulate or compare qualitative and quantitative results for convergences and divergences in order to obtain more valid conclusions about the phenomena. Mixing the two methods can further be used to explain what the numbers reveal about a sample. That is

numbers can be used to explain the narratives, pictures and words from the qualitatative data (Johnson and Christensen, 2008). Similary narratives can be used to explain numbers. Another strength of the methodology is that one can generate and test a grounded theory. Additionally, mixing methodologies tackles a broader range of ‘what’ and ‘how’ questions. The two methodologies have weaknesses and it was my intention to use both for purposes of complementarity. Lastly, a combination of the two has assisted in generating more complete knowledge that can inform practice and theory.

4.3.2 Weaknesses of the mixed methods

Though there are more benefits of mixed methods, there are also some weaknesses. The collection of data for mixed methods research can be time-consuming and expensive (Johnson & Christensen, 2008; Johnson & Onwuegbuzie, 2004)., especially when you are a part-time and a self-sponsored student like myself. To overcome this weakness, this study was focused on a small section within the university that is the Faculty of Humanities.

In light of the aforesaid benefits, I was convinced that the exploration of multiple data types would offer opportunities to answer my main research question. This position is also informed by the notion that, social research cannot be separated from the setting it sought to investigate. The research process and its results are moulded by humans and their actions. Additionally, research is influenced by the opinions and the values of those conducting the research. It is against this background that methodological and research design choices were made. The section that follows will, therefore, discuss the research design.

4.4 Research design

In this section I describe the overall study by explaining the framework, or structure of the whole research process (Hammond & Wellington, 2013). I also explain the linkages between the collected data and the conclusions made. This decision was based on the fact different questions are suited by different designs and the kind of information needed by the researcher (Hammond & Wellington, 2013). A research design can therefore be a quantitative, qualitative or mixed.

What follows is a discussion of the mixed-method design, which explains the aim and motivation for the research design process, collection of data and its analysis and access to participants. The section concludes by outlining ethical considerations of the research. This study adopted the mixed-method design order to understand a research purpose.

4.4.1 Motivation and aim of the research design

My research sought to explore the conception, implementation and management of RLT in the University of Botswana (UB) by exploring the research question;

> *How might universities transitioning from teaching to research-led institutions conceptualise, implement and manage RLT?*

To answer this, four additional questions were considered:

1. What convergences and divergences exist in the way RLT is understood by various groups and individuals at UB?

2. How is RLT valued by staff and students in the university under study, particularly in relation to enhancing the quality of teaching and learning?

3. In what ways is the idea of RLT integrated into the university curriculum?

4. What management implications and challenges are associated with the implementation of RLT in universities?

With the pragmatic principles and assumptions in mind, the research questions were central to choosing my research design. I noted from the onset that the topic under investigation will be at two levels: a level where a broad understanding of the concept, process and impact is sought; and a level where I seek to understand the subjective lived experiences of the people in that setting. A mixed-method design was therefore found to be appropriate for this study.

4.5 Research design process

Mixed method research is not about randomly collecting qualitative and quantitative data to investigate a problem. It is about systematically and logically mixing the methods. If it is not planned it may make the integration of methods difficult (Mason, 2006). To effectively mix the methods, there is a need to understand the purpose of each decision made. For example as a researcher I had to choose the most appropriate type of data for answering my research questions (Creswell, 2003). So in mixing quantitative and qualitative approaches, three critical issues were of assistance: priority, implementation and integration (Creswell, 2009). Priority means stating from the outset which approach will dominate the other. Implementation considers the manner in which the data collection and analysis will take place, whether it is going to be sequential or concurrent. Integration looks at where the

mixing is going to take place. That is going to be at the data collection or interpretation of results phase. In view of my research question, this study adopted the concurrent embedded mixed-method.

4.5.1 The concurrent embedded design/case study mixed-method[1]

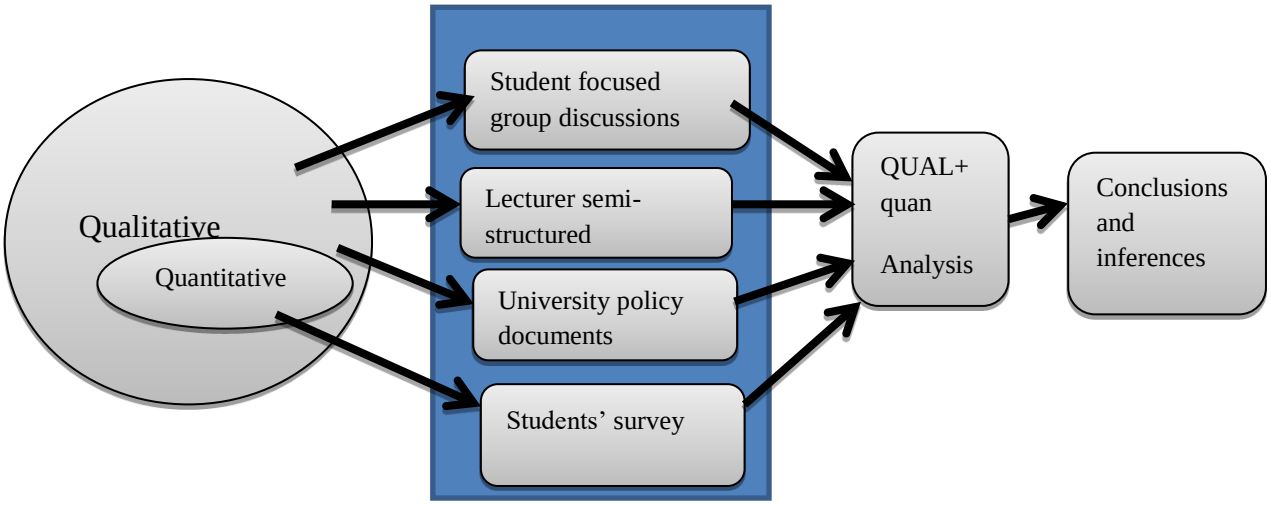
The concurrent mixed-method design collects both the qualitative and quantitative data at the same time. I specifically used the concurrent embedded design, where one method has less priority than the other (Creswell, 2007). This means that the one with less priority (qualitative or quantitative), is embedded within the predominant method. I embedded the quantitative research into the qualitative research with the aim of enriching the sample of participants (students)[2]. Creswell (2003) notes that this design can also be used when a researcher chooses to use different methods for different groups or levels. In this research, while the qualitative method was used to gather data from students and lecturers respectively, quantitative data was also collected from the students. In so doing, I was enriching the qualitative case descriptions (Curry & Nunez-Smith, 2015). The different groups enabled a deeper understanding of the general conceptions of RLT by students and lecturers and how different ways of its actualisation impact on the students, the faculty and the institution. Integrating the quantitative into the qualitative approach was also meant to improve descriptions of the macro context.

[2] The mixed method case study is a research design in which the researcher embeds the quantitative methods within the case study design to enhance the application of the case study for examining the cases. (Plano and Ivankova, 2016)

[2] Enriching the sample of students was based on the background from the literature that there is very little literature that seeks to understand students' perception of their experience in RLT.

4.6 Implementation of the research design

During the implementation of my research design, I collected the two types of data simultaneously as summarised in Figure 4.1.



DATA COLLECTION METHODS

Figure 4.1: Implementation of the research design (Adapted from Creswell, 2007)

The two types of data were used to highlight different dimensions of the phenomenon (May, 2010). The quantitative data were designed to corroborate students' and lecturers' qualitative data on the implementation and experiences on RLT. The qualitative data were designed to examine everyday RLT lived experiences of the students and lecturers. Based on the view that the researcher must explicitly describe where the combination of the two paradigms takes place (Creswell, 2009), the mixing of the qualitative and quantitative data sets happened at the analysis phase of my research process as illustrated in Figure 4.1.

4.6.1 Qualitative design

Denzin and Lincoln (2008) note that qualitative research is an inquiry that focuses on generating understandings about humans in their natural setting. It seeks to understand meanings that are made by participants in their environment by making sense of their lived experiences.

A qualitative researcher collects data and interprets it as it presents itself (Johnson & Christensen, 2008) in its natural setting. The research site and participants are accessed in a way that allows interactions between researcher and participants. This assists in building rapport with study participants (Creswell, 2003). The aim of my research was to get an in-depth understanding of how lecturers and students interpreted and experience RLT in their own unique setting. It is from this notion that the dominant qualitative design was found to be the most appropriate. Furthermore the qualitative design was appropriate for three main reasons.

Firstly, in adopting qualitative methods, I wanted to represent perspectives and interpretations from lecturers in their context as a teaching university. I was mindful of the fact that there are different contextual factors influencing RLT as discussed earlier in chapter 2 and this could only be understood through lived experiences of students and lecturers. Secondly, the qualitative approach can also factor in relevant documents that can aid in triangulating data sets and reach validated, verified, credible conclusions because the different data sets complemented one another. Thirdly, unlike in a quantitative study, interacting with the participants is likely to yield thick descriptions from in-depth sharing of experiences.

Based on this background, I briefly discuss the qualitative research methods that were used to collect and analyse data in the next section. Here I highlight the qualitative research type and the empirical phenomenological methods employed.

4.6.1.1 Case study method

A case study as an empirical investigation that explores a special case in order to get an in-depth understanding of its real–life context (Yin, 2009). Merriam (1998) notes that a case study is a bound system in that the unit of analysis is limited. This description suggests that the case study is constrained to a number of individuals. They may be students, teachers, a group within a community, programme and so on. So because the time for conducting this study was limited, I made a selection of who would constitute the case that I was studying. I also considered that for me to fully understand the lived experiences, I had to confine my study to a small group at the university. Therefore, I selected a group of individuals within a programme, in the Faculty of Humanities.

The benefit of adopting a case study is that it describes the cause and effects in a real–life context. It also acknowledges that the context can define the cause and effect of people's lived experiences (Cohen et al, 2007). Brew (2005) has alluded that the conceptions, students' and lecturers' experiences of RLT depends on the overall context of a university, faculty or discipline, hence lived experieces will vary from one case to another. It was against this background that a case study was found to be appropriate for studying a phenomenon that is context driven like RLT.

4.6.1.2 Population and sampling

My choice for selecting the faculty is based on my learning experience in the faculty as an undergraduate and postgraduate student. It is also based on the fact that the faculty was the first to produce postgraduates since the inception of the university in 1980 (Bailey et al, 2009). Most importantly I selected one faculty within a university so that I can understand, deeply, the subject under study.

Sample

A population is a group of people we want information about and a sample is a small group drawn from this population. The purpose of a sample is to assist in drawing conclusions about the broader population (Creswell, 2009). It also assists when a researcher wants to get a detailed understanding of people's perceptions and experiences. The detailed understanding is made possible by the small number of subjects in the sample, which allows the researcher to quickly get first-hand information through interacting with the interviewees. A sample of students and lecturers was selected from the Faculty of Humanities through a sampling procedure which is described as follows.

Sampling procedure

A sampling procedure is a method that is used by a researcher to choose the sample to be used in a study. In qualitative research, this procedure is more purposive than random. A purposeful sampling procedure is a deliberate method of selecting participants for research (Bowling 2002). In this procedure, the researcher selects a sample which he or she believes is most suitable for his/her research. Consequently, the selection of my sample was based on the assumption participants have information about what I want to know. This decision was based on Dornyei's (2007) notion that when conducting a qualitative research, the

main reason for sampling is to find participants who can give rich accounts of the subject under investigation. The sample was therefore drawn from university students and lecturers with characteristics that are relevant to my study. Informed by Brew (2003) notion that RLT is context driven, the selection was sensitive to the different backgrounds of the participants. I was interested in lecturers years of experience, the disciplnes that they teach and their manrgerial positions. For students I was interested in getting students from different academic disciplines, from different years of study. For lecturers I wanted lecturers in management positions, their academic discipline and their academic ranks.

The convenience sampling allowed me to select a sample in an easy, simple and an inexpensive method. In this way I, as the researcher, conveniently approached the participants and asked them to volunteer to be part of an investigation (Johnson & Christensen, 2008). Drawing from this understanding, selecting participants from the Faculty of Humanities was convenient as I have been a student in the faculty and have had interaction with lecturers within the faculty. This, therefore, helped in gaining entry to the research site.

In settling for the size of my sample, I was informed by Leedy and Ormrod (2005) who believe that in a qualitative study, the sample must range between 5 and 25 individuals who have experienced the phenomena under study. The mix of lecturers is summarised in Table 4.2.

Table 4.2 Demographic characteristics of participants (lecturers)

Participants	Experience / level of profession	Roles
A	• Senior lecturer • Member of departmental research structure (Committee)	• Research, teaching and community service • Coordinate undergraduate research in the department
B	• Professor	• Research, teaching and community service
C	• Professor • Head of department	• Research, teaching and community service
D	• Professor	• Research, teaching and community service
E	• Professor • Deputy Dean Faculty of Humanities	• Research, teaching and community service • Programme development and oversee programme development • Ensure quality of teaching and learning
F	• Lecturer	• Research, teaching and community service
G	• Lecturer • Head of Department	• Research, teaching and community service
H	• Professor	• Research, teaching and community service
I	• Lecturer	• Research, teaching and community service
J	• Senior lecturer	• Research, teaching and community service
K	• Senior lecturer	• Research, teaching and community service
L	• Lecturer	• Research, teaching and community service

Table 4.2 demonstrates that for lecturers, the selection was based on their experience and the value that they bring to the research. For example, three senior members of staff, dean of humanities, three heads of department, a member of the department research committee and three junior members of staff.

4.6.1.3 Qualitative data collection tools

The data collection tools are the means by which information will be gathered from the research participants. For purposes of deep understanding of the lecturers' and students' attitudes, opinions and experiences, the study employed semi-structured interviews and

focus group discussions. It also conducted a document review (university guidelines/policies). These tools are appropriate as they will enable an in-depth exploration and comparison of participants' views (Creswell, 2009; Yin, 2003).

The multiple data collection tools are informed by Yin's (2003) observation that a single source of data may have some disadvantages. The use of multiple data tools assists in addressing the challenges that may be faced when using one method in the sense that they can be used to complement one another.

Semi-structured interviews

The semi-structured interviews were used to obtain in-depth responses of lecturers with regards to their experiences with RLT. This is a qualitative data tool in which the researcher uses a guide with questions and topics that must be covered. Bearing in mind that my methodological choice was guided by my conceptual framework, the research question and literature review. This also guided the development of the interview guide as summarised in Table 4.3 and Appendix 5.

Permission was sought from the faculty to conduct the interviews. I then made plans to start the interviews and administer the questionnaire for students. In order to conduct interviews, the places for interviews were discussed and agreed upon by the researcher and the interviewees. For the focus group discussions, I choose a natural place that took the students away from their daily routine to minimise any disturbances. For lecturers their offices were found to be convenient places for the interviews. The data for the qualitative inquiry was collected during face to face interviews (Lecturers) and the focus group discussion (students). The focus group discussions and the interviews lasted for 45 – 60

minutes. During that time, for each interview session and discussion session I took notes so that I was able to ask more questions to seek for clarification of information shared or ask for additional information. The sessions were also recorded and later transcribed into text.

Table 4.3 Interview guide

Topics	Questions
1. Shared values	a. What do you understand by the term RLT? b. How is RLT implemented in your discipline? c. Why is RLT an essential part of the university? How important is it? d. In your opinion how does RLT enhance the quality of teaching and learning in your university? e. How does the UB encourage you to practice the core values of RLT? f. In what ways does the internal culture of the faculty influence the implementation and management of RLT?
2. Systems	a. What support systems are in place for lecturers implementing RLT? b. What is your opinion of the support systems that are in place? c. What would you suggest for improvement of the implementation of RLT in your discipline and in your institution? d. In what ways do policies and procedures in the university encourage the effective implementation of RLT? e. How are resources allocated for research and teaching at the university? ✓ How does the allocation of resources support the implementation of RLT? ✓ How it is financially supported?
3. Style	a. How does executive management of the institution and the faculty support the implementation of RLT? b. To what extent are the students involved in the strategy execution? c. In your opinion how does the managerial style in UB promote or hinder the implementation of RLT?
4. Staff	a. In what way does the university encourage the implementation of RLT? b. How does the university staff development policy promote the implementation of RLT? c. What staff needs need to be addressed for the effective implementation and management of RLT? ✓ To what extent do you think these needs are addressed?
5. Skills	a. What skills are needed for the effective implementation of RLT? b. How is the university enhancing and encouraging such skills? c. What are the personal challenges that you come across with regards to RLT. d. What are the institutional challenges with regards to the implementation of research-led teaching?
6. Structure	a. What structures are in place for the faculty in management and implementation of RLT? b. How effective do you think these structures are? c. How can they be improved?
7. Strategy	a. In what ways would you say RLT contributes to the internationalisation of the programmes in your faculty? b. How does RLT give UB a competitive advantage in the global higher education market?

During interviews, I covered a number of main themes and questions (David & Sutton, 2004) as illustrated in Table 4.3. In some instances I did not ask questions in the order they appeared in my interview guide even though they were the same questions for all participants. This pattern was influenced by the way the participants' responses to the questions. Some needed more probing than the others. Borrowing from Hatch (2002), probes were provided to ensure that I covered the correct material and also encourage participants to participate more freely in our discussion. This kind of interview extracted detailed information in a manner that was conversational. It provided a conducive environment for participants to be free to share information (Johnson & Christensen, 2008). Such interviewing enabled me to attain rich, personalised information (Mason, 2002).

Focus group discussions.

Focus group can be defined as a cluster of participants that is used to elicit data about the phenomenon of interest. Maykut and Morehouse (1994) refers to it as a group conversation with a purpose, while Krueger and Casey (2009) see it as a carefully planned discussion among a group of participants that seeks to get perceptions and opinions on a chosen subject area. I chose to use the focus group method with the students because I anticipated that some students may not know the term RLT but have experienced it unknowingly. This method enabled individuals to listen to one another thereby sparking new insights that helped develop their ideas through interaction.

To determine group size for focus group discussions, I was guided by Krueger and Casey (2009) who suggest that the ideal number of persons in a group is 5-8. At this size, groups are more manageable. I managed to use a group of seven participants.

In the focus group scenario, I was the moderator. I set the stage with prepared questions or an interview guide (Krueger & Casey, 2009). Questions at the beginning were designed to answer more general issues and also aimed at creating a more relaxed environment (see Appendix 9 for discussion topics).

Document analysis

Document analysis is a systematic study of any written material that has in it, data about the phenomenon the researcher wishes to study. Documents make important data sources in qualitative research because they can be used to triangulate and corroborate information from other sources of data. Merriam (1998) asserts that books, magazines and newspaper articles contain conversations, positions, arguments and descriptions that equate to the feedback obtained during fieldwork. Though there is a variety of sources that can be used, a researcher needs to ensure that the documents selected are credible, authentic and representative. Scott (1990) alludes that authenticity looks at whether the material selected is from the correct source. To assess credibility, I had to ascertain that the documents are officially recognised by the institution. Lastly I also ensured that the documents are representative and relevant to what I was investigating.

In conducting the document review I looked at university documents including university research strategy and the teaching and learning policy. These documents provided preliminary information on how the university views, values and supports RLT.

4.6.1.4 Trustworthiness in qualitative data

Creswell (2009) argues that assessing whether one's research is trustworthy is critical in qualitative research. The assessment of trustworthiness deals with the extent to which the

data, the data analysis and conclusion of your research are believable. It can be established in four main ways (Lincoln & Guba, 1985). These include assessing the research transferability, credibility, conformability and dependability. These were applied in the research to ensure its trustworthiness.

Transferability

Yen (2003) defines transferability as 'the extent to which the research findings can be transferred to another setting or group'. Informed by Flyvberg's (2006) argument that a case study has limited transferability, I had to justify the applicability of my results to cases similar to the one I studied. In doing so, I was guided by Lincoln and Guba's (1999) argument that the researcher has to ensure that ample contextual information is gathered about the site of study so that readers can make such transfers. The contextual information was gathered from documents that explained what the institution under study exists for. The study also ensured that in-depth interviews that gave detailed accounts of themes that were central to my findings were conducted. A thorough description of this context will hopefully guide the readers in establishing the extent to which this particular case study can inform practice in their own setting.

Credibility

Gibbs (2007) has alluded that credibility is about the establishment of whether the results of a study are true, credible or believable. For a research to be credible, the focus of the study must match the data analysis process (Lincoln & Guba, 1999). Therefore, in ensuring that my findings are credible I triangulated the strategies adopted.

Triangulation

Triangulation is the idea of using multiple sources by different methods to increase confidence in one's research findings. Triangulation is also an essential tool that can be used to judge the credibility of the research. In my study the qualitative data was triangulated using the focus group discussions, interviews, a survey and document analysis. Triangulating helped in addressing the weaknesses of a single method (Johnson & Christensen, 2008). Additionally it has assisted in obtaining in-depth information about my research (Yin, 2003).

Conformability

Conformability is the degree to which the findings of the study are what the participants have produced and not the creation of the researcher's bias or opinion (Denscombe, 2007). This topic was driven by my interest and I may have gone in to the field with my own opinion of what is happening. Therefore the multiple use of methods employed in this study minimised any kind of bias that I might have brought into the study.

Dependability

This is the degree to which different researchers using the same methods in the same setting and context would get similar results if the study was repeated. For one's research findings to be dependable, there is need to ensure that the field notes are taken in detail, interviews are transcribed such that cross checking of codes by different researchers is possible (Creswell, 2013).

4.6.2 Quantitative design

Quantitative research serves the purpose of describing current conditions, predicting or investigating relationships using numeric data. To enrich the students' data while corroborating findings from lecturers, I wanted to use numeric data to understand more situations uncovered by qualitative data. Therefore for the quantitative component of my research, I adopted the survey method of data collection. In this section I discuss, what a survey is, how the respondents were selected, the data collection instrument, the data analysis and the data quality.

4.6.2.1 Survey

A survey is a method of data collection from a sample with the intention of generalising the results to a larger population. The survey facilitated in the collection of numeric data about student's opinions and attitudes towards RLT in the faculty. This information was collected from a sample of the faculty of humanities' student population. It is from this sample that generalisations are made about the population. The survey allowed me to make inferences about some characteristics, attitudes and behaviours of this population.

4.6.3 Quantitative data collection tools/instrument

A questionnaire was used to collect the quantitative data. According to Fraenkel & Wallen (2005) the use of questionnaires is preferred by most quantitative researchers hence its adoption. The questionnaire measured students' perceptions of how RLT is practised and managed. The questionnaire was administered in person because it was convenient to explain the research study to the respondents before the students completed the questionnaire. The questions in the questionnaire were closed-ended questions. Answers to

closed-ended questions were found to be quick to analyse and facilitate comparison between answers. Classification questions, which are usually in the form of demographic information of the participants, assisted in establishing their relationship with various RLT conceptions, practices and experiences.

The respondents were asked to agree/disagree with statements provided on a Likert-scale. For example, they were asked to rate their understanding of research–led teaching on a Likert-scale based on its different conceptions as defined by the different RLT models identified from the literature review.

Before the questionnaire was administered it was piloted on students from the faculty of humanities to ensure that the questions in the questionnaire expressed my research intentions. It was from the results of the pilot that items in the questionnaire were revisited and rephrased to eliminate ambiguity.

4.6.3.1 Population and sample

The population for the survey was students in the Faculty of Humanities from which a sample was drawn. A stratified random sampling procedure was used. In stratified random sampling, the population is divided into small groups based on shared attributes. The strata of students were based on their academic disciplines. For example I wanted to have students who do languages, history and libray information studies within my sample. This choice enabled me to measure the variation in responses according to academic discipline and year of study.

4.6.3.2 Validity and Reliability

The validity and reliability of one's research instrument are critical in quatitative research as they help the researcher reduce errors that arise from measurement problems in a research study. According to Cohen et al., (2011) reliability ascertains that when the same data collection method used in one's research is used on another study by another researcher, it will produce the same results. In view of this notion, a reliability test was run using Statistical Packages for Social Sciences (SPSS) to compute the Cronbach's Alpha coefficient. It also measured the internal consistency of the Likert-scale as shown in Table 4.4. This coefficient normally ranges between 0 and 1. Giem and Giem (2003) and Taherdoost (2016) argue that, 'there is no lower limit to the coefficient, hence the closer it is to 1, the greater the internal consistency of the items in the scale'. Taherdoost (2016) suggests a minimum of .7 is acceptable while Giem and Giem (2003) rate it according to the scale that follows;

≥ .9 = Excellent

≥ .8 = Good

≥.7 = Acceptable

≥ .6 = Questionable

≥ .5 = Poor

≤.5 = Unacceptable

Table 4.4 Reliability test statistic

Reliability Statistics	
Cronbach's Alpha	N of Items
.887	33

Table 4.4 shows Cronbach's Alpha reliability test of .887, which according to Giem and Giem (2003), is a good score. Table 4.5 further shows the Chronbach's Alpha coefficient of all the items that were used to collect data on the students' understanding of RLT.

Table 4.5: Chronbach's Alpha coefficient for questionnaire items

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	73.45	309.479	-.209	.891
2	72.36	304.082	.013	.892
3	72.21	298.683	.113	.891
4	72.68	286.977	.396	.885
5	72.26	310.938	-.130	.900
6	73.12	295.147	.384	.885
7	72.49	301.562	.043	.894
8	72.75	287.958	.528	.882
9	72.73	284.806	.542	.882
10	72.11	293.723	.219	.889
11	72.77	274.299	.842	.876
12	72.97	279.175	.703	.879
13	73.01	276.000	.761	.877
14	73.08	279.669	.721	.879
15	71.85	291.429	.321	.886
16	72.56	291.639	.482	.884
17	72.29	286.328	.473	.883
18	72.50	290.481	.366	.885
19	72.57	284.612	.509	.882
20	71.95	285.686	.579	.882
21	72.52	287.319	.421	.884
22	72.02	285.898	.412	.884
23	72.81	271.888	.839	.875
24	71.95	288.038	.396	.885

25	73.03	292.824	.439	.884
26	72.90	288.307	.596	.882
27	73.16	291.190	.447	.884
28	72.81	288.613	.552	.882
29	72.86	296.162	.321	.886
30	72.79	281.909	.566	.881
31	72.77	284.965	.533	.882
32	72.85	281.037	.561	.881
33	72.38	280.035	.553	.881

Validity is about the extent to which a study accurately assesses a specific construct or concept being measured by a researcher (Taherdoost, 2016). There are different categories of validity (Hale & Twycross, 2015). The first is content validity which looks at whether the instrument covers all content that needs to be covered. The second is the construct validity which refers to, 'the extent to which a research instrument (or tool) measures the intended construct'(Hale & Twycross, 2015, p.66). In view of this notion, content validity of the survey instrument was established to check the degree to which the survey items and the scores from questions are representative of all the possible questions about students' conceptions and experiences of RLT. The wording of the survey items was examined by my peers who teach in a university. In doing so, I wanted to be sure that the survey questions are appropriate for what I aimed to measure.

4.7 Analysis of qualitative data

In qualitative research, data analysis is about converting the raw data collected from interviews and documents into research findings. Converting the data is achieved by

making meaning of text, documents' content, observations or images (Creswell, 2009). This process involves, arranging and cross-examining data in a way that allows the investigator to identify themes, see patterns, discover relationships, make interpretations and generate theories. (Hatch, 2002). Qualitative data analysis does not have stipulated procedures for its analysis. Accordingly, Creswell (2003) alludes that there is no one way of analysing qualitative data, making it complex. The complexity in the analysis is compounded by the form of data which is mostly descriptions or narrative of events, objects or processes. Making sense of such data is a challenging exercise that requires the researcher to be systematic in analysing the data.

My study used the deductive approach for data analysis. The data from the interviews and the focus group discussions was coded based on themes that came from my literature review, research questions and the conceptual framework. This approach was informed by the view of Menter et al, (2011) that a deductive approach is adopted when a researcher seeks to discover and test theories. In doing so, the primary codes address the research goal, questions and related concepts. To systematically analyse the data I used guidelines provided by Denscombe (2007) on the steps to coding and analysing interview data.

Preparation of data: In preparing the data, audio-taped, student-focus group discussions and lecturers' semi-structured interviews were turned into text or transcribed word for word.

Familiarity with the data: The second stage involved going though the transcribed data by reading it numerous times so that I am familiar with it. In so doing, a reflexive process where a 'loop-like pattern' (Lambert et al, 2010) of multiple circles of returning to the data

was adopted. During this process I also reflected on my own actions in relation to the impact they can have to the data. With this in mind, questions were asked at the back of my mind in relation to the research question and the theoretical frameworks.

Data Coding: After familiarisation, I carefully read the transcript line by line, applying a paraphrase or label (a 'code') that explained certain things about my research questions. My codes were guided by my research questions, theoretical assumptions and the objective of this study. The codes paid particular attention to particular behaviours, incidents or structures, values that were deemed important to the conceptualisation, actualisation and management of RLT. These characteristics enabled me to summarise and reduce data. The summaries include evidence in the form of quotations. The weighting of responses was observed through evidence that occurred frequently when discussing a topic.

Bearing in mind that Gale et al, (2013) emphasise the importance of having an analytical framework, I adopted Srivasta and Hopwood's (2009) question framework in Table 4.6 to enhance the systematic nature of my analysis.

Table 4.6 Questions that served as a framework of analysis (adopted from Srivasta and Hopwood, 2009)

Question 1: What is the data telling me? (explicitly engaging with the theoretical, subjective, ontological, epistemological and field of understanding)
Question2: What is it that, I want to know? (according to the research objectives, questions and theoretical point of interest)
Question 3: What is the dialectical relationship between what the data is telling me and what I want to know? (refining the focus and linking back to the research question)

4.8 Analysis of quantitative data

The questionnaire data from the students was analysed using the Statistical Packages for Social Sciences (SPSS) software. The data from the Likert-scale type questions was coded and entered into the software and each questionnaire responded to was entered.

The data were then analysed using descriptive statistics to show summaries of the collected data. The research used proportions and cross tabulations to give an analysis of students responses to the items in the questionnaire.

4.9 Analysis of mixed methods design

In the previous sections 4.7 and 4.8 I explain the data analysis for qualitative and quantitative data. My study adopted a mixed method design therefore a mixed analysis of data was adopted. Onwuegbuzie and Combs (2010) argue that a mixed analysis involves the use of the quantitative and qualitative analytical techniques frameworks within the same

framework. Guided by Creswell and Plano Clark (2007) belief that in mixed methods, data analysis consist of an analysis of quantitative data using quantitative methods and the qualitative data using qualitative methods hence the discussions in section 4.7 and 4.8 respectively. In this section I therefore discuss a framework that was adopted for analysing both sets of data.

My study gave a higher priority to the qualitative analysis component therefore my study adopted what Johnson et al (2007) refer to as a qualitative-dominant mixed analysis. In this case, I assumed a constructivist-poststructuralist-critical stance with respect to the mixed analysis process. I was also mindful of the fact that including quantitative data and analysis could deliver richer data and interpretations. The quantitative data was used to explain further the findings of the qualitative data. It was also used to corroborate what the qualitative data revealed.

To systematically analyse my data, I followed several phases suggested by Greene (2007). My analytical framework was therefore informed by these phases. Greene (2007, p. 155) identified the following four phases of analysis: (a) data transformation, (b) data correlation and comparison, (c) analysis for inquiry conclusions and inferences, and (d) using aspects of the analytic framework of one methodological tradition within the analysis of data from another tradition.

This study was mostly qualitative and the first stage was to transform the data as described in section 4.7. Similarly the quantitative data was also transformed as discussed in section 4.8. The second stage was to compare the findings from both qualitative and quantitative data. For this study I combined Greene (2007) analytical framework stage 2 and 3 of

comparing with analysis for inquiry conclusions and inferences. That is, the mixing of the data was done during the analysis and conclusions. In some instances frequencies in responses from qualitative data were recorded and reported quantitatively.

4.10 Research permission and ethical considerations

In addressing ethics in research I considered what is expected of a researcher in as far as the professional conduct of research is concerned. I deliberated on the conduct of research during the process of data collection and after its completion. I started the research with an understanding that a research process can bring in tension between its objective and the rights being researched on. Orb et al, (2000). In light of this thinking, the rights of the participants were considered because, Cohen and Manion (1994) have observed that research can impact on people positively or negatively. To eliminate the negative impact, I had to adhere to research ethical standards. Several ethical values like confidentiality, anonymity and informed consent were observed.

I, therefore, applied for ethical clearance from the University of Witwatersrand's ethics committee. The purpose of the clearance was to ensure that the research adheres to the ethical standards (Appendix 1). In the application, I gave a detailed explanation of how the participants were to be recruited, issues of confidentiality and potential harm at all levels; individual level and institutional levels. For instance, the background of the study was outlined to allow the ethics committee to judge the significance of the research in relation to research ethics. The plans and tools for interviews were also described in the application. It explained how potential participants were to be identified.

Once permission to conduct the study was given by the university more permission was sought from the university under study. This letter was accompanied by a consent letter for participants (refer to Appendices 2, 3). The consent letter explained in detail the main purpose the research and its intended contribution.

During the recruitment of participants, a letter that sought their consent to take part in the study was presented to them. It gave a brief description of the research to be undertaken, its purpose and the benefits of the study to them as individuals, the faculty or the university. I explained to the participants that even though they may agree to participate in my study, they could withdraw from it at any time. They were also made aware that they were free to ask questions about the study or any ethical concerns they may have had (Refer to Appendices 2, 3). In each interview I started with an ethical conversation that included issues of confidentiality, the use of the data and their storage.

For the focus group discussions, I was particularly concerned with the risk of students disclosing information from the discussions. To address this possibility, I arleted the participants of this risk by explicitly explaining it in the information sheets at the beginning of the focus group sessions. A non-disclosure statement was given to the students to sign. The interviews were also audio taped so I assured them that I would be the only one listening to the tape and that it would be destroyed upon completion of the research. At the end of each interview session, participants were given the opportunity to ask any questions or listen to the recorded interview.

4.10 Reflection on the challenges of data gathering

The data gathering process was a critical component of my research journey. It was important that I implement it systematically and correctly to enhance the quality of my study. In my endeavour to do so, I encountered a number of challenges associated with location, confidentiality and accessing the interviewees.

4.10.1 Location

This study has shown that the location of qualitative data collection is very critical and needs to be carefully selected. I carried out interviews with lecturers in their respective offices and this proved to be challenging as there were disturbances from telephones and students coming for consultations. The solution to this problem was to conduct the interviews in a neutral area. However, this proved to be problematic as they could not make it to the neutral place. I had to negotiate with participants to mute their phones and lock their offices for the duration of the interviews. For the FGD with the students, I moved the interview to a neutral place to prevent disturbances that may be associated with their routine activities on campus.

4.10.2 Accessing the interviewees

During data collection, accessing interviewees was not as easy as anticipated. The study wanted to ensure that lecturers with different responsibilities and academic hierarchies were interviewed. Though this was achieved, it was difficult to get to interview those with leadership responsibilities in the Faculty of Humanities as they had other faculty and university engagements.

With regards to the survey instrument, students were not willing to participate. Some would collect the tool and not return it or return it incomplete. It was also difficult to trace students after they left with the survey tool.

4.10.3 Challenges related to confidentiality

This was one of the critical challenges that I encountered. In the letter for permission, I promised that I would not mention the names of the people I interviewed. I have, however, mentioned people's positions and assigned roles such as deans, research coordinators or other leadership positions. For me, this presented a dilemma, as presenting these positions demonstrated the extent to which leadership and structures within the faculty value and manage RLT.

4.11 Chapter Summary

In this chapter I have explained in detail the process followed in conducting the concurrent mixed methods research. It was a mixed method study, in which the quantitative method nested into the qualitative method of data collection. The method was found to be appropriate for understanding a phenomenon that is complex and context driven. The quantitative data from students' questionnaires was used to confirm or corroborate the findings from the students' focus group discussions and lecturers' interviews.

The chapter has also made it clear how the findings were analysed systematically and mixed to answer the main research question. Most importantly it has demonstrated that the integration of the two sets of data were mixed during the analysis and discussion of the findings. Having discussed the methodology in detail, the chapter following presents and analyses data from the lecturers' interviews.

CHAPTER 5: LECTURER'S PERCEPTIONS OF RESEARCH-LED TEACHING IDEALS AND ITS MANAGEMENT

Research has a well-developed structure, discourse or framework for development and evaluation. Teaching doesn't. There is no commonly understood language or frameworks for talking about and developing teaching in the way that there is for research. Brew, 2015

5.1 Introduction

This chapter reports the findings and analysis derived from the research design and methodology discussed in Chapter 4. Most importantly, It reports on the findings to answer my main research question; how might universities transitioning from teaching to research-led institutions conceptualise, implement and manage RLT. The chapter also provides a response to the continuation of the discussions in Chapters 2 and 3 of the study. It further connects to the other preceding chapters in that the collected data are interpreted with the study's purpose in mind. The purpose of the study was to explore the understanding of lecturers and students and establish how these understandings inform the way they implement and manage RLT at individual and institutional level. The presentation and analysis of the findings were guided by the four main research questions that follow:

1. What convergences and divergences exist in the way RLT is understood by various groups and individuals in the Faculty of Humanities?
2. How is RLT valued by staff and students in the university under study, particularly in relation to enhancing the quality of teaching and learning?
3. In what ways is the idea of RLT integrated into the university curriculum?

4. What management implications and challenges are associated with the implementation of RLT in universities and how are these interrogated?

Lastly, the presentation of findings is also mindful of theories, conceptions and what is known about RLT as discussed in the previous Chapters 2 and 3. The presentation of findings is organised into four main sections. The first section discusses the conceptual framework for the chapter. This is followed by lecturers' understanding of RLT and how it is integrated into the curriculum. Then, it looks at how RLT is valued by lecturers in the Faculty of Humanities. The last section is about management and challenges associated with implementing RLT. This chapter concludes by giving a brief summary on the main findings on how lecturers view the conceptions, implementation and management of RLT.

5.2 Conceptual framework

To discuss emerging conceptions of RLT, its practices and management, I draw from the four pillars of integrated theoretical framework discussed in Chapter 4: the environmental factors, the institutional culture, structures and systems and management styles. This was derived from the McKinsey 7S model (Miller 1997) and Taylor (2007).

5.2.1 Institutional culture

It has been a challenge finding a satisfying definition of culture. To draw a broad useful conception for this study, I lend from Robbins et al, (2004), who describe culture as a system of widely shared and strongly held values. In the context of a university, Steyn and Van Zyl (2001) define culture as the overall effects of effects of the 'values, attitudes, ways of interaction, shared memories, the 'way of life' of the university, known by those who work and study in it, through their lived experience. Therefore, for a university to claim a

research-led teaching culture, RLT must be valued by the majority of its members. The elements of culture exert powerful control over the behaviour of those within it. The amalgam of beliefs, ideologies, language, ritual and myths surrounding RLT impacts on how it is conceptualised and managed at the individual and institutional level. Taylor (2007) argues that the institutional mission, beliefs and values, pedagogy (how research is infused into teaching), student recruitment (prospective students wanting to go to research-intensive universities) are ideological factors that shape and drive the commitment to cultivating teaching that is research-led. All these factors have a bearing on the university's ability to implement RLT strategy and deliver results.

For example,

> An organisational culture that intends to enhance quality permanently is characterised by two distinct elements; on one hand, a cultural/psychological element of shared values, beliefs, expectations and commitment towards quality and on the other hand, a structural managerial element with defined processes that enhance quality and aim at coordinating individual effort. (European University Association, 2006, p10).

The claim above goes to show how culture, values and ideologies shape structures, systems and management styles within a given setting.

In line with this particular study, this assumption regards the organisational culture of the institution under study to be attributed by the way RLT is understood and valued by lecturers and the university. These attributes have a significant impact on the lived experiences of those involved in the implementation and management of RLT. They also

contribute to both institutional and individual commitment towards achieving the expected goal. Such commitments become visible in the systems and structures put in place.

5.2.2 Structures and systems

The management of any given strategy in general terms is concerned with effective performance, the setting up of objectives, the design of policies and suitable systems and structures. This process entails planning, organising, directing coordinating and controlling (Saiti, 2012). From the framework discussed in Chapter 3, it is through the structures that the valuing of RLT is observed. The organisational structure hence plays an important role in managing and implementing a strategy. It is a representation of organisational divisions that gives information on who is accountable for what and to whom. The systems are the processes and procedures that guide the business activities and how decisions are made.

5.2.3 Management styles

Drawing from the McKinsey 7S model and Taylor's (2007) model, the idea of style refers to leadership and management style. Leadership styles are patterns of action (shared values and the dominant managerial philosophies) adopted/shown by top managers in an organisation. These patterns can either create or ease difficulties and problems in implementing a successful strategy.

The management of any given strategy in general terms, is concerned with effective performance, setting up objectives and the design of policies and suitable structures to reach the desired goal.

5.2.4 Environmental factors

The context of today's university, as noted in Chapter 3, has a significant influence on the university's business. This notion is critical in understanding the way RLT is perceived and managed. There is a prevalent claim that the social, political and cultural changes in society have impacted on the way research and teaching are related and how they are implemented in a university. These environmental forces can benefit from the link between research and teaching (Karagiannis, 2009) because society and modern market forces expect universities to produce graduates who will be able to use research to inform practice and also contribute to research as proffessionals. So as this demand is continually taking place, great pressure is exerted on universities to perform exceptionally in both teaching and research. This scenario has a significant influence on lecturers' identities which are highly complex, contextualised and dynamic due to organisational internal and external expectations.

5.3 Lecturers' understanding of RLT

If universities are to be research-led in their teaching, engaging students in research to enhance learning becomes a very important aspect of their organisational culture. In this case, implementing RLT comes in many different ways depending on how lecturers value and understand it. Studies conducted before this one have indicated that it can be done through sharing of research findings by lecturers or findings from other people's research with students and involving students in research (Zamorski, 2002). Healey (2005) also suggests three dimensions of RLT: 1) teaching that places emphasis on the the content of research or it's process; 2) teaching that places students as participants or the audience of the teaching processes; and 3) teaching that focuses on student or teacher-focused.

Though the participants perceived the involvement of students in research to be valuable for the faculty and the institution, the findings about the conceptulasation of RLT underpinned by the transmission model of teaching while the IBL model appeared to receive less attention as shown on Table 5.1.

Table 5.1 Lecturers conception of RLT

Participants	Teaching informed by academic's own research	Teaching that emphasis student engagement in research	Teaching informed by other people's research	Teaching that is driven by the needs of the market	Researching one's teaching
Lecturer A	✓	✓	✓	✓	
Lecturer B	✓	✓	✓	✓	✓
Lecturer C			✓		
Lecturer D	✓	✓	✓	✓	✓
Lecturer E		✓	✓	✓	✓
Lecturer F	✓		✓		
Lecturer G	✓		✓		
Lecturer H	✓		✓		
Lecturer I	✓		✓	✓	
Lecturer J	✓		✓		
Lecturer K	✓		✓	✓	✓
Lecturer L	✓	✓	✓		
Total	10	5	12	6	4

Given this picture, lecturers appear to be less inclined to inquiry-based approaches that actually involve the student in the research process. Given this picture, it is reasonable to claim that in the faculty under study, RLT seems to be more dominated by the lecturers (teacher–focused) than being student-focused. The findings seem to suggest that lecturers impart knowledge to the students making the student passive recipients of knowledge

(Healey, 2005). The link between teaching and research is, therefore, achieved through a transmission model that have very little impact on learning enhancement (Robertson, 2007). This is contrary to Healey's (2005) observation that students benefit from RLT when they are active participants or partners in the research process. Table 5.1, shows that the lecturers in this study mostly transfer information to the students during lectures and class discussions or use information to inform their teaching practice and enhance course content.

These findings are not astonishing because the university under study is a teaching university in a shift to becoming a research-intensive university. With this in mind, it is significant to note that the predominant historical context of the institution as a teaching university, made the majority of lecturers more comfortable with the notion of RLT as teaching that is implemented through the transmission of knowledge. This observation complies with Brew (2001), who asserts that the conception of RLT is context-driven. In this case, the historical context of a university as a teaching university has a significant contribution in terms of how it is conceptualised. To justify these beliefs, most lecturers pointed out that the fact that the institution is a teaching university and it has been for a long time, must not be overlooked. Their teaching focused more on delivering content than engaging students in the learning processes of doing research. The irony in these findings is that there seemed to be an overwhelming consensus of the value of student involvement in research but lecturers seemed to resist implementing what they value and believe in. Their stand was also contradictory to what the institutional policy on research expects in as far as research-teaching integration is concerned.

In Chapter 2, I discussed the two types of teaching that can influence lecturers' conceptions of RLT: student-centered learning (SCL) and teacher-centered learning (TCL). For this university, there is a required shift from TCL to SCL to become a research-intensive university and this transition is not a smooth one. This consequence is not surprising because Patria (2012) notes that shifting from the teacher-centered to SCL is an attempt to change one's paradigm, one's belief and, ultimately, one's teaching culture. It is a psychological, dynamic process needing the institutional management to intervene by institutionalising RLT as a core value of the institution. Reflecting on Lewin's change management, the institution seems to be hanging onto the second stage of transition, modifying or changing the existing practice which could be due to lack of support and motivation for those implementing RLT.

In the next sections, I present examples of the different conceptions of RLT and how lecturers implement it to justify the arguments advanced above.

5.3.1 Teaching that is informed by lecturer's personal research

Webster and Kenney (2011) claim that lecturers can expose students to their research in different ways, such as students listening to lecturers reading their research, reading their published work and being engaged in staff research projects. Similarly, participants in this study explained that while teaching, they use their own research as sources to illustrate what is being discussed in their lecturers. These sources can also be used as references for other class activities like group dicussions or just as course reading materials. For example Lecturer 'D' was of the view that teaching is informed by the research one has done such that the teaching is based on that research. Similarly, Lecturer 'L' added that when she was carrying out particular research, she uses examples from her research in her teaching.

Lecturer ‘G’ commented that the findings of one’s research can be brought to class and relate them to courses being taught. Meanwhile, Lecturer ‘B’ stated ‘I have referred students to my work to supplement what I have taught in class in that way my teaching is led by research’. Some argued that they engaged their undergraduate students as research assistants to help them in data collection for their research projects. Students doing interviews, assisting in researching about different aspects of the lecturer's discipline helps students identify their relevancy to the job market and also gives them an in-depth understanding of their discipline.

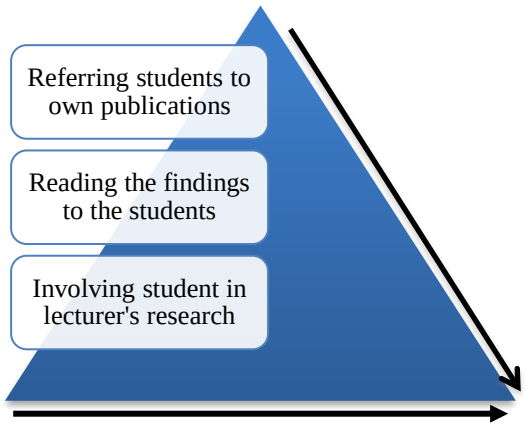


Figure 5.1: Ways of involving students in lecturer’s personal research

In summary, the involvement of students in a lecturer’s personal research can be summarised in Figure 5.1. It depicts that the more students are involved in their lecturer’s research, the more they benefit from the student-lecturer research collaboration.

5.3.2 Teaching that is informed by other peoples' research

All Lecturers viewed RLT as teaching that is mostly informed by research of other people. In this sense, they felt that research involves the reading of publications, journal articles books and book chapters. Lecturers use this type of research article in order to inform their teaching. This notion places students as consumers of knowledge. The emphasis of this notion is that lecturers gain knowledge through reading and researching and transmitting all the knowledge to the students, making the students passive, as noted by Healey (2005) and Patria (2012). The implementation of this idea is so that lecturers are kept abreast with the new changes that are happening in their respective disciplines. For example, Lecturer 'D' emphasised that course content is always changing because there are always the latest findings as opposed to what you might have found previously, so relying on other people's research is inevitable. Similarly, Lecturer 'G' highlighted that their research alone cannot inform everything they teach, therefore using other people's research helps in developing rich, balanced course content. Also on this notion, Lecturer 'A' said:

> *...what you research on must actually inform course content….and you must always borrow from what other colleagues have researched to inform your own objectives.*

Lecturers also alluded that they engage students in literature searches to answer assignment questions, thereby enhancing their critical and analytical skills. It is for this reason that encouraging students to use other people's research in doing their assignments was inevitable.

Lecturer 'B', for example, said in a history lesson,

...I give students assignments, ask them to critically analyse issues using research findings from various researchers.

The findings presented are consistent with Zamorski's (2002) findings in which RLT was understood by lecturers to mean teaching that is either informed by other people's research or theirs.

In a nutshell, this type of RLT appeared to be dominant in the university faculty under study and also varies in the way it is implemented. The variation further continues to show how divided conceptually and in practice the research-teaching link is (Brew, 2006).

5.3.3 Teaching that is driven by the needs of the market

Teaching that is informed by the needs of the market or the industry is one type of RLT that is not common in the literature. Participants in this study emphasised that in developing courses, programmes and course outlines, they are conscious about the needs of industry. This view is in alignment with Brew's (2015) notion that for universities to address the needs of the job market, they need to be proactive and educate students who can fit well in the labour market. Based on this notion, RLT was defined as teaching that delivers content derived from research or a course needs assessment, or teaching that is informed by external forces. For instance, Lecturer 'D' highlighted that in designing the courses, there is a need to, 'respond the needs out there'….

Teaching these days is led by the needs of the country, therefore, we must always be abreast with the needs of the country for us to be relevant.

He went on to say that they are not only interested in the national needs but also the regional and international needs so that they can offer courses that are relevant.

In simple terms, it can be deduced that lecturers believed that teaching is research-led if the curriculum is developed based on the needs of industry, nationally and internationally. This conception can be linked with Brew's (2015) observation that higher education must ensure that its offerings are inclusive of the needs of its stakeholders. Paradoxically, Collini (2011) argues that:

> *There is a need to ensure that those entering universities are not cheated of their entitlement to an education, not palmed off, in the name of 'meeting the needs of employers'.*

In the midst of these contrasting views, the participants' views are characterised bythe popular idea that higher education must contribute to society as a whole. It should contribute to the economic wellbeing of society. Hence, some lecturers felt compelled to build relationships with the industry. For example, one lecturer B said:

> *…the government feel strongly that humanities and education graduates are saturated in the job market, therefore there is more demand to bring courses which are needed by the market….the government is our major funder, therefore, I need to comply and see what the industry needs versus what we offer. In our department, we have the programme marketing committees and the department and industry forums to ensure that this relationship bears fruits.*

Though this conception is new in literature, it emphasises constant curriculum change to suit the changing environment. The question is whether it is practical. Lecturer B went on to answered this question by stating that:

'Though we have the opportunity to scan the environment and identify the need to change or modify our courses it takes years for the process to complete hence there is no agency in addressing such changes….'

5.3.4 Researching one's teaching

Zamorski (2002) also identified another RLT understanding that is not common among academics. It involves lecturers exploring and reflecting on their own practice so that improvements to teaching are made. This notion was emphasised by Lecturer D's idea that teaching is research-led if the kind of research that one does, seeks solutions for one's teaching. That is, researching a problem surrounding one's teaching methodologies or practice to come up with solutions. This is usually done in order to improve teaching practice. For example Lecturer D went on to say,

'….research led hah I think it means uhm uhm teaching which is influenced by the kind of research that one does…trying to link your own ah research with your teaching trying to find solutions for your own teaching using your own research so that as you publish it'

Lecturer 'E' added that in his discipline, library and information systems, students are usually sent for attachments where they would gather information about their experience. Their experiences are then used to improve teaching practice and content.

This kind of teaching can also be related to teaching that is informed by lecturers' personal research in that the lecturer takes his/her research to class after making some reflections about their teaching. The research may include researching student performance, research about practice and the discipline. Lecturers commented that such a practice contributes

significantly to the teaching and learning quality. They felt that the findings from these researches are used to inform practice or give solutions to problems in the teaching and learning of a discipline.

5.3.5 Teaching that emphasises student engagement in research

Some lecturers explained that RLT is the kind of teaching that involves students in the actual process of doing research or generating knowledge. Lecturers ‘A’ and ‘B’ highlighted that there are aspects of this kind of RLT in the faculty for few selected undergraduate students who are about to complete their degrees. This kind of RLT involves teaching-research methods, collecting data, analysing and writing research reports. Lecturer ‘A’ also highlighted that they involve students in research by exposing them to research seminars so they gain a feeling of engaging with the whole research process and other researchers.

The discussed perceptions on the way lecturers understood RLT, can be summarised by grouping them into five categories. These categories have different benefits to the students, the lecturer and the institution. Figure 5.2 shows the reconceptualisation of RLT based on the voices of the lecturers.

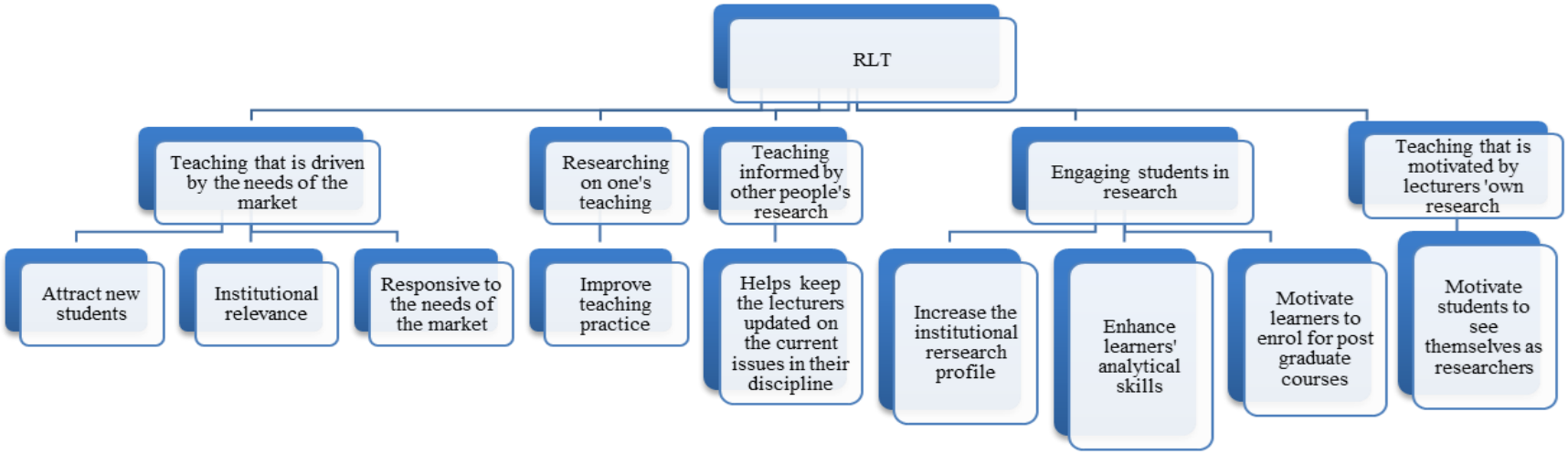


Figure 5.2: Reconceptualisation of RLT (Own source)

The section that follows discusses lecturers' perceived understanding of the benefits of RLT.

5.4 Lecturers' perceived understanding of the benefits or values of RLT

This section reports lecturers' perceived understanding of the values of RLT to the faculty, students and institution. In the previous chapter on the conceptualisation of RLT, the amalgamation of research and teaching was typically presumed to symbolise an academic identity (Robertson & Bond, 2005), enhance both research and teaching (Deem & Lucas, 2007; Robertson & Blackler, 2006) and prepare students for the changing complex world (Brew, 2003, 2010; Clark, 1997).

Similarly, these studies have also shown that participants perceive RLT to have more positive impact on both lecturers, students and the institution. The section that follows therefore reports on the major themes revealed by lecturers explaining how RLT teaching was alleged to benefit or impact student learning and teaching profession.

5.4.1 Lecturers' perceived benefits of RLT

The benefits of RLT are not only seen on the students but also on the institution as a whole and the lecturers themselves. For the positive impact, lecturers reported that RLT can help develop students who can fit well in the world of work. While for the instutional benefit they indicated that RLT gives a university a competitive edge and attracts local and international students. Similarly they revealed that it motivates students to enroll for higher degrees. The section that follows presents these benefits as revealed by lecturers.

a) Development of employment skills

In terms of preparing students for the world of work, lecturers said that students' involvement in research as knowledge producers or as analysts of existing findings from other researchers assists in the development of skills needed for employment. They indicated that this engagement helps in developing both soft and technical skills. For example, going out to collect data from people helps them develop people skills while reading and analysing research findings from other people equips them with analytical skills. These findings are consistent with Zamorski's (2002) finding that lecturers agree that undergraduate students must be involved in research so that they acquire research skills that can assist them later after completing their studies. For instance, lecturer ('B') indicated that,

> '*..Intensive linkages of research with teaching leads to production of very good graduates who are able to grapple with issues of research …be analytical, be problem solvers...' ('B')*

They alluded that conducting research can help students learn skills that can help them analyse and understand problems in a real life context. This notion is in agreement with Brew's (2006) idea that the integration of teaching and research in HE is critical for the preparation of students to enter the 'super complex societies' that they will be required to work in.

b) Enrollment for higher degree

According to Zarmoski (2002) and Healey (2005) engaging students in or with research helps them understand deeply their discipline. Lecturers confirmed this view and indicated that such a deep understanding of the discipline forms the basis for students wanting to develop more by enrolling for master's degrees. They further alluded that

encouraging students to do research makes them independent learners who can anlyse and solve any problem later in their lives. One lecturer said,

> *By allowing my students to be involved in collecting data for my research,… this might help them to have better understanding of the theories they have learned in term of research methodology in the course prescribed book in a relation with the reality.... (Lecturer 'E')*

> *By developing a strong research interest among students, I was encouraging my students to develop an expertise in that area and publish research. (Lecturer 'F')*

> *It was a very useful way to really promote student learning autonomy or to promote a culture of inquiry learning to enhance student learning when they were doing research. (Lecturer 'B')*

They went on to indicate that when students are invited to staff seminars, panel discussions and conferences, they begin to imagine what it's like to be a researcher, or 'see themselves as researchers' (lecturer 'B'). He said,

> '*…as students interact with scholarly work of their lecturers and that of other lecturer's, they are inspired…They look forward to further engagement with lecturers in their discipline'.*

Lecturers indicated that there are students who do research in their final year. These students later enroll for masters. An example was given in the history department where students were admitted into universities abroad because of their performance in their final year research projects (lecturer, 'B').

In this regard, students' involvement in research does not only benefit the student but

also benefits the institution. According to lecturers, RLT related activities are an indication that, within an institution there is a community of scholars that consists of students and their lecturers. This observation make an institution attractive to other institution and prospective national and international students. Lecturer 'E' said that,

> *We want to do research because we want to be the best among the best…. We want to make an international mark so that we attract student and staff from other countries.*

The scholarly engagement between student and lecturers also increases the chances of faculty collaboration with other universities. According to lecturer 'B' institutions of higher learning want to collaborate with universities with a high research profile. For this reason a faculty with a strong RLT culture has a competitive edge.

c) Benefits to lecturers

Lecturers indicated that as they read other peoples research they begin to see and appreciate what other researchers have done in their discipline. This gives the lecturer the confidence that up-to-date, researched lectures that are based on evidence from these researches are given to students. For lecturers, this develops their expertise and makes them more effective.

In terms of lecturers doing research, they indicated that they are able to improve their teaching while increasing their publication profiles. Publishing gave them the confidence to deliver to the students. It gave them authority in their subject areas and gain practical experience in research. The acquired experience is then transmitted to the students by exposing them to the experience of conducting research or reading the research findings. For lecturers doing research also helps them meet the university promotion criteria (Lecturers 'D', 'E', 'I').

They also pointed out that they sometimes conduct research about their teaching practices and course offerings. To them this is a form of RLT that enhances the quality of teaching and learning. Lecturer 'E' asserted that,

> *'... it is really important to have that kind of action research approach within one's own teaching practices because we are able to evaluate the impact of the teaching practice on the students and enhance the quality of content delivery.'*

So this benefits the lecturers because it gives them the assurance that what they are offering is what is needed by the students or labour market.

These findings are consistent with the benefits reported in the literature of the involvement of students in research in order to promote; a deep level of understanding of the subject/discipline, increased research skills, benefits for future employment (Healey et al., 2010), development of a critical attitudes towards employment and student motivation to learn (Van der Rijst et al., 2013).

5.4.2 Lecturers perceived negative impact of RLT

This study is consistent with other studies which have reported that RLT has more positive impact than negative impact (i.e. Brew, 2006; Robertson & Blacker, 2006; Jenkins et al, 2007). However there were some lecturers who suggested that RLT may have negative impact on both students and lecturers. Firstly, some participants noted that because they are expected to do research and publish, they sometimes find themselves spending more time on research to meet their promotion criteria. '...we are promoted on the basis of our research' lecturer 'B' said. This makes them neglect their teaching responsibility. One lecturer gave an example of their course outlines that take a long time to be reviewed.

Another challenge with emphasing on research is that, students need theoretical grounding in their respective disciplines and focusing on imparting research skills may deny students that opportunity. The following statement illustrates this negative impact:

> *If lecturers only taught what they researched, there would be huge gaps, as some research topics are so narrow and cannot be drawn on to inform teaching. (Lecturer 'D').*

This notion suggests that for lecturers, teaching needs to cover a broad perspective of undergraduate student disciplines and too much emphasis on the research-teaching link may threaten that. It is also believed to have a possibility to make courses too specialised and narrow. Consequently, on a similar note, Taylor (2007) has alluded that, the research –teaching connection is more evident in post graduate degress than in undergraduate degrees. Therefore, lecturers reasoned that the link between research and teaching is more visible in higher degrees.

> *Another disadvantage could be that RLT could sound like 'self-centered' to students as they hear their lecturers talking about their own research. (Lecturer 'C')*

Lecturers may spend more time in class trying to engage students in research activities rather than teaching critical concepts that will enable them to perform those activities. Lastly, there was a view that implementing RLT through engaging students in the research process can be a challenge. This challenge comes from the fact that, research requires a significant amount of time and a high level of analytical and critical thinking skills. Students may not have developed these skill during their initial years of their studies. Lecturer 'B' said, taking students through the process of conducting research before they fully develop the required skills may make students develop a negative

attitude towards research. One further went on to say that 'involvement in research may lead to students developing a negative attitude towards my course thereby giving me low marks for my teaching assessment'.

5.5 Management of RLT in the faculty

There is a body of knowledge that emphasises that culture, organisational structures, systems, leadership and groups of motivated people are essential for effective strategy implementation and management (Robbin et al, 2003). In formulating the strategies the university aligns itself to the current environmental issues external to the institution. Borrowing from this school of thought, management of strategies here deals with the implementation of policies, strategies and the day-to-day operation of the university in as far as RLT is concerned. The university under study has been a teaching university for a while. As a result, it has made efforts to put in place systems and structures to effectively integrate research and teaching.

5.5.1 Structures and systems for effective implementation of RLT

Lecturers shared that the effective implementation of RLT can only be possible if there is funding that encourages research teaching integration in undergraduate progammes, up-to-date research infrastructure, incentives for staff who make effort to involve undergraduates in research related activities and promotion of a culture of research. They also emphasised that for them to effectively implement RLT there is need to have a culture of research within the faculty. This culture is encouraged by the systems and structures that are put in place to support and build research capacity and capability.

In this study, systems are practices and procedures that facilitate implementation of institutional goals (Murphy & Willmott, 2010) and these include policy and policy guidelines for implementation or execution of a strategy.

5.5.1.1 Institutional research and teaching policies

The term 'policy' appears to be a most contested one because it has seen numerous definitions over the years. Even though this is the case, this study adopts the conception of policy as the institution's position regarding the execution of its mandate. It directs and facilitates activities and decisions in handling a group of people during the implementation of the institution's mandate (Dye, 2005). Policies were, therefore, a significant source of information for this study. They show the institution's intention to support research-teaching nexus.

I also note that a policy describes means meant to affect people's actions, behaviours and directing the staff and the institution to a specified direction (Mwaikokesya, 2014). This study reviewed two policies: the Institutional Research Development Policy and the Learning and Teaching Policy, which I perceived to address issues of the research-teaching link. These policies present official statements, intentions and courses of action, related to the the implementation of institutional goals and objectives (Cloete & Bunting, 2013). In this regard, the review of policy sought to reveal the objectives and commitment by the institution to the research-teaching nexus.

The institution under study developed a research policy whose main goal is;

> *'….to develop a research culture that encourages and rewards excellence in research, innovation and development, builds research capacity, generates resources, builds knowledge which enhances teaching and outreach activities, and leads the University towards the realisation of its Vision and Mission'*. (University of Botswana Research Policy, p3)

Moreover, the policy further acknowledges the need to link research with teaching and 'encourages research-teaching nexus' (p3). The policy was followed by the

development of a research strategy, whose aim was to increase and encourage active participation of lecturers in research by increasing the number of graduate students and graduate programmes.

The teaching function also follows the same approach as the research function, as there is a teaching and learning policy. With regard to the teaching and research relationship, it seeks to improve the integration of research and teaching by promoting RLT. The strategy purports to provide an environment where teaching staff are active in research and are able to include, in their course, findings from their own research and up-to-date research findings from other scholars.

The university also seeks to enrich the curriculum by promoting inquiry-based attitudes among students through its policy for Teaching and Learning. The Policy also encourages and supports RLT that includes up-to-date research viewpoints, findings and processes into the curriculum. In supporting RLT, the policy

> ‘is based on the principle of ‘intentional learning’, which puts an emphasis on pedagogical strategies that encourage active learning, the achievement of learning outcomes and the development of self-directed independent learners who have learned how to learn ’(UB Learning and Teaching Policy, 2008).

From the review of the documents, it is evident that the institution values and believes in the research–teaching connection. Through its teaching policy and the research strategy, the university directs lecturers to ensure that their research and teaching are integrated.

With these policies in place, comes the issue of implementation which is realised when there are support systems that enable staff competencies, skills, attitudes commitment and motivation.

5.5.1.2 Support structures for implementation of RLT

The effective implementation of RLT can be realised when the university closes implementers skills gaps, avails resources and incentivises evidence of effecting RLT in a faculty (Taylor 2007; 2008). From the perspective of lecturers, the implementation of RLT needs structural procedures to be in place, desirable research-teaching integration behaviours and reinforcement and dissemination of good practice. Lecturers' views on the appropriate structures for implementing RLT placed emphasis on the importance of structures that motivate a research culture. They reported that the Office of Research and Development (ORD) has in place structures for research development. The research development approaches were categorised as follows: Support for research dissemination, rewards for research uptake, structures and procedures for the conduct of research and research capacity development.

a) Support for research dissemination

The university has set out systems and procedures that enable academics to disseminate their research outputs in different platforms of the academia locally and internationally. Lecturers indicated that they are financed to attend conferences to share their research findings. There are laid-down procedures on how to apply for such support. Lecturers indicated that they form part of this structure as they have representatives in departmental research committees.

b) Reward for research uptake

Lecturers shared that rewarding the research uptake was another way of showing the university's stance in supporting a research culture. In this approach, different rewarding strategies are adopted in order to encourage the research uptake among academic staff. In this case, lecturers are rewarded through the promotion criteria which spells out the requirements in as far as research output is concerned.

c) Structures and processes for the conduct of research

The university has in place structures and procedures that guide the institutional conduct of research under the management of the Office for Research and Development (ORD). The office has developed a number of policy frameworks that guide research activities within a university. These include, Research Ethics Policy and Intellectual Property Policy.

Lecturers acknowledged the existence of structures under ORD that sought to support research. For the institution, this shows its seriousness towards promoting a research culture as pointed out by Altbach (2007) and Nguyen (2016). Though they were appreciative of the support for research, there seemed to be very few structures in place for developing research-teaching integration. Therefore lecturers felt that there was a lack of recognition for implementing RLT practices. Lecturers explained that it is almost impossible to align their research interest with their teaching interest when there are faculty and institutional demands to excel in research (Lecturer 'B', 'C', 'D'). they argued that, currently, the institution, through its research development (RD) structures, places more emphasis on research productivity.

Lecturers also argued that the promotion criteria focus more on the production of research outputs and thus gives a lower status to teaching. Given this scenario, the research teaching linkages become difficult to actualise in undergraduate programmes. This observation is consistent with Taylor's (2007) observation that though universities emphasise their mission to ensure that teaching and research benefit each other, formalised university goals are mostly not actualised by existing strategies and reward systems.

These findings are also consistent with the general view that the evaluation of

performance among university academic staff is skewed towards research indicators and that practice seem to growing (Taylor, 2007; Ter Bogt & Scapens, 2012). The performance indicators for teaching are not well defined when compared to those of research performance. This difference makes it difficult for lecturers to give the two activities equal attention.

The other structure that was highlighted as a driver for motivating a research culture is the existence of a 'world-class library'. This is in line with Altbach's (2013) and Shin and Lee's (2015) thinking that for a research institution to be successful, it needs a well developed library, high quality laboratories, seminar rooms, classrooms and fast internet connectivity. Internet connectivity assists students and lecturers to have access to various sets of rich data and current research findings. Availability of such resources according to lecturers surely has a contribution in cultivating a culture of research among students and lecturers. According to the dean, the existence of such a library and the provision of internet access supports the practice and implementation of RLT because students are exposed to a wide range of research from a community of scholars.

d) Research Capacity Development.

The capacity development deals with the research developmental programmes for both students and lecturers so that they are able to execute the institution's research agenda. Lecturers indicated that the university does give support in terms of availing financial resources for research capacity building. This capacity building is in the form of workshops and seminars.

5.5.2 Leadership role in managing RLT

Having discussed the factors that influence the management of RLT, this section discusses the way RLT it is managed in the faculty. I noted in chapter 2, Schapper and Mayson's (2010) view that RLT is a strategy that has been adopted to enhance the quality of teaching and learning in a university, hence its implementation needs commitment from all levels of the institution. Most importantly, leadership must believe in the research-teaching integration, encourage and resource it.

The preceding view comes from the fact that leadership is a key contributor to sustained improvement in any given institution. Kanji and Tambi, (2002) assert that the notion is particularly true for the improvement in HEIs. From this case study, effective leadership suggests that the institution deliberately decides on its strategic direction (Osseo-Asare et al, 2007). This is to say that the university leadership must be directly and actively involved in deciding what the research teaching nexus must look like.

Taylor's (2007) model of research-teaching nexus, as discussed in Chapter 3, suggests that the response of leadership to implementing RLT may either be passive or active management. Passive management leaves the responsibility for understanding and implementing the RLT strategy to individual staff. Active management on the other hand adopts an interventionist approach by management in the development and assessment of RLT (Taylor 2007).

These contrasting management styles are largely influenced by the differences in the balance between the environmental cultural or ideological factors. Taylor (2007) postulates that the predominance of ideological factors result in passive management of RLT. The findings from this case study suggests that management of RLT in the Faculty of Humanities tends to be more passive because management has the

responsibility to understand and implement it. This standpoint supported the deputy dean's position that 'after developing the faculty strategy and plans, lecturers are expected to demonstrate how they integrate their research into their teaching. There is no documented evidence from the faculty on how this integration is done, nor is there any performance measure for the level/rate of implementation.

Correspondingly, passive management also takes cognisance of three activities: curriculum development, stimulating research and quality and relevance. Curriculum development, in this case, can be used as a tool for managing RLT. It involves how the curriculum is planned, actualised and evaluated. Most importantly it also considers what are the people, processes and procedures needed for effective implementation (Taylor, 2007). For the university under study, there are efforts to plan the curriculum based on the needs of the external environment. Some lecturers made mention of how they have set up committees that foster industry-faculty collaboration. From these forums, lecturers are able to gather the industry needs and incorporate them in the curriculum. The work-placement/internship scheme also facilitates curriculum planning as students come back with reports from their attachments. The dean, for example, acknowledged the value of feedback from internships in shaping the curriculum.

5.5.3 The role of cultures in implementing and managing RLT

Robbins et al (2004) have argued that, 'culture' is a critical element in the implementation of a change initiative. Its importance comes from the fact that, it is more difficult to change culture than it is to change structures. Since culture is something that is learned over a given period of time, it can influence the behaviour of people in an institution. As a consequence, the organisational culture influences the implementation of policies and strategy and ultimately the organisational performance (Tsui et al, 2006). Organisations learn behaviours and values through policies, manuals, rules, regulations

and management behaviours (Hladchenko et al, 2016; Miroshnik, 2013). The university under study, being a teaching university, has been characterised by beliefs of transmitting knowledge to the student. In contrast to this belief, research-teaching integration thrives in an environment where there is a strong research culture (Brew, 2003; 2010). To understand the institutional research culture, it is perhaps ideal to understand the concept 'research culture'.

5.5.3.1 Research culture

Hazelkorn (2005) defines research culture as an 'intellectual seed-bed' that is necessary for a sustained and productive research undertaking. It also, encompasses lived experiences of an organisation grounded in beliefs and values that facilitate the pursuit of excellence in research (Parse, 2007). In my view, this claim is an indication that a research culture is a reflection of principles, attitudes and beliefs regarding research that are held by the management, students and lecturers. The university under study has, in place, structural and procedural RD initiatives. The presence of a research office, instruments that facilitate the good conduct of research (i.e. ethics policy) and the incorporation of research into the university mission, lecturers' career advancement path and the promotion criteria are indicators of how serious a university is about developing research. Therefore the university has taken a strategic move to cultivate a culture of research which, according to Brew (2003), is very critical in the implementation of RLT.

From the management point of view, the establishment of structures shows the institutional position in the value of research and how it benefits teaching. However, in the findings, lecturers felt strongly that the institution values research over teaching. For example, some lecturers said that the common practice of delegating teaching

responsibilities to junior lecturers or teaching assistants for them to have time for research is indicative of the value research has over teaching. One lecturer insisted that:

> *Lecturers can just do desk research and teach…. because as a teaching university we just transmit knowledge to the students so the teaching responsibilities can be given to junior lecturers or teaching assistants.*

In contrast, some lecturers were of the view that benefits can be derived from involving the involving graduate students like PhD students or postdoctoral researchers. They are are given the opportunity to transfer their research work and experiences to the students they are teaching hence actualising RLT. They can also use their teaching experiences to strengthen and inform their research activities. In doing so, lecturers believed that post-doctoral students and PhD students are able to experience and appreciate the research teaching relationship earlier in their career lives.

Polk (1989) notes that 'the institutional values and norms, the researcher knowledge and expertise and institutional material are artefacts essential for developing a research culture. For the university under study, the ORD is responsible for supporting nurturing and reporting research undertakings. Most study participants acknowledged the significant role played by the Office of Research in supporting the development of a culture of research. They, however, indicated that though there is support through structures and systems, there is very little motivation for research (Lecturer 'B'). According to the participants, because RLT thrives where there is a culture of research, it is not fully implemented because of insufficient financial resources to conduct research. Lecturer 'B' for example notes:

> *'…that research-led teaching is encouraged by the faculty and the institution but I don't think its implementation is monitored….there are no mechanisms in*

place to track its implementation, so it is assumed that our research is integrated with our teaching.'

Given these shortcomings, lecturers went on to allude that a culture of research-teaching integration will exist when the implementer is encouraged or supported by the head of department, dean or other persons in university authority. They also expect the authorities to have a keen interest in disseminating practices of RLT.

According to Lewin's change management model, there is a need to reward short-term wins so that the change is embedded in the organisational culture. There seemed to be a prominent voice among lecturers of the enforcement of a research culture through a well-defined assessment and reward menu, while not much is said about the research-teaching integration. In suggesting solutions to this shortcoming, lecturers stated that the institution should have a policy establishing parity between research and teaching, including for purposes of promotion.

5.6 A reflection on lecturer's responses

The findings in this study have revealed some varying responses when it comes to issues related to the management of RLT and how it is conceived. These variances were according to management level and disciplinary space. The issues of policy awareness and what is expected of lectures in relation to it, was mostly well articulated by an executive manager. While some head of departments (HODs) and lecturers had knowledge of what RLT is but not aware of any governing systems and structures ensuring that it is actualised. For example Lecturer C said,

'……*research led teaching I had never seen that term before being*

used but I have used that concept in my teaching, so sometimes there is a concept is floating somewhere in the air... ...but then you do things that coincide with that concept….'

This statement suggests that while lecturers are aware of what RLT is but they do not associate it to the mandate of the institution. They seemed to agree that it therefore up to individuals to see how it is implemented.

Another observation is that the issue of disciplinary space picked by empirical studies by Healey (2005) also persist in this study. For example lecturers who teach English, indicated that their research is aligned to what they teach. He said,

'…..I teach Lexicography…. so Lexicography deals with dictionary writing systems ….. , I also sit by the way on the Afrilex committee. Afrilex is an association of African Lexicographers so … the kind of issues that we raise in our research in our publication do filter in into our teaching, for example, we have designed our course in Lexicography for Masters based on some of the latest trends from our publications...'

In contrast, one history lecturer showed that his research interests are sometimes different from the discipline he teaches. For example, he said that in teaching history, one may be concentrating on the history of a particular area. He said,

'…….I myself I teach East Asia, Japan and China but really my research interests are particularly on issues of land and politics in Botswana. Whereas when you look at what I cover in class, it has nothing much really to do with the land issues and whatever…'.

5.7 Chapter Summary

The overall goal of this studuy was to explore lecturer's ideals, varied understandings, implementation and management of RLT in the faculty of humanities. Consequently the results from lecturers have revealed that there are various ways in which lecturers described RLT. These desciptions included, 'teaching research findings', 'making research findings known', involving students in the research process by providing students with the experience and help to conduct research.

The findings also revealed that both the university and lecturers value the integration of research into teaching. For the institution the policies reviewed have shown a clear commitment to research teaching intergration because of its ability to improve the quality of teaching and learning experience. Similarly lecturers also expressed different ways in which students can benefit from RLT. However, eventhough RLT is regarded to be of high value, the study identified a gap when it comes to the actual integration into their own teaching and the curriculum. There are a number of factors contributing to this gap, one being that of the university culture of historically being a teaching university. For example, most lecturers still see themselves as knowledge transmitters because their university is a 'teaching university'. Another factor is that there is no systematic way of documenting practices of RLT in the faculty and the institution. The management of RLT is passive in that it is assumed that because lecturers are supported to do research, their research will benefit teaching.

The university has visible approaches to develop the institutional research culture and these initiatives are cascaded down to faculty level. While there is a systematic way of managing the cultivation of a research culture, the integration of research and teaching is left to individual lecturers, departments and faculties. Moreover, there is clear evidence of a robust framework for managing research production but no framework for

managing teaching excellence. This disparity according to lecturers, separates research from teaching to the extent there is no research-teaching integration.

The next chapter discusses the students' perceptions of RLT in order to have a holistic understanding of RLT in a faculty. Specifically it is through the next chapter that I provide evidence that demonstrates the convergences and divergences in the way RLT is understood by various groups and individuals at UB Faculty of Humanities.

CHAPTER 6: STUDENTS' PERCEPTIONS OF THE CONCEPTION, EXPERIENCE AND MANAGEMENT OF RESEARCH-LED TEACHING

6.1 Introduction

The preceding chapter discussed lecturers' views of RLT conceptions, implementation and its management in the Faculty of Humanities. In this chapter, I report the findings and analysis of students' perceptions and experiences, with the view of corroborating lecturers' findings with those of the students. Furthermore, through this chapter, I make a contribution to the missing voice of the student in the research-teaching link debate as noted by Visser et al. (2010) and Zarmoski (2002).

Lecturers highlighted that faculty research culture and research support structures and systems are critical in the implementation and management of teaching that is research-led. It, therefore, became imperative that I investigated this culture and support as perceived by the students. This chapter presents students' perceived awareness and experiences of the impact of RLT.

I draw the findings from the three focus group discussions consisting of seven students each and a survey from students in the faculty who are at different levels of their study (years 1 to 4). The survey employed an amalgamation of the Griffiths (2004) and Healey (2005) categorisation of RLT to ask students of their understanding and experience of it. The model or categorisation was very critical in facilitating understanding of faculty culture and attitudes towards RLT. To understand how the integration of research and teaching is managed, Taylor's (2007) model of research-teaching integration and the McKinsey 7S principles served as a lens for drawing

meaning from the findings. The discussion consisted of four discussion topics as explained in the headings.

6.2 Student conception and experiences of RLT

The conception of RLT constitutes the ideological position regarding the way it is valued and implemented by the faculty. It translates to practices and management of RLT. Subsequently, in the group discussions, students were asked to deliberate on how they understand RLT. From these discussions, students understood RLT, in terms of conception and practice, in a number of ways. In general terms, they seemed to conceptualise RLT from a standpoint of its positive relationship between research and teaching and disciplinary space. In line with these beliefs, two main categories of their understanding emerged: reading, collecting, analysing and interpreting information that was gathered by others and collecting one's own data and adding to knowledge. Student conceptions of RLT confirm Smyth et al (2015) and Zamorski's (2002) idea that RLT is about exposing students to recent scholarly research literature and involving students in doing research.

They further perceived it to be teaching that is heavily characterised by IBL methodologies. For example, one student said '…I think the idea of RLT allows students to gather their own information as a way of self-learning'. From the discussion, students seemed to share the same sentiment with regard to preference for teaching methodologies that make students drivers of their own learning. The findings are consistent with international research literature, noting a shift from teaching approaches that are teacher-focused emphasising the sharing of knowledge derived from research, to a focus on developing strategies for students to learn by engaging in numerous

practices of research and inquiry (Brew, 2003; Brew & Mantai, 2017; Hattie and Marsh, 1996; Healey and Jenkins 2009).

The findings, however, revealed that the conceptions vary according to individual student's contextual factors such as year of study and disciplinary space. In terms of a student's disciplinary context, Robertson and Blacker (2006) note the difference in the definition by Physics, English and Geography students in his study. Similarly, in this study, there is an observed difference in perceptions by students doing languages and those who were doing Media studies, languages and History. Students who are doing Media studies and Archaeology valued and appreciated teaching that encourages field work, that is, doing interviews, being attached to media houses and excavating historical artefacts. Students from languages, on the other hand, see it as bringing together different areas of interest through reading and analysing research outputs. Within these perceptions, disciplinary context has a significant role in students' identities as consumers or creators of research.

The different perceptions as observed from the discussions with the students also varied according to the student year of study. This observation may have been due to Cheesman's (2015) notion that in an IBL classroom, students need prior knowledge of the subject to build new knowledge and make analyses of existing literature at their disposal. From the focus group discussions it was observed that first and second year students identify themselves more with using knowledge than generating it, while third and fourth-year students were more appreciative of engagement in research activities. This finding may be indicative of the fact that though the majority of the students are not exposed to lecturers' research, they are aware of the benefits that could be derived from such exposure.

These context-driven variations of conceptualising RLT were also defined with examples that explained how it is implemented at faculty level. In the next section, I discuss further the types of RLT that emerged from the focus group discussions and how the students have experienced them.

6.2.1 **Reading, collecting, interpreting and analysing information**

For this conception category, students doing first, second, third and fourth year agreed that teaching is research-led when information is collected through reading other people's research findings or those of their lecturers. One student noted that usually, lecturers put their research on 'reserve' in the library so that students have access to it upon referral. Though other students were in agreement with this notion, they emphasised that they are often advised to compare the work of their lecturers with those done by other scholars.

In contrast, the discussions further revealed that some students have found their lecturers research by chance, through their studying. For example, one student said '...though my lecturer's research was valuable in what I was studying, the lecturers never shared the research…so to me, this kind of teaching is not planned, it just happens and it's all dependent on the lecturer'. Another student doing the third year of his studies said, 'I am not aware of research done by lecturers, I just found it on my own and it was work done by lecturers who taught me at first and second year…..I feel it would have benefitted me if it was shared then'. The contrasting views of students are also evident in the survey results as shown in Figure 6.1.

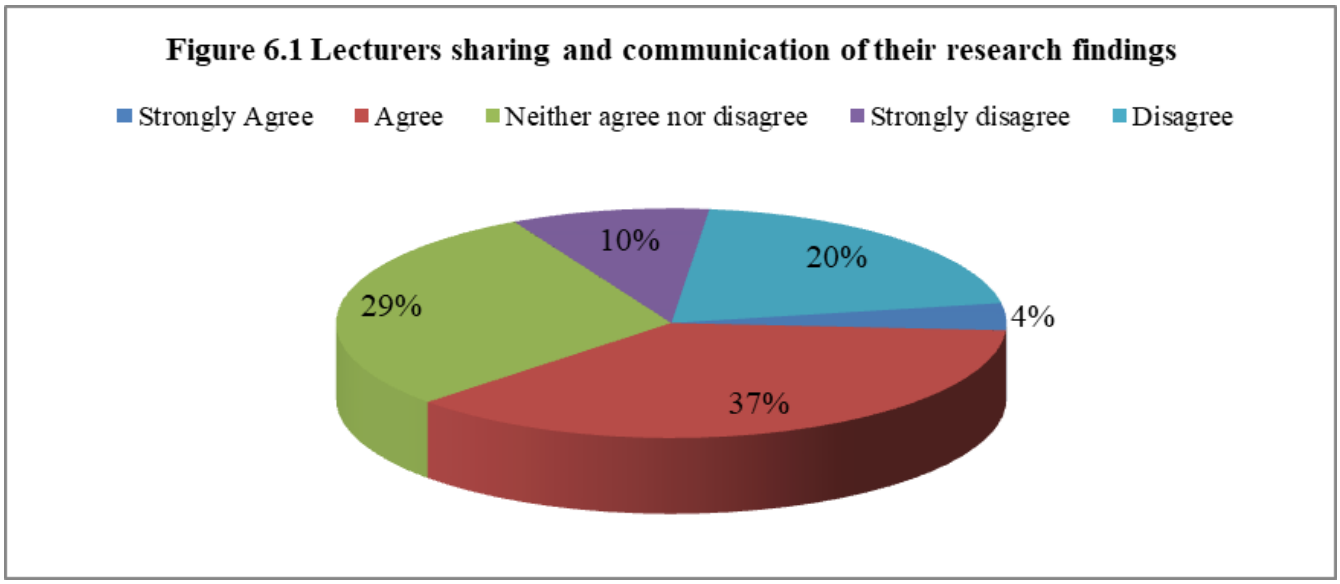


Figure 6.1 Student views on lecturer's research communication.

Ten percent of the students strongly disagreed and some neither disagreed nor agreed (59%) with the notion that lecturers share their research findings while only 4% strongly agreed and 37% agree. These findings confirm the lecturers' views in the previous chapter that the research-teaching link is usually not planned. Though students who agreed they were exposed to lecturers' research form a lesser proportion compared to those who neither agree nor disagree, disagree and strongly disagree, the students' perceptions shifted when they were asked about the value of lecturers' research in their teaching. Eighty per cent of the students indicated that their lecturers' research contributes significantly to the quality of their programme.

Another way of reading, collecting, interpreting and analysing information is experienced by students when the lecturers give them long essay assignments to do some analysis of different authors' work.

They have highlighted that, they have also experienced this kind of teaching through group work presentations. For students who are doing first and second year, this form of research-teaching integration seemed to be very common.

6.2.2 **Collecting own data and adding to knowledge**

Students also explained that to them, teaching is research-led if they are given the opportunity to go out to the field and collect data to answer questions about a given phenomenon. This notion is associated with the constructivism and human progressive philosophies because students want to develop their own understanding of a phenomenon. For instance, students gave scenarios of being given a topic to go and research and report back to the whole class. Some students doing media studies and languages respectively said:

> *'...we gather information directly from the source and don't depend much on the lecturers so which is good. In my course media studies…… we are assigned to go gather information pertaining to different issues like…. one semester we were tasked to collect information on, 'The usage of mobile phones on citizens of Botswana,' so we were focusing much in Gaborone…. we were asking them questions, interviewing them....as students.'*

> *'…I experienced research…..I would say in second year and third year in African Languages and Literature where we had to go and research out there in the field... Research on three different Bantu languages, i.e. Shona, the Swahili ...I had to go to the field...and research on those languages we had to come up with some differences and some similarities between ah the three languages'*

To sum up this section, the way students perceived RLT fits the teaching styles explained by Visser-Wijnveen et al, (2009) and Belo et al, (2014) that students can either be passive recipients or consumers of knowledge, or participants in the knowledge generation. Table 6.1 shows the categories of RLT as understood by the students and the different ways in which they have experienced it. The table further

shows the different activities that are indicative of these categories' infusion into the curriculum.

Table 6.1 Research-led teaching and its implementation

Research-led teaching	Inclusion in the curriculum	Learning experiences	Example of activities
Learning about the research of others/lecturers	Research activities of others and those of lecturers is shared with the students	Learn about lecturers' disciplinary research	Students do group assignments or given topics to research in the library Students individually write long essays as assignments using literature from lecturers or other peoples research.
Learning to conduct research	Students are involved in the research process	Students learn through their research	For years 1 – 4 students are given small topics to collect information from the community or industry. Students conduct research and present findings (Year 3 - 4). Students involved in seminars and conferences as audience (1 – 4) or participants (year 3 – 4).

6.3 Student awareness and experiences of research activities in the faculty.

Understanding students' conceptions of RLT helps one to appreciate the impact of faculty research activity on student learning. It also plays a key role in promoting their learning outcomes because their learning experience and observations give valid reliable evidence about their learning environments (Vereijken et al, 2017). It was therefore important to find students' awareness of lecturers' or faculty's research activity and their experiences of it.

The survey and the focus group discussions have revealed that students are aware of research activities that take place in the faculty. However, it was not clear whether they are aware of their lecturers' specific areas of research interest. They just indicated that they know that lecturers conduct research without knowing their specific research undertakings. Interestingly, some students further stated that they were aware of institutional research activity before enrolling with the university.

These findings have been supported by Healey (2010) who argued that awareness of research happens before students are enrolled because the university research outputs market it and make it attractive to both local and international students. Consequently, in a higher education environment, characterised by competition for students, the choice of a university depends on these market forces and students' expectations. They judge an institution by the engagement of lecturers in research, scholarly work that is recognised by their peers. Not only that, Maringe (2006) also notes that today, students want to study subjects that are reflective of contemporary careers.

In this study, the research intensity of the faculty or the university is perceived by the students to give a qualitative dimension of their learning experience and also increase their chance of employability. The implementation of RLT, therefore, is vital in positioning the university to be eye-catching in the increasing student recruitment market.

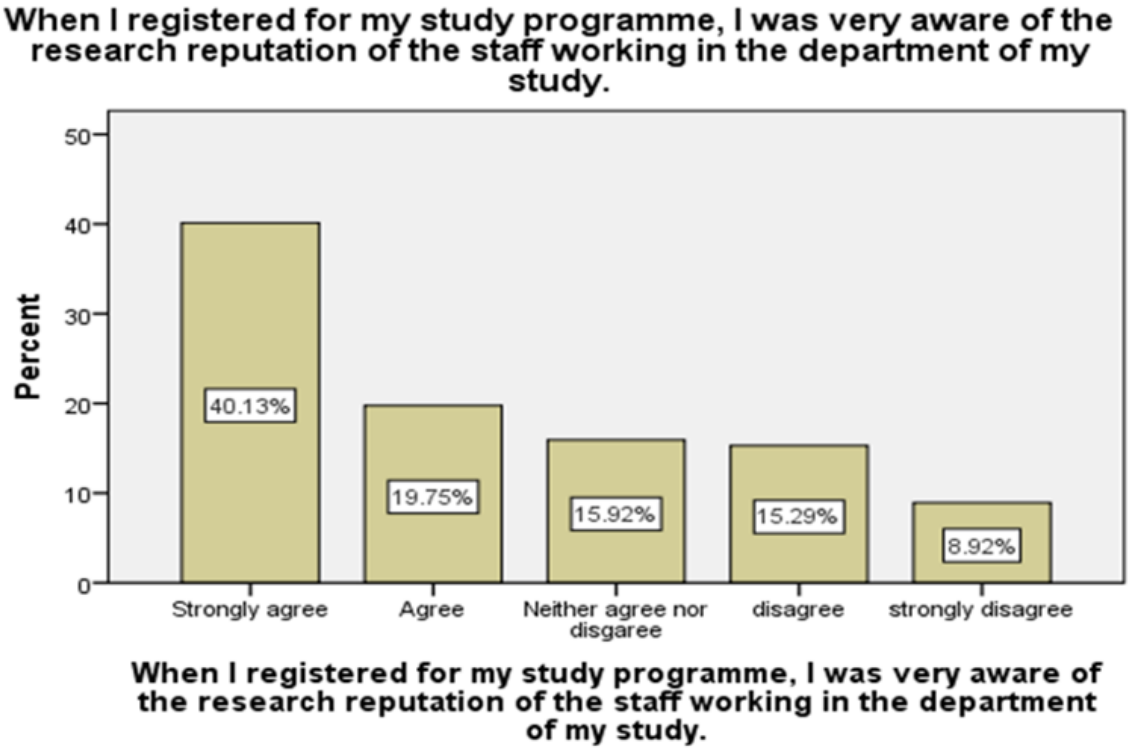


Figure 6.2. Awareness of university research activity before enrolment

For example, Figure 6.2 shows that 59.9% of the students either strongly agree or agree that they were aware of the university research culture before they enrolled with it. However, it was not clear whether the research culture within the institution or a faculty influenced their decision to enroll.

With regards to awareness of lecturers' research activities, three themes came out of the focus group discussions. The students were either aware, not aware, or assume that their lecturers do research. Most students were aware of research activity occurring at their institutions while a few assumed that it occurred. There were also some who expressed their awareness of the research activities but were vague about how they happen. The awareness was inclined to the research activities that the students were involved in with their lecturers. For example, one student studying archaeology used the field work in which he collected artefacts as an example of awareness of lecturer's research activity.

Table 6.2 Student awareness of faculty research activity

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
In our university, there are research centres.	32.5%	61.1%	11.5%	0%	8.3%
I am aware that in my faculty there are lecturers who do research.	19.1%	17.2%	35.7%	5.7%	8.9%
I am aware that in my faculty there are lecturers who write publications.	24.8%	50.3%	15.3%	8.3%	.6%
I am aware that in my faculty there are lecturers supervising students.	33%	48.4%	8.3%	8.3%	2%

The survey results show that students are aware of the various research activities at an institutional, faculty and individual lecturer's level. In Table 6.2 they strongly agreed (32.5%) and agreed (61.1%) that they know of the existence of research centres in the university. However, the proportions of students agreeing (17.2%) and strongly agreeing (19.1%) to awareness of lecturers doing research were less compared to the proportions of students' awareness of centres. Based on this disparity, it can be concluded that a lecturer's individual research rarely involves students but students are somehow aware that lecturers do publish their research as shown in Table 6.2.

According to the findings, students indicated that they derive positive benefits in being engaged in research of their lecturers.

6.4 Students' perceived values or benefits of RLT

The ability to analyse problems, think critically and make decisions in complex societies make these skills a requirement for all professionals in the twenty-first century

(Brew & Mantai, 2017). Informed by the findings of this study, it can be argued that this idea stems from the integration of research and teaching as indicated by both students and lecturers. From the discussion topic of students' perceived values and benefits of RLT, four themes emerged. Students indicated that RLT improves their learning experiences, soft skills, research methods and their employability skills.

The way in which research can enrich student learning experiences has been debated (Brew, 2001; Jenkins et al, 2003; Zamorski, 2002) and there has been an overpowering consensus that involving students in research has multiple benefits. These benefits range from motivational to equipment with skills, tools and methods that facilitate self-driven learning. Most importantly it aids in the attainment of research skills (Levy & Petrulis, 2012) and enhances student employability skills.

This study makes a contribution to this discourse by giving an account of the students' perceived benefits of RLT. In line with the existing literature, students indicated that being involved in research makes them understand their subject or discipline better and also motivates an interest in the subject. Table 6.3 confirms the findings from the focus group discussions.

Table 6.3 Benefits of involvement in research

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
My involvement in research has increased my understanding of my discipline.	44.6%	33.7%	1.3%	20.4%	0
My involvement in research has stimulated my interest and enthusiasm for the subject.	33.8%	36.3%	8.3%	21.6%	0
My involvement in research has increased my awareness of methodological issues.	51%	23.5%	5.1%	20.4%	0
My involvement in research has contributed to the development of research-related skills.	50.3%	27.4%	9.6%	12.7%	0

Table 6.3 shows that 78.4% of the students agree and strongly agree that their involvement in research has increased their understanding of their disciplines. A deeper understanding of the subject or discipline, according to Zamorski (2002), leads to a student's interest in pursuing a higher degree in that particular subject. Students strongly agreed (33.8%) and agreed (36.3%) that being involved in research has stimulated their interest in the subject. It is further shown in Table 6.3 that student involvement improves their research skills. According to Brew (2003), all these skills equip students with the necessary abilities that can help them cope with the complexities of the ever-changing world of work.

This thinking confirms that research-teaching integration prepares students for a career in research, becoming analytical thinkers, ownership of learning and problem-solving skills. Additionally, Brew and Mantai (2017) and Brew (2002) maintain that the 21st

century is characterised by highly complex environments that need graduates who can analyse and resolve these complexities. The findings fit in this context as students indicated that as they go to the field to collect data and reading other people's research it helps them gain skills of systematically analysing information and using it appropriately.

It is, however, worth noting that from the focus group discussions, students pointed out that they felt this benefit more when they are involved as knowledge producers as opposed to being knowledge consumers. They indicated that they develop skills related to research. Similarly, the survey results in Table 6.3 show that 50.3% of the students strongly agreed that their involvement in research has contributed to the development of their research skills, while 27.4 % agree.

Apart from gaining skills from being involved in research, students indicated that working in groups assisted in learning interpersonal skills which are needed by employers. For example, some students said:

> '*group presentations assist in growing our management skills .....because we manage each other in groups… we discuss and reach a consensus.*
>
> *'we learn to tolerate each other ..... and be open to diverse views and opinions'*

They went on to say that employers 'do not want to employ students from certain universities because they teach more than they empower students with critical employment skills.

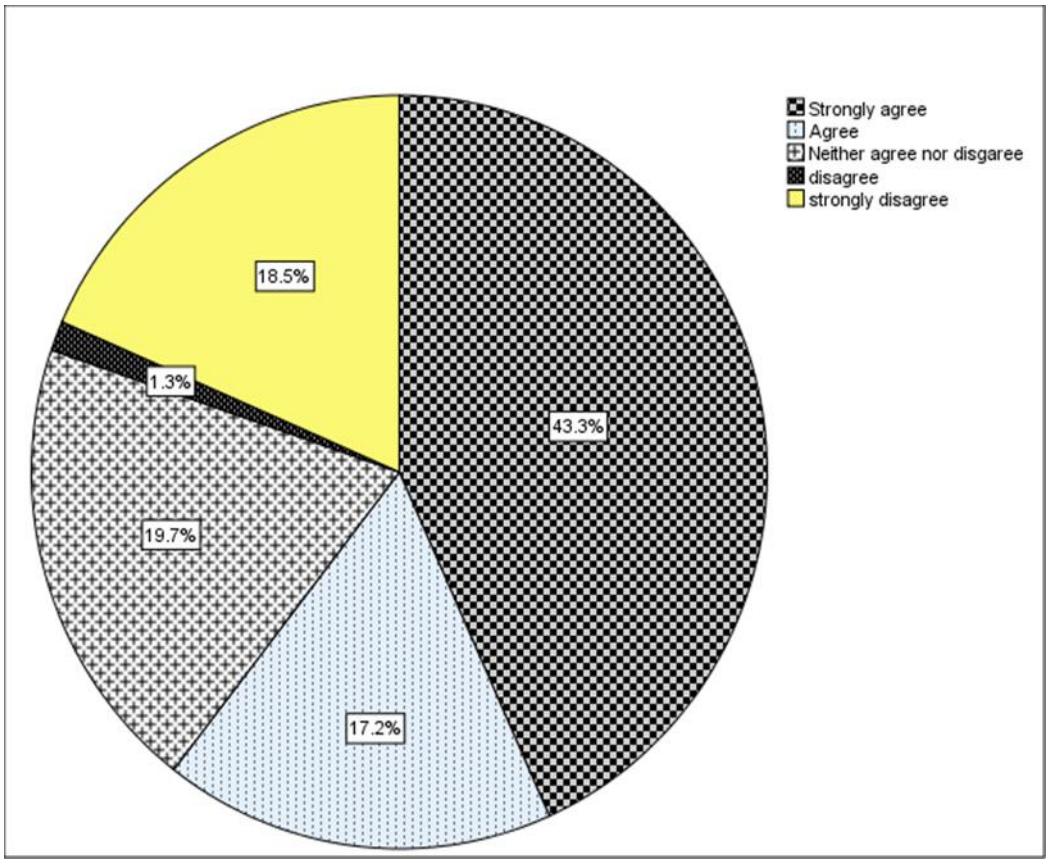


Figure 6.3: Research competencies help improve employability

6.5 Research support systems for students

Taylor (2007) argues that research-teaching integration can be managed passively and actively using different management mechanisms. The passive management involves support, but in a non-intrusive working environment. This is to say the direct control over teaching and research is minimal. Passive management would include the following characteristics: stimulation of research, quality and relevance and curriculum development. Active management means the university makes deliberate interventions to ensure the development of research integration to ensure compliance with the set goals and objectives. This type of management tends to place emphasis on three vital areas: strategic and operational planning, resource allocation and staff development.

Consequently, the institutional support as viewed by the students is more passive than active. For example, there are support mechanisms in the form of resources and infrastructure put in place but fewer management interventions to support implementation and utilisation of such.

6.5.1 Allocation of resources

Most students either agreed or disagreed that there is support given to the students for them to engage in research activities. Table 6.4 shows the different kinds of supports given to the students. For example, 47.1% of the students strongly agree and 13.4% agree to the existence of such support for purposes of improving their research competencies. They went on to strongly agree (44.6%) and agree (28 %) that the university management encourages them to be involved in research.

Table 6.4 Faculty students research support

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
In my faculty there are research grants for students.	18.5 %	21%	22.3%	21.7%	13.4%
There are adequate library resources available to conduct research.	36.3%	38.9%	3.8%	12.7%	8.3%
We are given support to improve our research competency.	47.1%	13.4%	26.8%	1.9%	10.8%
My faculty encourages me to participate in lecturer seminars by guest speakers in my field of study.	24.8%	35.7%	1.3	28.7%	9.6
University management encourages us to become involved in research.	28%	44.6%	23.6%	2.5%	1.3%

Though the survey results indicated that there is support for student involvement in research, they mentioned in the focus group discussions that the support is limited to a small number of the students because of limited resources. It can therefore be deduced that for the Faculty of Humanities, the support for student learning through involvement in research is an ideal practice for research-teaching integration that lies out there and not fully implemented because of limited resources.

For example, one student said:

> '*for us in languages, our lecturers are just teaching us …they don't care much about our interaction with research…We are just told that we are expected to do research….so we tend to do research on our own'*

In contrast, another student from media studies said that for them, their discipline is,

> *…all about research…we go out and interview people about problems in society.*

The contrasting views are indicative of the fact that there is the issue of disciplinary space in the varying perceptions of RLT in the faculty. Students expressed that though they are encouraged to participate in research activities and conduct research, the level of support varies according to discipline. Students doing media studies for example, expressed that there is funding set aside for field attachments, while for languages and history, small field research exercises are usually funded by the students. They, however, mentioned that a limited number of history students proceed to do research projects in their third year.

6.6 Chapter summary

In summarising the findings from the discussions from focus groups and the student survey, the chapter makes a conclusion that students know of their faculty research activities and aware of RLT in their faculty. Though there is awareness, it did not come out clearly how the students perceived the RLT activities in the faculty are organised. They indicated that their involvement in research was more voluntary than planned. Additionally, the university under study is a teaching university and thus prone to a culture of transmitting knowledge. Regrettably, from the students' perspectives, this status does not make them less open to research opportunities. Students expressed their desire to experience more research as it adds value to their learning experience. Given students' perceptions, the societal expectation on training students who will be employable and able to put into practice the knowledge they have acquired, probably more consideration should be given to the integration of practical research involvement and practical professional skills as part of RLT activity.

A number of convergent and divergent views can be made regarding lecturers' findings in chapter 5 and students' findings in chapter 6. For example, Students and lecturers agree that the research activity is used by potential students and the public to measure the quality of teaching and learning in a university. It was however not clear how this quality manifests itself in the faculty.

Over and above converging views, on the benefits of the research–teaching nexus, when it comes to application, both students and lecturers had different views of how research and teaching should be integrated. Lecturers placed more emphasis on sharing of research findings while students expressed their desire to be part of research processes or case study assignments that will make them engage in collecting information and

analyse it. Another observation made from the findings is that while lecturers indicated that they shared their research with students by referring them to their reserved publication in the library, students expressed very little interaction with their lecturers' research work.

In the Chapter 7, I discuss the examples given above, their contribution to theory of the RLT discourse and implication to HE policy and practice.

CHAPTER 7: DISCUSSION, CONCLUSIONS, IMPLICATIONS FOR THEORY, EDUCATIONAL PRACTICE AND POLICY.

7.1 Introduction

In the Chapters 5 and 6, I presented and analysed the findings from lecturers and students. In this chapter, I look back at these chapters and present a consolidated analysis of the research findings. I also demonstrate my contribution and conclusions in understanding how RLT is conceived, actualised and managed. I present this contribution and conclusion in four sections. Firstly, I summarise the the major findings for all my research questions. Secondlyly, this chapter shares the research relevance and implications for policy, practice, theory and methodology. Finally, the study limitations, recommendations, areas of further research will also be covered in this chapter.

7.2 A glance at the research questions

Coming back to my main research question; how might universities transitioning from teaching to being a research-led institution conceptualise, implement and manage RLT? This study uncovered a number of issues that are critical in understanding the topic broadly: shared values, structures and systems, resources and skills. The following are the main findings of the study. Firstly, both students and lecturers value RLT and were in agreement that it contributes to the quality of teaching and learning in higher education. I note that though there was a shared value, there were diverging and converging views on how it is conceptualised and the ideal practice and what is happening on the ground. While students and lecturers agreed on the benefits of RLT and its typologies, students indicated that they are not fully engaged in research. The differences as noted in two previous chapters come from contextual elements such as

disciplinary space, year of study for the student and lecturers' understanding of 'teaching' in a market-driven university environment.

Secondly, the study also shows that effective implementation of RLT is made possible by the availability of structure and systems that support the research-teaching integration. Structures include support structures for the cultivation of a research culture and the integration of research and teaching. Though this idea emerged, I note that there was a shared sentiment that there is no support structure that specifically monitors the actualisation of RLT and as such a passive approach to managing RLT is adopted by the university. In terms of systems, there was a strong view that frameworks for teaching and research are separate and independent of one another, hence making integration difficult.

Thirdly, resources and skills were said to be contributing factors in the implementation and management of RLT. The study indicates that the passive management approach noted by Taylor (2007), makes assumptions that the financial resources supporting RD will spill to enhancing the integration of research with teaching. This is because the activities of implementing RLT are left for individual lecturers to actualise. With regards to skills, the latter repeats itself; strengthening a research culture according to the faculty will lead to lecturers developing their ability to effectively implement RLT in their disciplines.

7.2.1 **Research question 1**

What convergences and divergences exist in the way RLT is understood by various groups and individuals in the Faculty of Humanities?

Confirming previous studies by Brew (2006) and Brew and Mantai (2017), this study has revealed that there are preconceived notions about key concepts underpinning RLT

which influence how it is understood. The way ‘research’ and ‘teaching’ were conceived was very critical in understanding the diverging views between lecturers and students. For example, lecturers emphasised that being in a teaching university makes them transmitters of knowledge. Therefore, the type of university has defined teaching that must take place in the faculty. In this case, teaching is the transmission of knowledge and when it is understood this way, there is less engagement in research (Brew, 2002; 2006; Brew & Mantai, 2017). Similarly, research is understood to be the generation of knowledge. This knowledge generation, according to lecturers and students, is more associated with graduate students than undergraduate students. From the lecturers’ perspective, students need some prerequisites before they are involved in research, hence research engagement in their faculty is mostly evident in graduate students. Based on this observation, the study is in agreement with Brew and Mantai’s (2017) and Brew’s (2006) view that lecturers’ definitions seem to be based on the preconceived idea that undergraduate students are incapable of doing research. It is therefore not surprising that the lecturers mostly defined RLT in terms of the consumption of research by the students while students see it as an act of being engaged in the knowledge generation.

The varying conceptions of RLT of students and lecturers differ between the two groups and within the groups. For students, the conceptions differ according to year of study and academic discipline. They defined RLT based on how they have experienced it in the faculty. In that way, first and second-year students did not have much experience of being engaged in research while third and fourth-year students shared and valued their experiences in their engagement in research-related activities.

Although these diverging views among students and lecturers existed, there were some convergences in the way RLT is understood. Figure 7.1 shows a summary of the

different understandings. It summarises the understanding of RLT by lecturers and students. In Figure 7.1, I further show how these understandings are pre-conditioned by different contextual factors such as the national and/or the faculty culture, their belief in the positive relationship between research and teaching and disciplinary space.

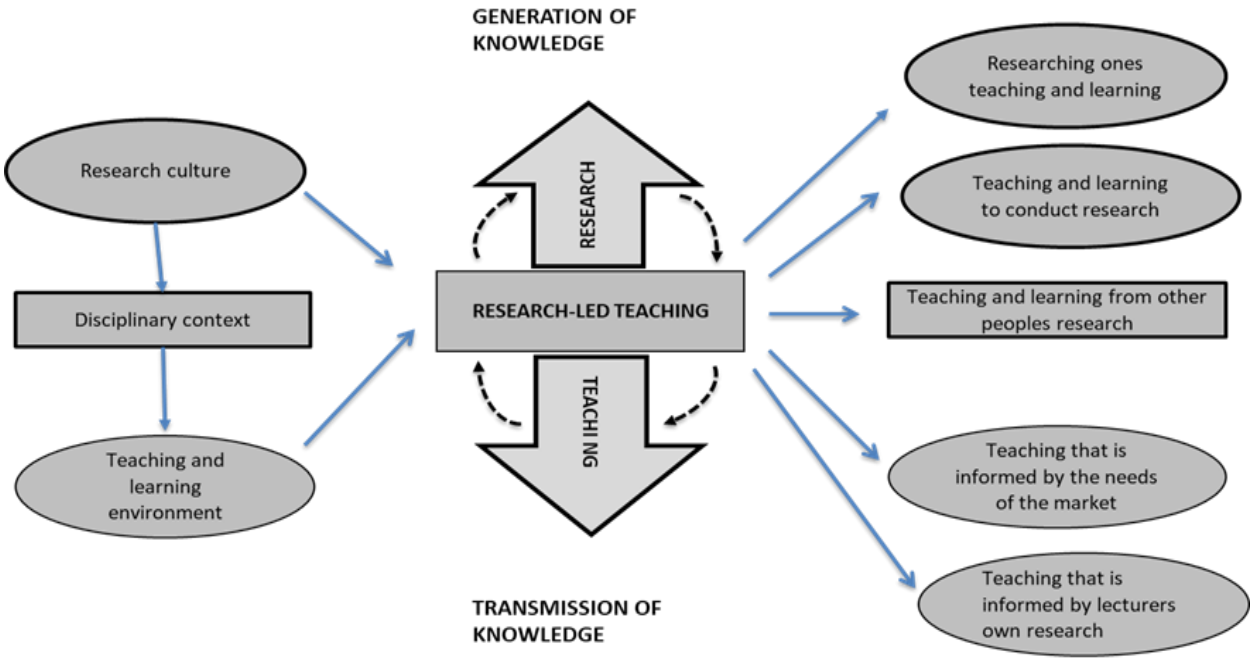


Figure 7.1 Students and lecturers conceptualisation of RLT (Own)

7.2.1.1.1 National culture and faculty culture

National and faculty culture constitutes the beliefs, values and ideals of how research and teaching are integrated at a university. There is a strong belief that the integration of the two brings a qualitative dimension to teaching that contributes significantly to the needs of the market. This notion influences lecturers and students to view RLT as teaching that is market-needs driven. From the students' perspective, teaching is research-led if it enables them to acquire employability skills hence making them employable. Similarly, lecturers and faculty leadership believed in researching the needs

of the market in order to enhance their curriculum and make it relevant to what the labour market needs.

An employable and marketable graduate, according to Brew (2012), is one that is able to analyse complex societal problems in ever-changing environments. Hence the issue of research engagement was key in defining RLT. The students defined their ideal of this engagement as placing them as knowledge producers in the faculty as opposed to just being consumers. In contrast, lecturers seemed to be bogged down in the culture of associating research with postgraduate students. This dominance of the culture may be rooted in the lecturers' beliefs that since they operate in a teaching university, their duty is to share knowledge with the students. In light of these findings, it is probably integral for lecturers to adopt a culture where undergraduate research is seen as a normal to facilitate the research-teaching integration (Brew & Mantai, 2017).

In context of what students and lecturers perceived to be an ideal for RLT, it can be argued that someone is educated when he/she is able to respond to what he/she is not used to in complex working environments. This idea can be achieved when lecturers see undergraduate students as capable of being partners in the construction of knowledge. They must be seen as able individuals who will later deal with the challenges surrounding them. RLT, therefore, emphasises learning that encourages spaces and platforms where there are dialogues between students and lecturers, peer review and collaborative learning. This position connects well with the positive relationship between research and teaching that both students and lecturers believe in.

7.2.1.1.2 Belief in the relationship between research and teaching

This study revealed a strong belief in the positive relationship between research and teaching, a notion that has been reinforced by policies and HEIs strategies (Mayson &

Schapper, 2012). Both students and lecturers agreed that teaching can enhance research and research can enhance teaching. This is shown by the dotted connected lines in Figure 7.1. They show that while there is a common belief among students that teaching and research can benefit each other, the belief is overshadowed by contextual issues hence affecting how it is conceptualised and actualised.

7.2.1.1.3 Disciplinary space

The nature of the disciplinary space in which the integration between research and teaching occurs, that is the environment in which the different cultures exist, largely influences the way the experiences were shared by the students and lecturers in the Faculty of Humanities. Academic discipline became an important mediator (Healey, 2005; Healey and Jenkins, 2003) in the implementation of RLT. This is because in this study it was evident that the way teaching and research were said to connect, varied in approaches across disciplines within the faculty. Disciplines such as languages, history, archaeology and media studies and library studies had unique approaches to implementing RLT.

From the research-teaching approaches given by the students and lecturers, there were some distinctive characteristics between the disciplines. Some tended to over-emphasise the involvement of students in research or IBL while others find themselves comfortable with just teaching and using other people's research. This came from the fact that some subject requires practical work for further understanding of the disciplines and others do not.

7.2.2 **Research question 2**

In what ways is the idea of RLT integrated into the university curriculum?

This section will start first by discussing lecturers' perspectives on how RLT is implemented or actualised followed by students' perspectives and conclude by making a comparison of the two groups' views.

7.2.2.1 Lecturers' perspective

In Chapter 5 (Table 5.1), I presented the various conceptions of RLT by lecturers based on the interviews with lecturers. They include teaching informed by the academic's own research, teaching that emphasises the involvement of students in research, teaching that draws from research of other people, teaching that is guided by the needs of the labour market and researching one's teaching. These definitions form the basis for the different approaches used by lecturers to actualise RLT in their faculty. An overview of the conceptions and the different implementation approaches is shown in Table 7.1.

The implementation activities from the lecturers' perspectives are guided by the lecturers intentions or goals. These were mostly related to student learning outcomes on content enhancement. The activities highlighted by lecturers place students as consumers of knowledge or research, while knowledge generation is left for a few chosen students. In Chapter 5, I indicated that though activities that placed students as consumers of knowledge were dominant, lecturers valued the involvement of students in research for its ability to develop certain skills needed by employers (Visser-Wijnveen et al, 2012). Based on this context, I concluded that RLT cannot be an activity that takes place automatically in a faculty. It has to be purposively developed and supported by departments, faculty, institutions and perhaps the national structures.

Table 7.1 Students' and lecturers' perspectives on how RLT is infused into the curriculum

Definition	**Lecturers' perspectives**		**Students' perspectives**	
	Experienced Activities	Activity Goal	Activities	Ideal practice
Teaching informed by academic's own research	• Referring students to lecturers' publication • Discussing the findings in class • Seminar presentations	• Deep understanding • Exemplifier for topic	• Unaware of lecturers' research activity	Use lecturers research as reference material for courses
Teaching that is driven by the needs of the market	• Consultancies • Market survey • Internship/ attachments	• Motivation • Enhance curriculum • Market relevance	• Attachments	
Teaching that emphasises student engagement in research	• Engaging selected students in the research process	• Train researchers	• Field work • Data collection	Involvement in research process
Teaching informed by other people's research	• Incorporation of up-to-date research in course content • Reading to enhance course content	• Give students a theoretical grounding in the discipline	• Analyse research articles through assignment • Group presentations	
Researching one's teaching	• Student evaluation	• Enhance teaching and learning	• Students do not have an understanding of the purpose of the forms	

7.2.3 **Research question 3**

How is RLT valued by staff and students in the university under study, particularly in relation to enhancing the quality of teaching and learning?

The findings from lecturers and students show that the perceived value of RLT is in its benefits. These benefits can be categorized into two; benefits to individual (lecturer and students) and at an institutional level.

7.2.3.1 Individual benefits

Both the students and the lecturers were of the view that RLT prepares one for a career in research and prepares one for the world of work. With respect to lecturers, research engagement enhances their motivation, deepens knowledge, gives them confidence in delivering their subject to the student, makes them credible lecturers, enables them to give practical examples and enables them to provide textual or visual resources (Jenkins et al, 2003). These benefits are believed to impact on students' motivation and learning experiences.

7.2.3.2 Institutional benefits

This study confirms Mayson and Schapper's (2012) findings that institutional branding is linked to RLT in a way. Institutions that take RLT seriously are perceived to be gearing towards a research-intensive university status. This discourse is drawn from the views and the perceptions that are external to a university. It places emphasis on external university ranking that is underpinned by high research performance. Based on this notion, a strong belief that research benefits teaching was held by both students and lecturers. These benefits translate into a number of other benefits for the institution: a) Research informs

practice and, as such, improves the teaching and learning experiences within the faculty. b) Research prepares students for the world of work, thereby producing students who are relevant to the needs of the job market. It is worth noting that this study confirms Mayson and Schapper's (2012) finding that most lecturers seem to strongly believe that teaching benefits from research and not the other way round. I, however, observed that some activities that were said to be RLT, such as market research, internships and university-industry collaborations, benefit teaching. This notion did not emerge strongly from the students and lecturers, probably because of lack of mechanisms in place to enforce application of findings from such activities. They, however, highlighted that these activities are meant to enhance the curriculum and make it industry-relevant.

In summary, the institutional benefit revolves around teaching, research, practice and impact as shown in Figure 7.2.

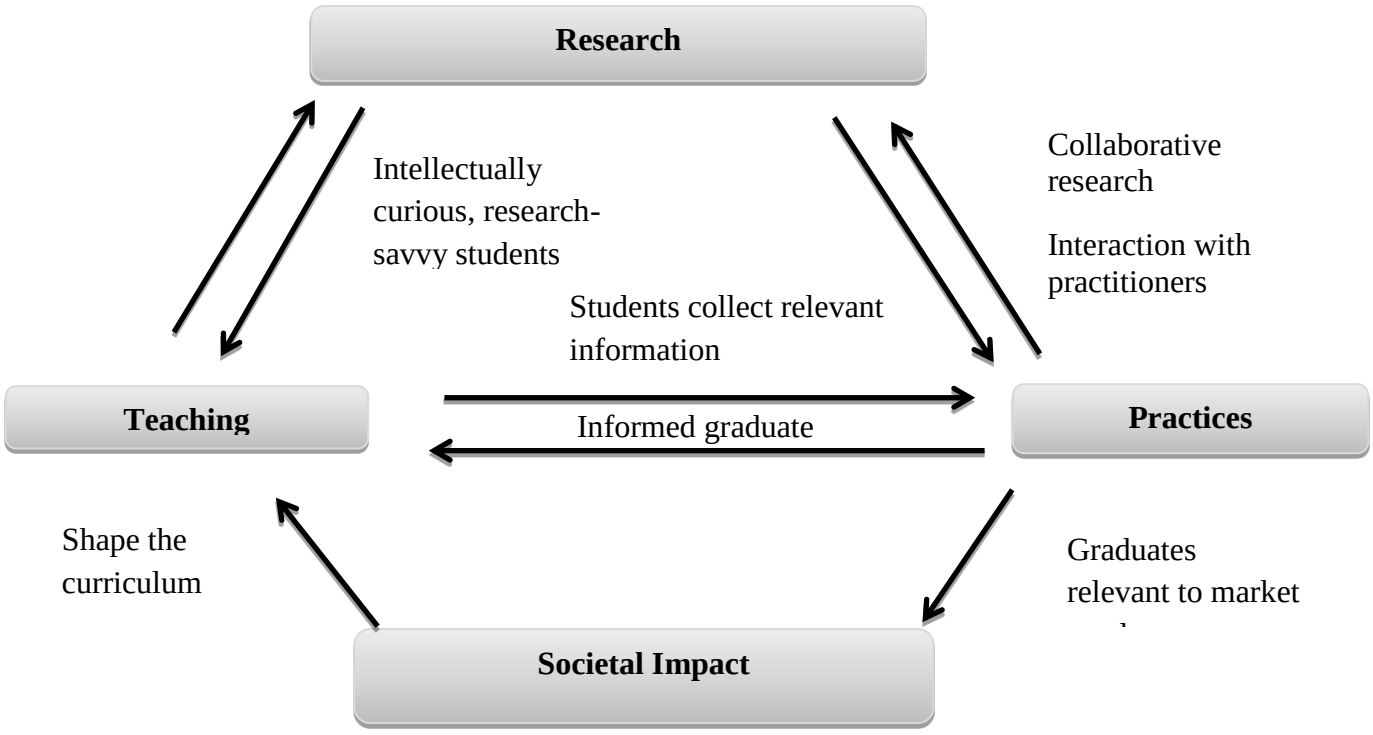


Figure 7.2 Faculty impact of RLT

7.2.4 Research question 4

What management implications and challenges are associated with the implementation of RLT in universities and how are these interrogated?

University policies and structures define a culture that supports the research-teaching integration. However, this study has observed some shortcomings that can discourage this integration. In general, some measurement in managing research and teaching is more on the research side than the teaching as discussed in Chapter 5. Therefore lecturers and students identified the following mechanisms that enable RLT: funding, time for research, development of skills, evaluation and reward for good practice, structures and systems, as illustrated in Figure 7.3.

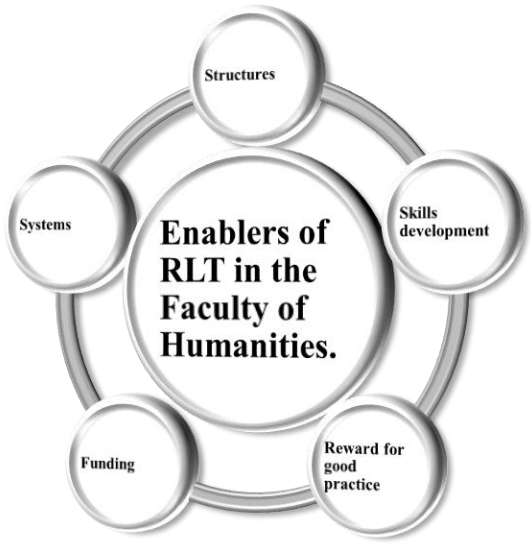


Figure 7.3 Enablers of RLT in the Faculty of Humanities. (Own)

Institutional planning was also identified as another aspect that facilitates the implementation of RLT. This planning involves the identification of performance indicators and measuring them. Though these enablers were identified, they were either not fully implemented, or some structures and policies within the faculty separate teaching from research, according to the lecturers. The separation comes from the way teaching and research are assessed and rewarded. Another finding was that for undergraduate students, there are no deliberate systems and structures that encourage students to participate in research. Over and above the issues alluded to, rewarding the research-teaching integration seem to be critical for an institution that is transitioning from being solely a teaching university to a research-intensive one.

7.2.4.1 Systems and structure

From the findings, it has become clear that policies and structures can facilitate the development of undergraduate research experiences. I also learned from this study that, market surveys, industry-university links and teaching evaluations are key mechanisms that can facilitate course reviews for a rapidly changing higher education environment, yet there are no formalised structures and systems to enable the utilisation of such initiatives.

The structures that facilitate undergraduate involvement in research as indicated by lecturers and students include capacity building structures.

7.2.4.2 Funding

The funding in the university is based on separate funding for teaching and research (Taylor, 2007). The funding for research and teaching is monitored separately under the Office of Research and it is believed that this practice separates the two university activities instead of integrating them. While faculty leadership assumed that availing resources for teaching and research will translate to research-teaching integration, staff had a different view. They perceived the lack of commitment of resources to the research-teaching link to be a hindrance.

7.2.4.3 Skills development and reward systems

Staff development is an integral part of the application of RLT in the faculty (Jenkins, 2004). From the university policy document, it is evident that research and teaching need to be integrated, but there are no clear guidelines as to how the integration must happen. The teaching and learning centre, through its policy, emphasises more on technologies that can be used to improve the quality of teaching and learning. This observation was also alluded

to by some of the lecturers. The document analysis also indicated that lecturers are appointed on the basis of their research performance and their teaching ability. Lecturers pointed out that teaching assessment is more general and does not spell out how teaching must be done in relation to emphasising RLT. They, however, indicated that their RD skills are more defined, though not fully developed, because of lack of financial resources.

Though Taylor (2007) has identified staff development as a management mechanism for the research-teaching integration, no staff development activities are aimed at developing the research-teaching integration in the faculty. It is assumed that efforts to develop skills in research will lead to the uptake and full implementation of research and teaching integration.

7.2.4.4 Strategic and operational planning

Taylor (2007) has pointed out that if research-teaching integration is to be an integral part of a university's strategic planning, the planning must be guided by supportive operational procedures policies. Contrary to this notion, the findings show that even though there is a research policy and a teaching policy, they are independent of one another and there was no evidence of operational procedures on how the two activities merge. Drawing from Taylor's (2007) model for managing the research-teaching nexus, I came to a conclusion that the faculty is not active in promoting the teaching research integration; it is left to individuals or the departments to do this. For example, during the interview with the deputy dean and some HODs, it was clear that the quality and relevance of the curriculum was key in managing research and teaching in the faculty. They, however, did not give detailed criteria with which they monitor staff performance in this regard. The actualisation of RLT is left to individuals to plan and implement. This notion is termed by Taylor (2007)

as passive management because there are support systems but not much is done to create an enabling environment for them to be operational.

7.3 Study limitations

Just as is the case with other empirical studies, this study had limitations. It was largely qualitative and small samples of both lecturers and students were used. It is therefore not easy to generalise the results outside the space of my study. However, the study provided an in-depth understanding of how RLT is understood, implemented and managed in the Faculty of Humanities. It is probable that this comprehensive analysis could not have been achieved with other designs. Nevertheless, bringing the qualitative and quantitative design into the research and having employed a detailed interpretive analysis makes this study transferable and applicable to other universities and faculties with similar contexts. The section that follows, presents my contribution to the discourse on research-teaching nexus, its implementation and management in a teaching university transitioning to being a research-intensive university.

7.4 Contribution of the study

This dissertation is likely to be one of the first attempts to investigate the conceptualisation, implementation and management of RLT in the context of an African university transitioning from being a teaching–led university to a research–led university. Most of the literature reviewed on this subject are from the United Kingdom, the Netherlands and Canada, as shown in Table 3.1 in Chapter 3. It fills the knowledge void regarding how African universities, particularly in Botswana, can contextualise RLT, implement and manage it for an effective and quality university offering. My contribution, therefore,

focuses on the effective implementation of RLT in a university that has a low research culture due to its status as a teaching university since its inception in the early 1980s.

7.4.1 The Systems Resources Structures (SSR) Model

Beyond the findings of my study, I identified one main contribution to the discourse around the conceptualisation, implementation and management of RLT in a teaching university. The SSR model argues that effective management of RLT lies in the adoption of an active management style that recognises the importance of developing systems and structures and availing resources for the implementation of any strategy. The findings indicate that there are systems in the form of policy and policy procedures for teaching and research. These policies echo the importance of RLT in a university setup, but the adoption of a passive style of management makes this intention impossible. A passive management style assumes that availing policies translate to implementation, hence I propose the model in Figure 7.4.

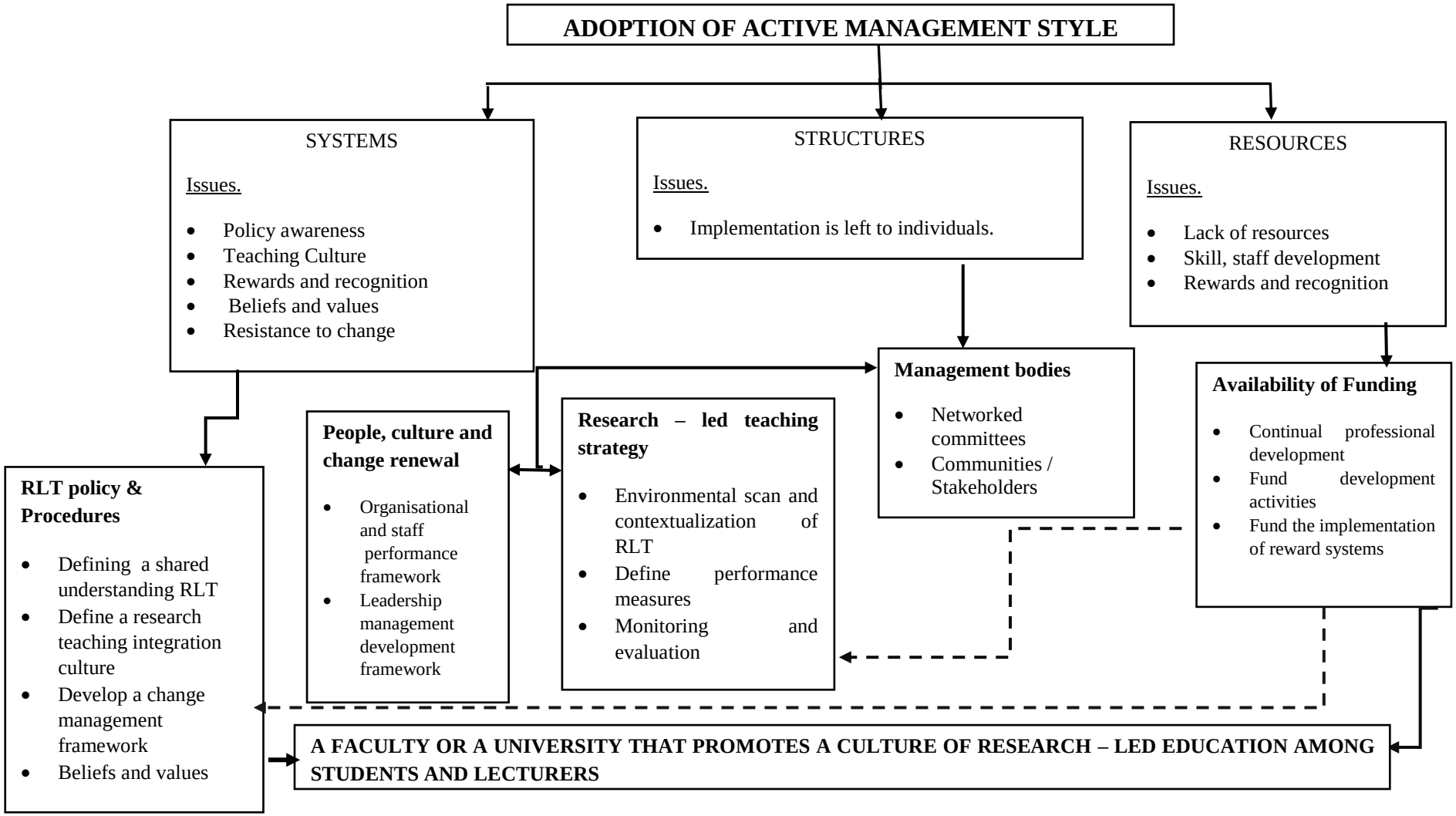


Figure 7.4. SSR model for effective implementation of RLT

Through this model in Figure 7.5, I propose that higher education managers must move beyond just availing policies, to ensuring that there are structures and resources that will support the implementation of such policies. I, therefore, recommend that the model be tested further among faculties and universities that aspire to be research-intensive.

Over and above this main contribution, the study has also made a contribution to theory, practice and policy.

7.4.2 Theoretical contribution

Through this study, I contribute how RLT is conceptualised, implemented and managed. It has demonstrated RLT conceptualisation and understandings in the context of a university in Africa transitioning to be a research–led university. It is therefore justified to say that it forms the basis for informing policymakers, higher education leadership and stakeholders on the conceptualisation of RLT and what should be done to improve the research-teaching integration.

7.4.2.1 RLT conceptualisation

Discourse on the definition of RLT often focusses on how it can be conceptualised as opposed to how institutional and individual contexts influence its conception. While agreeing with Brew (2003) that the definition is context driven, the study further demonstrates how RLT conception can be influenced by the external and internal university environment (See figure 7.5).

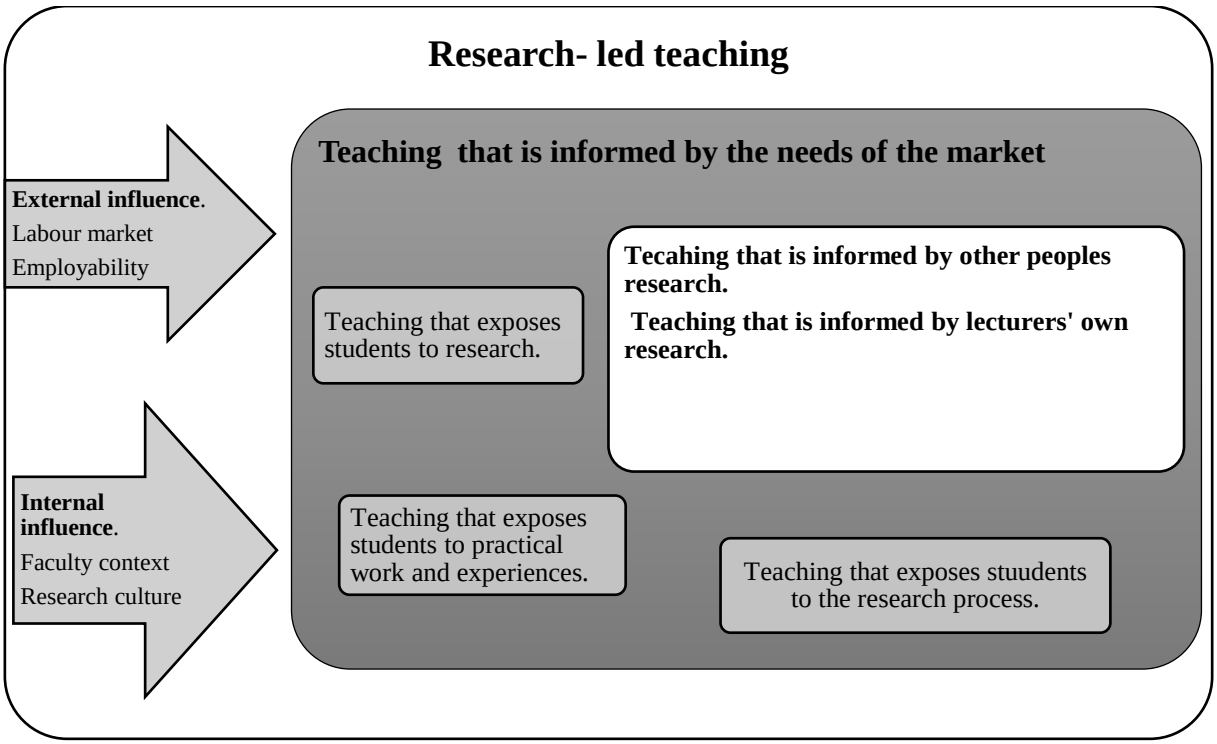


Figure 7.5 Market influenced RLT conception (Own)

a) Management

Another contribution that relates to management, emanates from Taylor's (2007) research-teaching nexus management model that identifies the main factors influencing the management of the research teaching nexus. The model has identified concepts including the identification of ideological influences and environmental factors and their subsequent translation into passive management and active management. In proposing active management of RLT, I came up with a model of analysing RLT that has practical solutions to the diverging views of lecturers and the lack of effective implementation.

An analytical model of the conceptualisation, implementation and management of RLT in a university that strives to be research-intensive, is built on the themes discussed earlier in this chapter. From the discussion, I identify principles that can translate into a

number of activities that can be separate or related. These principles are the critical enablers of RLT in the Faculty of Humanities.

A number of studies have revealed that RLT is context-driven (Brew, 2002; Brew & Mantai, 2017) and yet there is not much evidence on how its contextualisation in an institution is done, coordinated and managed. Over and above that, the study has revealed that there was no strategic planning and implementation of RLT activities. Also, the structural support systems are not fully developed and coordinated. With this observation in mind, this study concludes by mapping the critical elements in planning, implementing and managing RLT.

While Maringe (2005), proposes the CORD model to understand the marketisation of HE, this study has uncovered similar elements that are critical in understanding RLT in an environment driven by the needs of the market. Therefore the Contextualisation, Coordination and management researching the student market, Developing the Curriculum and Evaluation (CCRDE) are critical in the implementation and management of RLT.

7.4.2.2 Contextualisation of RLT

a) Reflecting on the ideological mission of a university

For a university that is in the transition from a teaching-intensive to a research-intensive one, a reflection on its ideology and mission is critical. The latter confirms the nature of a university (Maringe & Gibbs, 2009) and its management style (Taylor, 2007). This study has shown that lecturers still hold the ideology of being a teaching university and as such see themselves as knowledge transmitters. To me, this is a hindrance on the implementation of RLT. Jenkins et al (2003) suggest that stating the link between research and teaching in a university's mission and the formulation of strategies and

plans that support the nexus, is key in the implementation of RLT. This statement may be coupled with a re-emphasis of undergraduate research and a learning environment that sees research as complementary to and not competing with, teaching.

Students enrol with expectations of coming out of the university ready for employment and able to contribute to the economy and society. The mission must include practicality to cater to expectations posed by the external environment. In reflecting on the mission and ideology, it is perhaps vital to define RLT in the context of HEIs' external environment. This definition must demonstrate how it contributes to the institutional mission. Largely, reflection must assess whether the mission of a university adequately addresses RLT and the prevailing HEIs' environmental circumstances.

b) Reflecting on the definition and purpose of RLT

This study has revealed that there are multiple definitions of RLT with different outcomes for the student. It is, therefore, crucial to define the university's understanding of RLT, its approaches, how it should implemented and what it wants to achieve from RLT. A contextualised RLT definition will form the basis for faculty and department practices in RLT.

c) Reflecting on the external environment.

One of the observations made from the lecturers' different understandings of RLT and how they have experienced it, is that caters heavily to the needs of the market. A reflection on the external environment will assist an institution to go beyond their ideological understanding and factor in the demand and expectations of the external environment. This assessment will also assist in evaluating the quality of its offering in terms of relevance to society and the community.

7.4.2.3 Coordination and management plan

In order to strengthen the implementation of RLT, a university needs to take an 'active lead' Taylor (2007) and develop a coordination and management plan. Based on this notion, I have identified key principles that are critical in developing the strategy. These include structures for implementation and coordination, resources and a change management framework.

a) Structures

The findings have revealed that the implementation of RLT is not coordinated and is currently just left to individuals. Putting structures in place will create a platform where the diversity in RLT conception can be brought together.

b) Resources

Resources must be channelled towards operationalising RLT. These resources may be financial or human resources. In terms of human resources, there must be efforts in developing skills in implementing RLT approaches through rewarding excellence, funding conferences and seminars where RLT practices are shared and other skills development activities such as workshops.

7.4.2.4 Researching the students and market needs

To close the gap that normally exists between the course offering, the needs of the students and of the HEIs market, it is perhaps important to find out how the needs of the market and students can assist in defining RLT and its approaches. The student evaluation forms become critical in this exercise. Aspects that assess the implementation of RLT must be included in the form and students must know what is expected of them. The student conception of learning is also important in that it also allows students and lecturers to share expectations.

7.4.2.5 Developing the curriculum

As pointed out earlier, the conception and implementation of RLT teaching varies between individuals and departments. I, therefore, propose that the faculty under study come up with what they perceive to be RLT and explicitly state what they want to achieve from it. The latter will then assist in coming up with the different approaches of actualising it.

7.4.2.6 Evaluation

For purposes of continual improvement, it is also important that at this stage, an evaluation framework and tools for measuring implementation are developed.

7.4.3 Contribution to practice and policy

This study contributes to practice by generating knowledge derived from the findings. It also suggests recommendations that can aid in the development of effective HEI policies and practices required to facilitate the operative implementation and management of RLT strategies in Botswana and other countries. This contribution is relevant to developing countries with similar social, demographic, economic and cultural, characteristics. The model for understanding the implementation and management of RLT proposed in the previous section provides a practical guide for practice. It has highlighted the elements that are necessary to ensure that RLT is effectively implemented.

The study has shown that lecturers and students agree over the necessity and value of RLT. However, there are a number of issues that make it impossible. There is not much support to strengthen RLT at the faculty level. Therefore the following strategies are recommended for improvement of faculty management practice.

7.4.3.1 Support for RLT

There is not much support for RLT in the university. Therefore the faculty should provide support for lecturers to excel both at research and teaching. The critical support that may bring research and teaching together, is the appraisal and promotion criteria (Jenkins et al, 2007; Jenkins & Zetter, 2003). This will give both teaching and research equal status and also enforce its implementation. Training and development is another way of building capacity and skills for implementation of RLT. Therefore the adoption of training strategies that enable sharing of good practice is critical.

7.4.3.2 Develop departmental and disciplinary understanding

RLT implementation may be reinforced by establishing positive fundamental values about the existence of RLT among faculty members. It may be clear that lecturers in the faculties believe in RLT, but the faculty perceives it is not communicated. Therefore, having a mutual understanding is necessary. This can be done by developing a policy and strategic plan for RLT. These critical documents can be communicated in seminars and publications (Jenkins et al, 2007; Jenkins & Zetter, 2003).

With regards to lecturers' practice, it is, perhaps, necessary for them to make it explicit to students with regards to RLT. This is necessary because of the general observation that students are not fully aware of the existence of RLT in the faculty. So this study makes a contribution to how a curriculum that emphasises the research-teaching link can be developed. This contribution is made through the CORD model of implementing and managing RLT.

Lastly by uncovering the different ways in which RLT could be implemented, I add lecturers' teaching practices. By so doing, I have also given different dimensions that were not covered in the literature. These dimensions can be used by the faculty and lecturers during their efforts to define RLT in the faculty or university.

7.5 Thesis conclusion

The central aim of this thesis was to understand how RLT is conceptualised, implemented and managed in a university that is in transition from being teaching-intensive to research-intensive. This study concludes by arguing that RLT can be conceptualised in the context of students as consumers or generators of knowledge. It was thus defined as the type of teaching that involves students in research and that which exposes students to research done by others or their lecturers. RLT was also defined in terms of researching teaching practices.

Apart from these dimensions, I came to the conclusion that to a large extent the conceptualisation of RLT has been influenced by market forces. It was defined by lecturers as teaching that is influenced by the needs of the market and those of the students. Given these conceptions, the study also concludes that there is no one way of conceptualising RLT. The conception depends on one's context, values and beliefs in the research-teaching integration. For this reason, any university or faculty seeking to strengthen the research-teaching integration needs to define their parameters of teaching that is research-led.

In terms of how the faculty values RLT, both students and lecturers stated that RLT enhances the quality of education. Individual and institutional benefits can be derived from the implementation of RLT. For students, it develops their employability skills, motivates them to pursue higher degrees and gives them a deep understanding of their discipline. This study also concludes that RLT is valued for its ability to market a university. This is because according to the students and lecturers, a university that is research-intensive is attractive to prospective students and its stakeholders.

The study also makes conclusions about the implementation of RLT in the Faculty of Humanities. The first conclusion is that because there are different conceptions of RLT, there are surely different implementation approaches that can be adopted by lecturers. According to Chesman (2015), the approaches can also be grounded by lecturers' definitions of teaching that places emphasis on the traditional classroom and that which encourage IBL. So the approaches for RLT can either be student-centred or teacher-centred.

It can also be concluded that the implementation of RLT is not fully realised because of the lack of student awareness of lecturer research and yet their exposure to research was one of the approaches of implementation. There is also a contradiction between what lecturers value in RLT and its actualisation. For example, there is a shared sentiment between lecturers that exposing students to the process of generation of knowledge is most beneficial to their learning experiences and yet it that is only accessible to students who excel academically. Based on this observation it is also justifiable to draw a conclusion that the implementation of RLT is also influenced by students' abilities.

Lastly, the effective implementation of RLT needs structures, systems, training and development and funding. This must be coupled with a systematic development of RLT strategy, its implementation plan and evaluation.

7.6 Suggestions for further studies

This thesis suggests future research issues that could be explored on similar topics around the research questions in this study. It also proposes methodological issues that may be adopted to study RLT in HEIs.

7.6.1 Instruments and methodology

Further research can be done by employing a mixed method design that gives the qualitative and the quantative research equal footing to extend understandings around the RLT discourse. The research can also be extended to a larger number of universities to give a comparative analysis of RLT in universities. To extend more on the comparative aspect of the study, studies that look at RLT in different types of a universities (teaching and research intensive) will inform how universities transitioning from being teaching to research intensive universities can implement RLT. Lastly, correlational studies that analyse the relationship between conception and the actualisation of RLT can also help in building theories underpinning its implementation.

7.6.2 Research Question 1.

This study uncovered the convergences and divergences in the way RLT is understood by groups and individuals in a university. Further studies can be done to investigate the relationship between contextual factors that influence the conception of RLT and the way RLT is understood. This relationship can further make comparisons between a teaching university and a research intensive university. Such comparative studies can inform the way universities transition to being research intensive conceptualise RLT.

7.6.3 Research Question 2.

Through this study, I have revealed that both students and lecturers value RLT as a mechanism in HE that enhances teaching quality. However there seemed to be factors that contribute to how it is valued. These factors were not explored in detail because of the scope of my research. These factors included among others, number of years of teaching experience, students' and lecturers' personal interests in terms of growth and

student year of study. A study into the relationship between perceived value of RLT and these factors can further enhance the its importance in HE.

7.6.4 Research Question 3

I have made contributions on ways in which RLT can be actualised or implemented. More studies can further expand on this, by investigating lecturer's intentions when they plan to incorporate research in their teaching. Such a study will aid in understanding more, the value of adopting various ways of integration research with teaching in university teaching.

7.6.5 Research Question 4

The models that were used in this study suggest that leadership plays a crucial role in the implementation of any given change or strategy. Therefore, further studies could explore how leadership styles in a university setting influence how RLT is conceptualised, implemented and managed.

CHAPTER 8: MY PERSONAL INTEREST IN THE RESEARCH AND PERSONAL LEARNING.

8.0 Introduction

Writing a PhD thesis has been the most difficult and yet pleasurable journey of my life in academics. It required a lot of different phases of implementation in order to attain the final result. I started developing the research proposal implemented it then arrived at the research findings and conclusion. There were moments when going back and forth was inevitable. This interactive process has enabled me to learn and gather information in the chosen field of study and the art of conducting academic research. For this reason I thought it would be of great importance to sit back and consider for the last time my personal learning in achieving the end product of my PhD journey. Therefore this section presents the process followed from the start to the end of my journey. I start by sharing my interest in the research area, followed by a reflection on the main steps of the research process. I conclude this chapter by making a reflection on my findings in relation to international literature.

8.1 My personal interest and development in research

My motivation for embarking on this research was sparked by my personal experience and observations, reflection and experiences as a postgraduate student at the University of Botswana and the University Of Derby, United Kingdom respectively. I was inspired by how my assignments were centred on the practical application of theory where I worked as a research administrator and manager. This experience was something that I missed at undergraduate level. During that time I had very little understanding of

research because there was more emphasis on being taught. For that reason getting good grades was a priority for attaining my bachelor degree.

When I became a research analyst at the Botswana Parliament, I began to value research as a valuable contributor to legislature, economic and societal development. I became inquisitive; I reflected on my journey as an undergraduate student and realised that there was no frequent mention of research in the teaching and learning environment despite its value. I was familiar with reading textbooks and general articles to broaden my general knowledge.

Upon undertaking postgraduate studies, I experienced a completely different way of teaching that was characterised by independent learning through the guidance of my lecturers. I observed that there was emphasis on the conduct of research by both lecturers and students. Students in this set up were encouraged to also read other people's research. In the post graduate programme I was expected use other peoples findings to enhance understanding of concepts and why things happen the way they do in real life situations. I began to appreciate the importance of research teaching integration. Most importantly, I appreciated how I was able to see the value of my education in my work.

When I became a research administrator in a university setting I realised that for undergraduates this idea is hanging somewhere in the sky and not within their reach. For example, one measure of achievement in university research was on the output of graduate research.

Furthermore, working within my level of operation and within a university research structure, I saw research as a function that is not related to teaching for an undergraduate. The link between research and teaching was not of great importance in

my function. So my focus as a professional research administrator was to ensure support for staff to increase research output. In the midst of this observation, I developed an interest in understanding how RLT is implemented and managed in a university, especially in undergraduate studies.

8.2 Personal learnings – A reflection

This section focuses on a reflection on my personal learning as I continued to navigate my way towards completing my thesis. Right from the proposal stage to writing the thesis, I have had experiences that have contributed greatly towards being an academic researcher.

8.2.1 Research proposal

The main objective of my proposal was to study RLT in a university in a developing country that has since realised the importance of investing in research for development. For that reason, the university is transitioning from being a teaching-led university to being a research-led or research-intensive university. So given this broad context, I had to come up with a description of how I am going to carry out my research. In doing so, multiple possibilities that sought to analyse my research problem created a lot of difficulties while writing the research proposal. This scenario gave me the opportunity to analyse many different topics within the 'research-teaching nexus' and 'research-teaching link'. I learned that these concepts are used interchangeably in literature to refer to RLT. I also learned that studying RLT generated a lot of challenges as there was no single definition of RLT, hence a clear focus was needed. Setting the main focus of the study and concentrating in particular areas proved to be very important at this stage of my research. I had to identify gaps in the study area to establish a focus for my study. For example, I learned that there was a missing voice of the students in studies that

investigate the research-teaching link (Brew & Mantai, 2017; Jiang & Roberts, 2011), hence my choice to research both students and lecturers. The relationship between research and teaching and efforts to actualise this relationship has been studied (; Brew, 2006; Griffiths, 2005; Healey, 2005) and what was missing in this area is how it is implemented and managed. What was appealing for me in conducting this study, was the fact that most literature in this area was set in the context of Europe and not much has been said about the African context.

The several meetings with my mentor and my study group, as well as discussions around the research topic and focus, were extremely helpful in eliminating the doubts that I had about my choices. This interaction has developed my ability to take constructive criticism and advice to refine my proposal. This learning I was able to use throughout my journey to the completion of this thesis. The proposal was examined and comments were made by the internal and external examiner and this process further assisted in refining my proposal and the other stages that followed thereafter. This stage proved to be a very important component of the research process as it assisted in setting the exact boundaries and limitations for the development of the thesis. Although the early stages are full of uncertainty, I found this stage of my research to be thought-provoking and necessary. It gave me a chance to plan for the implementation of my research plan. In this way, it made it possible to consider several factors that influenced the outcome of my research.

8.2.1.1 Literature review

Reviewing literature was another aspect of my journey that transformed me into the academic researcher I have become. I focused on the literature in my study area so that I have a thorough understanding of the topic and what has been done so far. It was a demanding task that enabled me to develop a conceptual framework used in this study. I

learned that this process of reviewing literature is cyclical, as I moved from doing the literature review, to gathering empirical evidence and back again to reflecting on the review. The process has guided me in focusing my presentation and analysis, given that interviews and focus group discussions produced a lot of data, some of which was beyond the scope of my study.

8.2.1.2 Empirical study

Another crucial step in my research journey was that of going to the field and collecting data. I conducted interviews and focus group discussions and completed a survey. The process of collecting data not only exposed me to rich data but also to the general field of practice, as I interacted with implementers and supposed consumers of RLT. The multiple approaches to data collection have given me a reason to value the use of a mixed-method approach to research, in that it has prepared me to research complex issues in HEIs.

As I was collecting data, I believed that my research was going to solve the problem in implementing and managing RLT in the university under study. I then realised that there are differing opinions that were emerging from my data that helped me understand the problem further. This realisation aided in developing an analytical model for understanding the implementation of RLT in the university under study and other universities with a similar context.

8.2.1.3 Findings and lessons learned

As I moved towards the end of my thesis and drawing conclusions, I observed another cyclical pattern in my work. I analysed my finding by going back to the review and making conclusions. This process underscored the idea that research is a methodical process of gathering data and analysing it to solve a problem.

The major finding that contributes to my personal learning is the fact that universities are adopting business principles to implement their teaching mandate. They have seen the need to comply with what HEIs regulators, policymakers, quality assurance bodies and students want. So the development of courses or programmes is guided by the needs of the market, HE regulators and society. However, this notion is not fully implemented because the university management approach is passive, as that which is believed to be of benefit to the university or faculty, is left to individual lecturers.

In light of this experience, I am coming out of this journey more inquisitive to continue my academic journey to make a contribution to discourse in research – led teaching, its implementation and management. Most importantly this research has come up with areas for further research that will need my intervention as I take my journey to the next level.

8.3 Conclusion

Even though a comparison of RLT implementation and management in developed and developing countries HEIs was not within the scope of this study, there were some personal learning from the findings and international literature worth sharing. Firstly, in developing countries the research teaching integration is more of an aspiration for Higher education's institutions. This probably explains the limited literature on the research teaching nexus from an African context. In developed countries for example in UK, Australia and the Netherlands, the research teaching nexus has received a lot of attention from both policy makers and academics (Healey et al., 2010). This observation is also evidenced by the growth of literature in this area (i.e. Brew & Mantai, 2017; Healey, 2005).

Secondly research –led teaching strive where there is a strong research culture (Brew, 2007) and therefore in my opinion the results of this study differ from international literature for a number of reason. Firstly higher education institutions in developing countries are still in the process of building strong research cultures (Studman & Tsheko, 2007; Lingami, 2019; Tabulawa & Youngman, 2017). Developed countries on the other hand have strong research cultures and are now advocating for a demonstration on how research benefits teaching and learning.

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APPENDIX 1: ETHICS APPROVAL LETTER

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 Private Bag 3, Wits 2050, South Africa. Tel: +27 11 717-3064 Fax: +27 11 717-3100 E-mail: enquiries@educ.wits.ac.za Website: www.wits.ac.za

25 February 2015

Student Number: 700645

Protocol Number: 2015ECE002D

Dear Changu Batisani

Application for Ethics Clearance: Doctor of Philosophy

Thank you very much for your ethics application. The Ethics Committee in Education of the Faculty of Humanities, acting on behalf of the Senate, has considered your application for ethics clearance for your proposal entitled:

The Conceptualisation, implementation and management of research-led teaching in a developing country university: The case of University of Botswana.

The committee recently met and I am pleased to inform you that **clearance was granted**.

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your research project.

Yours sincerely,

M Mabeta

Wits School of Education

011 717-3416

Cc Supervisor: Prof Felix Maringe

APPENDIX 2 : LETTER TO THE UNIVERSITY

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 • Private Bag 3, Wits 2050, South Africa
Tel: +27 11 717-3007 • Fax: +27 11 717-3009 • E-mail: enquiries@educ.wits.ac.za • Website: www.wits.ac.za

June 2016

Dear Vice Chancellor

My name is Changu Batisani. I am a PhD student in the School of Education; Education leadership and policy studies department at the University of the Witwatersrand.

I am doing a research on, '**The conceptualization, implementation and management of research-led teaching, in a developing country university'** and using the University of Botswana Faculty Of Humanities as my case study.

My investigation involves exploring how Research-led teaching is conceptualized, implemented and managed in UB. The research has a transformative agenda of change by generating data for higher education policy makers to address the issue of research and teaching integration through RLT. This research aims at giving valuable insights on the importance of the role of research in informing teaching and student learning. Most importantly it sought to bring insights on how RLT enhances the quality of teaching and learning experiences in a university.

The research will be significant in making contribution to literature on the different ways of integrating teaching and research in higher education.

In respect of the above mentioned, University of Botswana has been chosen as a case study because the institution has characteristics that will enable me to explore and understand the core issues related to research-led teaching. Moreover the institution is in a transition to being a research intensive university and as such realised the importance of research-led teaching in enhancing teaching and learning experiences in a university. I therefore humbly request that you allow me to conduct this research in your faculty.

The research participants who will be the students and the lecturers will not be disadvantaged in any way. They will be reassured that they can withdraw their permission at any time during the project without any penalty. There are no foreseeable risks associated with this research.

Transcripts and audio-tapes will be locked away in a secure place, papers shredded and electronic data deleted after 3 – 5 years after completion of the project.

The data will only be used for scholarly work, and publications in scholarly journals at some later stage. However names and identity of participants will be kept confidential at all times during the academic writing of this study.

Please let me know if you need further clarification regarding this study.

Thank you.

Yours faithfully

Changu Chandapiwa Batisani
Cbatisani1@gmail.com
Cell: 73130135

APPENDIX 3: STUDENTS' CONSENT FORM

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 • Private Bag 3, Wits 2050, South Africa
Tel: +27 11 717-3007 • Fax: +27 11 717-3009 • E-mail: enquiries@educ.wits.ac.za • Website: www.wits.ac.za

STUDENT CONSENT FORM

Please fill in the reply slip below if you agree to participate in my study called: **The conceptualisation, implementation and management of RLT in a developing country university: The case of University of Botswana.**

My name is: _____

Permission to be audiotaped

I agree to be audiotaped during the interview	YES/NO
I know that the audiotapes will be used for this project only	YES/NO

Permission to be interviewed

I would like to be interviewed for this study.	YES/NO
I know that I can stop the interview at any time and don't have to answer all the questions asked.	YES/NO

Informed Consent

I understand that:

- my name and information will be kept confidential and safe and that my name and the name of my school will not be revealed.
- I do not have to answer every question and can withdraw from the study at any time.
- I can ask not to be audiotaped, photographed and/or videotape
- all the data collected during this study will be destroyed within 3-5 years after completion of my project.
- Everyone is asked to respect the privacy of the other group members. All participants will be asked not to disclose anything said within the context of the discussion, but it is important to understand that other people in the group with you may not keep all information private and confidential.

Sign_____ Date _____

APPENDIX 4: LECTURERS' CONSENT FORM

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 • Private Bag 3, Wits 2050, South Africa
Tel: +27 11 717-3007 • Fax: +27 11 717-3009 • E-mail: enquiries@educ.wits.ac.za • Website: www.wits.ac.za

LECTURER CONSENT FORM

Please fill in the reply slip below if you agree to participate in my study called: **The conceptualisation, implementation and management of RLT in a developing country university: The case of University of Botswana.**

My name is: _____

Permission to be audiotaped

I agree to be audiotaped during the interview	YES/NO
I know that the audiotapes will be used for this project only	YES/NO

Permission to be interviewed

I would like to be interviewed for this study.	YES/NO
I know that I can stop the interview at any time and don't have to answer all the questions asked.	YES/NO

Informed Consent

I understand that:

- my name and information will be kept confidential and safe and that my name and the name of my school will not be revealed.
- I do not have to answer every question and can withdraw from the study at any time.
- I can ask not to be audiotaped, photographed and/or videotape
- all the data collected during this study will be destroyed within 3-5 years after completion of my project.

Sign_____ Date_____

APPENDIX 5: INTERVIEW GUIDE FOR LECTURERS

INTERVIEW PROTOCOL FOR LECTURERS

1. **Introduction**
   a. Greeting
   b. Introducing myself, the purpose of research, collecting a signed consent and remind participant about the voice recording.

2. **Demographic details**
   a. Could you tell me what your job entail
   b. How long have you worked for UB

3. **Ideological factors; ie instutional mission, beliefs and value, pedagogy.**

Lecturers understanding of RLT and its values

a. What do you understand by the term RLT? Can you give examples of RLT in your faculty?
b. How is RLT implemented in your discipline? How are students involved in RLT?

c. In your opinion what is the impact of RLT on teaching and learning in UB

d. Why Research-led teaching an essential part of the university? How important is it?

e. In your opinion what are the practices of RLT in your faculty?

f. In your opinion how does RLT enhance the quality of teaching and learning in your university?

Institutional Mission

a. How does the university strategy support RLT and how is it of strategic value to the institution?

b. In what ways does the institution use teaching and research to compete in the higher education market?

RLT practices

a. In what ways do you use other people's research to inform teaching

b. In what ways do you use your research to inform teaching

c. To what extent do you encourage your student to participate in your research to inform your teaching? (Why/Why not?)

d. In what ways do you engage your students to inform teaching?

Structures and systems

a. What support systems are in place for lecturers doing research-led teaching
b. What is your opinion on the support systems that are in place?
c. What would you suggest for improve RLT in your discipline and in your institution?

Staff and skills

a. How prepared are you to implement research-led teaching in your discipline?

b. How is the university supporting you in effectively implementing RLT?

c. what skills are needed for the effective implementation of RLT?

d. How is the university enhancing and encouraging such skills?

e. What are the personal challenges that you come across with regards to RLT.

f. What are the institutional challenges with regards to the implementation of research-led teaching?

Staff & Skills

a. How prepared are you to implement RLT in your discipline?
b. How is the university assisting you effectively implementing RLT?
c. What skills are needed in effectively implementing RLT?
d. How are such skills encouraged?
e. What are some of the personal challenges that you encounter with regards to RLT?

4. Environmental Factors

Market Forces

a. In what ways does your faculty use RLT to incorporate an international dimension into the curriculum?

b. How does the university use RLT to impact on the social and economic state of the labour market?

c. In what ways does RLT impact on the institutional brand? How does it give UB a competitive advantage?

Differential funding arrangements

How are resources allocated for teaching and research in UB?

- Does the resource allocation support implementation of RLT?

APPENDIX 6: DISCUSSION QUESTIONS FOR STUDENTS

1. What is your understanding of research-led teaching?
2. How has RLT enhanced your learning experience?
3. How is research integrated into your learning experience? How have you experienced research in your programmes or how has your lecturer introduced research in your learning experience?
4. What is the university of Botswana doing in order to ensure that you actually interact with research, what support are you getting from the university? Are you getting any support, any funding for research, what has been your experience?

APPENDIX 7: STUDENT QUESTIONNAIRE

THE IMPLEMENTATION AND MANAGEMENT OF RESEARCH-LED TEACHING IN UNIVERSITY OF BOTSWANA

This questionnaire is based on the McKinsey 7s management principle (Strategy, Structures, Systems, Staff, Skill, Staff and Shared values) to understand your views on the implementation and management of research-led teaching in your faculty.

The questionnaire has statements under each principle you are requested to rate the statement according to current state of interaction with research-led teaching in your faculty.

Rate how much you agree with each statement using the 5 point likert. Record your rating with a tick in the appropriate box provided to the right of the statement as indicated below.

Agreement Rating

Rating	How much you agree with each statement
1	Strongly agree (SA)
2	Agree (A)
3	Neither agree nor disagree (NDA)
4	Disagree (D)
5	Strongly disagree (SD)

The first section of the questionnaire requests you to give demographic information.

SECTION A: DEMOGRAPHIC DATA

Please fill out the following questions and make a tick on the appropriate spaces

Gender: Male ___ Female_____

Faculty of Study: HUMANITIES

Study Programme(e.g History, English): _____

Degree: Undergraduate_____ Post graduate_____

Year of study(e.g1,2,3,4)_____ other(specify)_____

SECTION B:THE IMPLEMENTATION AND MANAGEMENT OF RESEARCH-LED TEACHING

PRINCIPLE DEFINITION AND STATEMENT	RATING				
Strategy -The strategy is the general plan of action. It stipulates how the organizations align its resources with the plan of action to respond to the external pressure, its customers and its competitors. The strategy includes short and long term objectives.					
When I registered for my study programme, I was very aware of the research reputation of the staff working in the department of my study.	***1***	***2***	***3***	***4***	***5***
The general opinion is that research can enhance the credibility of an institution	***1***	***2***	***3***	***4***	***5***
The common belief is that research competences will help me become a better employee later.	***1***	***2***	***3***	***4***	***5***
My lecturer's research has contributed significantly to the quality of my study programme.	***1***	***2***	***3***	***4***	***5***
I learn effectively when given research tasks (e.g, exercises on problem solving, development of a research project giving, a presentation of own research).	***1***	***2***	***3***	***4***	***5***
I learn most when I'm involved in a research project	***1***	***2***	***3***	***4***	***5***
I think it is important that lecturers report on their own research during their classes	***1***	***2***	***3***	***4***	***5***
Shared Values -Shared values emphasise on culture, guiding concepts and the dominant set of values that unite the organisation in a common purpose.					
My involvement in research has increased my understanding of my discipline.	***1***	***2***	***3***	***4***	***5***
My involvement in research has stimulated my interest and enthusiasm for the subject	***1***	***2***	***3***	***4***	***5***
My involvement in research has increased my awareness of methodological issues	***1***	***2***	***3***	***4***	***5***
My involvement in research has contributed to the development of my research-related skills	***1***	***2***	***3***	***4***	***5***
Lecturers in my faculty (formally or informally) communicate research activities	***1***	***2***	***3***	***4***	***5***
We have opportunities to learn about current research (through official publication, journals, books, conference papers, wibsites)	***1***	***2***	***3***	***4***	
Conducting research is viewed as important in our faculty	***1***	***2***	***3***	***4***	***5***
In our university it is generally believed that including research in university teaching is important	***1***	***2***	***3***	***4***	***5***
The faculty reinforces a culture of research among students and lecturers	***1***	***2***	***3***	***4***	***5***

Structures - This element describes how the institution is organised in terms of roles, responsibilities and accountability relationships. I know that within my Faculty there are;					
Research centers	***1***	***2***	***3***	***4***	***5***
Research seminars and conferences	***1***	***2***	***3***	***4***	***5***
Lecturers and assistants who write books, journals	**1**	**2**	**3**	**4**	**5**
Systems- refers to the business and technical infrastructure that employees use on a day to day basis to accomplish their aims and goals. This category includes organisational subsystems such as management information system (MIS), training, budgeting and accounting systems.					
In my faculty there are research grants for students	***1***	***2***	***3***	***4***	***5***
There are adequate library resources available to conduct research	***1***	***2***	***3***	***4***	***5***
We are given support to improve our research competencies	***1***	***2***	***3***	***4***	***5***
Style - The idea of style, refers to leadership style/ patterns of action (dominant managerial philosophy and shared values) undertaken by top managers in an organization.					
My faculty encourages me to participate in lecturer seminars by guest speakers in my field of study	***1***	***2***	***3***	***4***	***5***
I am encouraged to attend research seminars that are not part of my regular classes.	***1***	***2***	***3***	***4***	***5***
University management encourages us to become involved in research	***1***	***2***	***3***	***4***	***5***
Staff -Staff looks at people who do the work as well as the human resource systems that allow and encourage work to be done, including performance appraisals, training, motivation and morale.					
In my faculty there are mechanisms in place to capture and evaluate lecturers in order to improve their teaching and research intergration**.**	***1***	***2***	***3***	***4***	***5***
Lecturer's teaching evaluations process is applied consistently and fairly.	***1***	***2***	***3***	***4***	***5***
Skills - ***Skills refer to the activities people do best or the competencies that people possess in order to perform the organization duties. In my faculty there are;***					
Lecturers undertaking research	***1***	***2***	***3***	***4***	***5***
Lecturers writing publications	***1***	***2***	***3***	***4***	***5***
Lecturers supervising students research	***1***	***2***	***3***	***4***	***5***