

**THE ROLE OF ACADEMIC MIDDLE MANAGERS IN THE
PLANNING AND IMPLEMENTATION OF CURRICULUM
CHANGE IN PRIVATE HIGHER EDUCATION INSTITUTIONS
IN BOTSWANA**

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**A Thesis Submitted in Fulfillment of the Requirements for the Degree of
DOCTOR OF PHILOSOPHY**

In the Faculty of Education

At the

**UNIVERSITY OF FORT HARE
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September 2015

DECLARATION

I hereby declare that this study titled *The role of academic middle managers in the planning and implementation of curriculum change in private higher education institutions in Botswana* is my work, that it has not been submitted before for any degree or examination in any other University and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Norman Rudhumbu

September, 2015



Signed:-----

6th September 2015

Date:-----

ABSTRACT

The purpose of the study was to examine the role of academic middle managers (AMMs) in the planning and implementation of curriculum change in private higher education institutions in Botswana. This study employed a mixed methods research approach which utilised a structured questionnaire and a semi-structured interview guide to gather data on AMMs' role in the planning and implementation of curriculum change in PHEIs in Botswana. SPSS version 21 was used for analysing quantitative data while thematic analysis was used for analysing qualitative data on the role of AMMs in the planning and implementation of curriculum change in PHEIs.

The study showed that the role of AMMs in the planning and implementation of curriculum change in PHEIs was too complex and demanding because they spent most of their time on daily administrative routines instead of on core academic activities such as planning and implementing curriculum change in their departments. The AMMs in the PHEIs under study operated more like managers in academic departments than academics in management. As a result the study showed that AMMs faced more challenges than opportunities in their planning and implementation of curriculum change in PHEIs. The major challenges AMMs faced in the planning and implementation of curriculum change were a highly controlled and strict work environment, role conflict, lack of autonomy, role strain and heavy workloads which limited the time AMMs spent on the core business of managing curriculum change in their departments. The study also highlighted some of the strategies albeit a few, which, despite the numerous challenges AMMs faced, are used to try and make the planning and implementation of curriculum change by AMMs was to some extent successful.

The study provided insight on the influence of AMMs biographical characteristics as well as the influence of AMM job requirements (such as having a detailed job description and having authority over curriculum matters) on how AMMs enacted their role in curriculum change. Based on the results of the study, a model to assist AMMs in the effective planning and implementation of curriculum change was proposed.

ACKNOWLEDGEMENTS

My special thank you goes to the Faculty of Education in particular the School of Postgraduate Studies at the University of Fort Hare, for the opportunity afforded me to pursue my PhD study. Special mention goes to my supervisor Prof Cosmas Maphosa for his timely reviews and comments to my work. He was ever patient and ready to offer me the much needed academic guidance during the whole trying period of the PhD study. Thank you very much.

I also want to say thank you to management and staff of the five private higher education institutions that afforded me the opportunity to carry out my study.

Special mention also goes to my colleagues Ushe Makambe, Clever Gumbo, Douglas Svatwa with whom I was always engaged in academic discussions concerning my study. They were always there to motivate me to succeed.

Last but definitely not the least, I am very thankful to my wife LUCY RUDHUMBU for always giving me time to study, encouraging me and even sacrificing financially to ensure that I complete this study. Thank you my dear.

DEDICATION

To my wife Lucy Rudhumbu and my children Knowell, Anold and Norman Jnr

ACRONYMS

ABM.....	Academy of Business Management
ADOF.....	Assistant Dean of Faculty
AHOD.....	Assistant Head of Department
AMMs.....	Academic Middle Managers
AMM1.....	Academic Middle Manager Number 1 out of 10
ANOVA.....	Analysis of Variance
BOTA.....	Botswana Training Authority
CHE.....	Council of Higher Education
DL.....	Distributed Leadership
DOF.....	Dean of Faculty
DRD.....	Dropped
FPC.....	Faculty Programmes Committee
GIPS.....	Gaborone Institute of Professional Studies
GLM.....	General Linear Model
HE.....	Higher Education
HEIs.....	Higher Education Institutions
HOD.....	Head Of Department
PHEIs.....	Private Higher Education Institutions
HE.....	Higher Education
HEIs.....	Higher Education Institutions
ML.....	Module Leader
MOESD.....	Ministry of Education and Skills Development
N.....	Population size
n _i	Number of AMMs per Institution

NIIT.....	National Institute of Information Technology
NR.....	Not Returned
OECD.....	The Organisation for Economic Co-operation and Development
PAC.....	Programmes Accreditation Committee
PhD.....	Doctor of Philosophy Degree
PHEIs.....	Private Higher Education Institutions
QUAL.....	Qualitative
QUAN.....	Quantitative
r	Pearson Correlation Coefficient
R.....	Returned
R^2	Regression correlation
S.....	Total Sample Size
s_i	Sample Size per Institution for QUAN phase
SPSS.....	Software Package for Social Sciences
S_{qi}	Sample Size per institution for QUAL phase
S_q	Sent Questionnaires
Std Dev.....	Standard Deviation
TEC.....	Tertiary Education Council
UB.....	University of Botswana
UBBS.....	University of Bechuanaland, Basotoland and Swaziland

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CHAPTER 1: INTRODUCTION

1.1. Introduction to the study

This study focuses on the role of the academic middle managers in the planning and implementation of curriculum change. The role of academic middle manager (AMM) in curriculum change has been a subject of debate and contestation the world over (Clegg & McAuley, 2005; Meek, Goedegebuure, Santiago & Carvalho, 2010). The role, nature and functions of academic middle managers (AMMs) has traditionally been viewed as that of transmission of top management views to lower echelons of the organisation (Balogun, 2007; Brundrett, 2007; Meek, Goedegebuure, Santiago & Carvalho, 2010; Smith, 2007). Such a view has however, changed greatly over the last decade due to the growing recognition of the key role academic middle managers play in institutional improvement in general and curriculum change in particular (Bennett, Newton, Wise, Woods & Economou, 2003; Brundrett, 2007; Meek, Goedegebuure, Santiago & Carvalho, 2010). Academic middle managers have also been viewed as playing the role of academic leaders, a key role for academic excellence (Busher, 2005; Kallenberg, 2007). As leader-academics, academic middle managers are increasingly expected in colleges and universities to be good managers, strategic leaders and distinguished academics (Smith, 2002; Hellowell & Hancock, 2001, Kallenberg, 2007; Meek, Goedegebuure, Santiago & Carvalho, 2010).

The important role of academic middle managers in higher education in general and in curriculum change in particular is further highlighted by their unique middle hierarchy position in their organisations that gives them leverage to have both an institution-wide view as well as a deep understanding of the needs of those at the operational levels of institutions (Fitzgerald, 2009; Brown, Rutherford, & Boyle, 2000; Bennett et al, 2003). This middle position enables academic middle managers to have a broader knowledge and understanding of organisational issues that better positions them to confidently propose, plan and effectively lead curriculum change in educational institutions than most of the institutional members (Kedian, 2006). In the same vein, Kumarasinghe and Hoshiro (2010) posit that the proximity of academic middle managers to employees and hence to the opportunities to mediate operational conflicts and problems, as well as to decode corporate messages for top management, demonstrates the key role these managers play in managing curriculum change.

Literature further attests to 80% of all administrative decisions in higher education in general and in curriculum change in particular, being made by academic middle managers at departmental level (Jackson, 2004; Del Favero, 2006a; Dunning, Durham, Aksu & Lange, 2007). Although academic middle managers occupy key positions and perform crucial roles in their organisations, research also shows that there is much pressure put on the shoulders of these managers in terms of workload, multiple tasks and the need to produce good results. The multiplicity of tasks performed by academic middle managers in higher education institutions is a significant and continuing theme in higher education in general, and in curriculum change in particular. Research further shows that by undertaking these multiple tasks, academic middle managers enmesh themselves in a web of confusion about what exactly constitutes their role in curriculum change (Del Favero, 2006a).

1.2. Background

1.2.1. The higher education environment in Botswana

Higher education in Botswana consists of two systems namely public education system which consists of all post-secondary and publicly funded institutions and private higher education system which consists of privately owned and funded post-secondary institutions. Furthermore, while all post-secondary institutions whether public or private, are referred to as tertiary institutions, only those that offer qualifications up to degree level are described as higher education institutions.

In terms of history, higher education in Botswana dates back to the 1960s which saw the establishment of the University of Botswana which began as a part of a larger university system known as UBBS, or the University of Bechuanaland (Botswana), Basotoland (Lesotho), and Swaziland founded in 1964 to reduce the three countries' reliance on tertiary education in apartheid South Africa (Tertiary Education Council (TEC), 2005). Since 1982, the main provider of tertiary education in Botswana has been the University of Botswana (UB) after it became an independent national university (TEC, 2005).

The history of private higher education in Botswana dates back to the early 1990s when private higher education institutions (PHEIs) became recognised as potential partners with government

in the provision of tertiary education (TEC, 2005). The astronomic rise in the number of private tertiary education institutions in Botswana raised concerns about the quality of education they provided and meant that there had to be government regulatory bodies for checks and balances on the quality of education these tertiary education institutions provided (Botswana Training Authority (BOTA), 2009; 2011). Specific concerns raised about the mushrooming of these institutions related to their capacity to successfully provide quality education that would address current societal challenges; sound management on the part of the private tertiary institutions; and their potential to survive in a highly competitive higher education environment (Varghese, 2006, TEC, 2005, TEC, 2006).

Academic middle managers operate in a highly regulated private higher education environment in Botswana. Externally, the government regulatory agencies have created a rigid and strict regulatory framework for the accreditation of programmes as well as the implementation of curriculum and curriculum change. Internally, private higher education institutions are owner-managed and the owners have created strict operating procedures where they run the institutions on a strict family businesses-like approach rather than as professional institutions. Such a highly controlled environment has the potential to adversely impact on the role of academic middle managers in the planning and implementation of curriculum change. The role of academic middle managers in PHEIs is further compounded by the fact that literature also shows that little is known about the actual roles and practices of academic middle managers (Raes, Heijltjes, Glunk & Roe, 2011) and how their activities are facilitated in higher education (Balogun, 2007) despite the acknowledged crucial role of the academic middle manager in whether a change is achieved or not (Kallenberg, 2007).

Despite the above concerns and issues surrounding how PHEIs operate, private tertiary education has continued to grow in leaps and bounds to the extent that as of June 2011, there were 6 private higher education institutions (tertiary institutions offering degree qualifications) out of 276 registered tertiary institutions operating in Botswana. The need for partnership between government and private sector in providing much needed tertiary education had become too apparent to ignore (Botswana Training Authority (BOTA), 2002; 2011; TEC, 2013). Due to the need to regulate the operations of these institutions, the Botswana government introduced a two-tier regulatory system through the TEC, formed through the Tertiary Education Act of 1999, and

BOTA, formed through the Vocational Training Act No. 22 of 1998 (TEC, 2008). TEC's mandate was to accredit programmes from diploma level to degree level (Ministry of Labour and Home Affairs, 1997). BOTA's mandate was to accredit programs at certificate level (BOTA, 2002; Republic of Botswana, 1998).

The two regulatory bodies namely BOTA and TEC both fall under the Ministry of Education and Skills Development. Through these two regulatory bodies, PHEIs were formally registered and accredited as from 1997. The registration and accreditation of institutions, the accreditation of their programmes as well as the planning and implementation of curriculum change in private higher education institutions in Botswana follow prescribed rules and regulations which are rigorously followed upon by both regulatory authorities at different times every year (TEC, 2005).

The development and growth of higher education in Botswana has three clear phases (Study Series, 2008). The first phase covering the period prior to 2001, had the following features: sponsored largely given to students studying at the University of Botswana, the colleges of education and national health institutes; limited sponsorship of students at universities abroad in selected study areas such as engineering, medicine and applied sciences; and abolishing of the national youth service which congested a higher education system which was still growing with only a few private higher education institutions as the youth service students had to be absorbed into the mainstream higher education.

The second phase (2001 – 2007) was a period when government, due to its limited capacity to absorb more higher education students locally, increased the funding of students learning in countries such as South Africa as well as abroad in countries such as Europe and Asia (Study Series, 2008).

The third phase (2007 – current) has the following features: extended sponsorship to students in private higher education institutions and tertiary education institutions; mushrooming of private tertiary institutions owing to the sponsorship (by 2007 there were only thirteen registered private higher and tertiary institutions in Botswana and by 2011 there were 276); and the first private higher education institutions to benefit from this decision were Limkokwing University of

Creative technology, NIIT (currently known as Botho University), ABM University College, BA Isago University College and Gaborone Institute of Professional Studies (GIPS) (TEC, 2013).

The sponsorship of Batswana students in all registered local higher education institutions, more than trebled local enrolment from 4374 students in 1999 to 15451 students in 2007 as shown in Table 1.1.

Table 1.1: Student Placement Trends in Botswana

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Botswana	4374	5556	6054	6232	6495	5953	5490	5511	15451
South Africa	177	399	4782	3304	1605	1605	1664	1563	1373
Other Countries	402	415	662	448	404	403	345	648	1333
Total	4953	6370	11498	9984	8664	7961	7499	7722	18157

Sources: Study Series (2008: 148)

Table 1.1 shows increased enrolments in tertiary education in Botswana as a result of the proliferation of tertiary education institutions with an increasing share of the market being taken by private higher education institutions. According to Study Series (2008), in 2008, there were 124 registered tertiary education institutions in Botswana of which 5 were higher education institutions as Table 1.2 indicates.

Table 1.2: Distribution of Registered Tertiary Education Institutions as of year 2008

Type of institution	Number
Private	66
Public	13
Community	34
Workplace	6
Non-governmental Organisations (NGOs)	2
Parastatals	2
TOTAL	124

Source: Study Series (2008: 148)

The difference between tertiary and higher education institutions is based on level of academic qualifications offered. In Botswana, all post-secondary institutions offering professional and academic qualifications from certificate to degree are referred to as tertiary institutions. Tertiary

education institutions offer academic programmes up to degree level and are specifically referred to as higher education institutions. Out of the 66 private tertiary institutions, there were only 5 PHEIs (degree offering private tertiary institutions) in Botswana. Up to now (2014) there are still the same 5 private and 2 public higher education institutions in the context of Botswana. Higher education institutions are regulated by the TEC.

1.3. Statement of the problem

Many authorities in the field of curriculum change attest to the importance of the role of academic middle managers in curriculum change (Busher, 2005; Kallenberg, 2007; Meek, Goedegebuure, Santiago & Carvalho, 2010). Despite this broad acknowledgement that academic middle managers are key to the translation of institutional policies and strategies into practices and actions as well as for generating creative solutions to curriculum challenges facing both their institutions and departments, literature shows that the role of the academic middle manager in academic research in general and in curriculum change in particular, remains largely unexplored (Boyko & Jones, 2008). This assertion is also confirmed by Briggs (2003) who posits that the role of academic middle managers in higher education institutions in general and in curriculum change in particular has largely remained a grey area in research literature. One reason for this gap in research according to Kallenberg (2005) is that research on school leadership and management has tended to focus on top management ignoring the critical role academic middle managers play in leading and managing curriculum change particularly in ensuring that curricula are developed, delivered and assessed, and programs are evaluated and teachers are assessed.

Private higher education institutions are highly controlled externally by government regulatory agencies and internally by owner managers. Despite the constraints under which the AMMs operate, the researcher knows of no research that has been conducted in the context of private higher education in Botswana to determine how academic middle managers operating in such a highly controlled environment plan and implement curriculum change. Researches reviewed on higher education also indicate that there is very limited substantiated body of literature on the role of the academic middle manager in curriculum change in private higher education institutions (Clegg & McAuley, 2005; Lavarda & Canet-Giner, 2009). This study therefore is an attempt at investigating how AMMs implement curriculum change as well as add to the body of

literature on the role of AMMs in curriculum change. Results of the study are used to develop a model to enhance the planning and implementation of curriculum change by AMMs in PHEIs. The focus of this study can best be understood from the research questions which guided the study. The study is framed by one main research question and 5 sub-questions. One research aim and 5 research objectives are also used to articulate what the study seeks to achieve.

1.4. Main research question

What role do academic middle managers play in the planning and implementation of curriculum change in private higher education institutions?

1.5. Sub-research questions

- 1.5.1. How do AMMs view the role they play in leading the planning and implementation of curriculum change in their disciplines?
- 1.5.2. To what extent do biographic characteristics influence the role of AMMs in the planning and implementation of curriculum change in PHEIs?
- 1.5.3. Which strategies do AMMs employ for effective planning and implementation of curriculum change in PHEIs
- 1.5.4. What are the enablers of AMMs role in the planning and implementation of curriculum change in PHEIs?
- 1.5.5. Which model can be developed to improve the planning and implementation of curriculum change by AMMs in private higher education institutions?

1.6. Research aim

The aim of this study is to investigate the role of academic middle managers in the planning and implementation of curriculum change in private higher education institutions in Botswana.

1.7. Research objectives: This study seeks to:

- 1.7.1. establish the views of the academic middle managers concerning their role in leading the planning and implementation of curriculum change in their different disciplines;
- 1.7.2. establish the influence of biographic characteristics on the role of AMMs in the planning and implementation of curriculum change in PHEIs;
- 1.7.3. identify strategies AMMs employ during the planning and implementation of

- curriculum change in PHEIs;
- 1.7.4. investigate the enablers of academic middle managers' role in the implementation and management of curriculum change in private higher education institutions; and
- 1.7.5. develop a model for enhancing the implementation and management of curriculum change in private higher education institutions.

1.8. Research plan of action

Table 1.3 gives a description of the research plan of action whose details are given in chapter three of the study.

Table 1.3: Research plan of action

Guiding Research question	
What role do academic middle managers play in the planning and implementation of curriculum change in private higher education institutions?	
Paradigmatic Suppositions	
Epistemological Models: Objective model; interactive/subjective model; practicality model.	Paradigm: Pragmatic paradigm that combines both positivism and interpretivism
Methodological Model: combining QUAN and QUAL methods	Approach: Mixed Methods research approach
Research design	
The Concurrent triangulation design	
Sample and sampling procedures	
Sample type: Stratified purposive sample. Sampling procedures: - Stratified random sampling was used to select AMMs for the quantitative phase. - Purposive sampling was used to select AMMs for the qualitative phase.	Number of participants: 162 out of a population of 280 AMMs.
Data Collection	
Data collection methods: Structured questionnaire and semi-structured interviews	Procedures of data collection: 90% of questionnaires were hand delivered to AMMs in Gaborone where most AMMs were located and 10 % were sent by e-mail to centers outside Gaborone. - For semi-structured interviews 10 AMMs were conveniently selected and interviewed for 30 minutes.
Data Analysis and interpretation	
Data analysis method: quantitative using SPSS	Descriptive statics and inferential statics (parametric and non-parametric tests) were used.
Data analysis method: Qualitative using thematic approach	Thematic content analysis were used.
Validity and reliability/Data trustworthiness	
Reliability: Internal consistency reliability	Internal consistency reliability was tested using the Chronbach's Alpha coefficient
Validity:	Expert advice were sought to ensure face

	validity. • To ensure external validity random sampling, large sample size and multi-methods were used. • To ensure content validity expert opinion were sort on instrument nature and quality of content.
Data trustworthiness: • Credibility • Transferability • Dependability • Confirmability	• To ensure credibility of data, well establish research methods were used, thick descriptions of phenomenon under study were done and participants had options to refuse participation. • To ensure transferability, sample size especially for QUAN study was large. • To ensure dependability, the research design and its implementation were explain in detail. • To ensure confirmability, triangulation was used and methodology will be explained in detail.
Ethical considerations	
Ethical issues to be considered before start of the study include the following:	• Permission was sought from management of participating institutions. • Participating institutions were assured of anonymity. • Ethical clearance from Parent University was sought and granted. • Participants were informed of the purpose and procedures of the study for them to make decisions to take part or not. • Participants also signed letters of informed consent after reading and understanding the purpose of the study.
Conclusions	
Recommendations	

1.9. Significance of the study

This study is an attempt at filling the literature and research gaps concerning the role of academic middle managers in curriculum change in Botswana. It will also contribute to the enrichment of the body of knowledge on the role of academic middle managers in curriculum change in higher education. Since the role of academic middle managers has been viewed by a number of researchers as being pivotal in higher education in general and in curriculum change in particular (Del Favero, 2006a), this research will also result in the increased awareness and appreciation by top management in PHEIs, of the important contributions of academic middle managers to curriculum change in higher education with particular reference to private higher education. Furthermore the research will be enhance the knowledge of AMMs of the challenges they are likely to face during curriculum change, possible opportunities that may be available to them for

effective planning and implementation of curriculum change as well as strategies they can use to enhance their effectiveness in the planning and implementation of curriculum change in PHEIs.

1.10. Methodology

A concurrent triangulation design was adopted for this study after a careful examination of the nature, philosophy and focus of the study with the structured questionnaire and semi-structured interview guide being the primary instruments for data collection. The concurrent triangulation design is defined as a one-phase design in which the researchers implement qualitative and quantitative methods (Creswell, 2007). The single-phase timing of this design is the reason why it has been referred to as the concurrent triangulation design (Creswell & Plano Clark, 2010; 2011). The underlying principle of concurrent triangulation design is to use separate quantitative and qualitative methods as a means of offsetting the weaknesses inherent within one method (Creswell, 2003) thus strengthening the study's knowledge claims.

1.10.1. Data collection

With regards to instrumentation employed in the study, a structured questionnaire and a semi-structured interview guide were used. The semi-structured interview guide was meant to probe deeper into the respondent's knowledge and views about the planning and implementation of curriculum change in PHEIs. To ensure research rigour, both the questionnaire and the interview guide were standardised subsequent to a pilot test and then content analysed.

1.10.2. Data Analysis

Data analysis was meant to provide an understanding of AMMs' views of curriculum change in terms of how they lead the planning and implementation of curriculum change in highly regulated PHEIs. Parametric, non-parametric, as well as descriptive statistics were used for analysing quantitative data while the thematic approach was used for analysing qualitative data.

1.11. Delimitation of the study

This research focuses primarily on the role of AMMs in curriculum change in private higher education in Botswana. AMMs were chosen for this study as they are the main actors in the planning and implementation of curriculum change in institutions and this study wished to establish how they plan and implement curriculum change in the highly regulated private higher

education environment. The choice of PHEIs rather than public higher education institutions or private tertiary institutions (non-degree offering private institutions) was informed by the fact that the private higher education environment in Botswana is highly restrictive internally and highly regulated externally when compared to both public higher education institutions and non-degree offering private tertiary institutions and the researcher wished to establish how curriculum change is planned and implemented in the PHEIs. There are five private higher education institutions in Botswana all of which are owner-managed, and located across Botswana. These five owner-managed private higher education institutions constituted the research sites for this study.

1.12. Definition of key terms

1.12.1. Academic middle managers

These are academics, that is, professors, typically tenured, with teaching and research backgrounds in a university setting, who occupy positions between the top management and the operating core (Boyko & Jones, 2008). These are academics in the middle of institutional management hierarchy in private higher education institutions who include deans of faculty, assistant deans of faculty, heads of department, and assistant heads of department.

1.12.2. Role

Role is part someone or something plays in a particular activity or situation (Boyko & Jones, 2008). In the context of PHEIs, role signifies academic middle managers' involvement or what they actually do during the planning and implementation of curriculum change.

1.12.3. Curriculum change

It is a process that involves changes in the educational systems, programme structures and objectives, leading to changes in approaches to teaching and learning as well as changes to students' learning outcomes (Chan & Luk, 2013). Curriculum change therefore relates to the changing of the course and/or its components for both the lecturers and their institutions.

1.12.4. Higher education in Botswana

Higher education (HE) primarily describes post-secondary learning that takes place at universities, as well as other colleges and institutions that award academic degrees and

professional qualifications (Walsh, 2012). In the context of this research higher education refers to all post-secondary education up to degree level.

1.12.5. Private higher education

It is education provided by a non-public HEI established by a natural person or a corporate body (Dittrich & Weck-Hannemann, 2010). In the context of this study private higher education is all post-secondary education up to degree level provided by privately-owned institutions.

1.12.6. Planning

Planning is a process of thinking about and organizing the activities required to achieve a desired goal (Sherlekar & Sherlekar, 2009). Planning therefore is a forethought activity.

1.12.7. Implementation

It is the act or process of putting a decision or plan into effect (Sherlekar & Sherlekar, 2009). In the context of this study implementation is the execution of curriculum change plans.

1.13. Organisation of the study

Chapter 1 introduced the study and explained the purpose of the study in which the research background, problem statement, research questions and objectives as well as significance of the study are articulated. Chapter 2 reviews the literature related to the study. In this chapter the concepts of curriculum and curriculum change, role of academic middle managers in curriculum change, enablers and barriers to effective curriculum change, models of middle manager role in curriculum change as well as leadership styles for curriculum change are discussed. The theoretical framework which informs the study is also discussed at the end of chapter 2. Chapter 3 describes the methodology of the study that will be used for collecting data to be analysed in chapter 4. It explains the research philosophy and design as well data collection and analysis instruments used in the study, among other things. Chapter 4 presents and analyses both quantitative and qualitative data for interpretation in chapter 5. It also marks the point where both sets of data are integrated. Chapter 5 interprets the findings of the study. Chapter 6 gives summary of the study, conclusions and recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

Chapter one introduced the study. One of the main purposes of chapter one, besides introducing the study, was, through the articulation of research questions, aim and objectives of the study, to set the parameters within which review of related literature was to be done. Chapter one also set the basis for the methodology for data collection to be discussed in chapter three. One of the major issues discussed in the background to the study was that there are five private higher education institutions in the higher education sector in Botswana. Another was that while AMMs are critical to the success of curriculum change in higher education, research on the role of these managers in higher education in general and in curriculum change in particular largely remains a grey area. Chapter one also explained the research problem. The statement of the problem also showed that in the context of Botswana specifically, there is no known research that has been conducted to examine the role of AMMs in curriculum change despite the fact that AMMs operate in a highly regulated higher education environment, hence the need to carry out this study.

Chapter two focuses on two critical issues. First the chapter reviews literature related to the process of curriculum change and the conditions requisite for that change. Since the study focus was on AMMs' role in relation to curriculum change, such literature would provide useful insights upon which the investigation of AMMs' role in the curriculum change process would be investigated. Second, the chapter reviews literature on AMMs' role, its historical context and both enabling and constraining factors in the enactment of that role within the context of curriculum change. Such knowledge provides indicators of effective AMMs role which the study can investigate.

Other important issues discussed in chapter two include strategies AMM deploy for managing curriculum change, how top management in higher education institutions influence the AMM role in curriculum change, the role of leadership in curriculum change with regards to how AMMs frame their leadership role within a typology of different leadership styles. A description of the theoretical framework that underpins this study is also provided at the end of chapter two.

2.2. Curriculum change in higher education

This section conceptualises curriculum change in higher education by discussing the following issues: the concept of curriculum and curriculum change, the curriculum change process as well as conditions that contribute to the successful planning and implementation of curriculum change.

2.2.1. Defining curriculum

To clearly understand the process of curriculum change, it is important to understand what curriculum is. Literature testifies to there being no uniformity or singularity of definition when it comes to the concept of curriculum. In a general sense, curriculum is viewed as a socio-historical construction that is experienced through general systems of knowledge characterisation and hierarchy, which systems are in turn translated and transformed into legislative and administrative regulations, academic achievement standards, textbooks and teaching materials, and the practice of teaching and learning in classrooms (Moreno, 2006 in Benavot, Braslavsky & Truong, 2007). This conception of curriculum therefore views Hamilton's (2005) claim of curriculum as the systematization of stored-up (dormant) human experience as highly deceptive in its form and simplicity. The above is so because curriculum is dynamic and is a process in which valued knowledge is interpreted and reinterpreted through the processes of conception, translation, production and implementation (Gilbert, 2011). The view that curriculum is dynamic is also confirmed by Moreno (2006) who intimated that as a dynamic process, curriculum is an articulation of meanings in social practice. In my opinion therefore, curriculum represents all the *learnings* students go through at school be they planned or unplanned, inside or outside the classrooms.

2.2.2. Defining curriculum change

Change is viewed as a process through which people and organisations move as they gradually come to understand and become skilled and competent in the use of new ways (Hall & Hord, 2006). Fullan (2005) also views change as not just a process but rather as an interaction of various factors in society acting at different stages so that whatever transpires on one stage affects the activities of another. Change is therefore not simply about getting things better, larger or smaller, but also about being a discontinuous process that has no pattern, is chaotic and difficult to predict (Ford & Ford, 2010). Literature shows that as a result of its unpredictability,

desired change may not occur if individuals lack the skills to change, do not understand it, are unable to recognise how they feel about it, or possess values that limit their motivation to participate in the change (Pieterse, Caniëls & Homan, 2012). Given the above characteristics of change, curriculum change can therefore be defined as a process rather than an event which links to a broader social context, and a process in which broader, deep-rooted questions about school and society, especially with regards to the nature of knowledge and which knowledge is useful, are addressed (Gilbert, 2011). As a result of this link between school and society, factors that are cultural, social, political, organisational and psychological, all in their own unique and/or collective way, help in enriching our understanding of curriculum change and the competing forces therein, as well as in defining the parameters within which curriculum change can be successful (Smith, 2008).

Literature further attests to curriculum change often being a problematic process for middle managers and teachers because of its political, complex, contradictory and occasionally symbolic nature (Morgan & Xu, 2011). The multidimensional nature of curriculum change lends credence to the claim by Rosenmund (2006) cited in Benavot et al, (2007) that curriculum change cannot therefore, be seen as purely a planned technocratic reform to improve the productivity of the educational system but rather as a socio-political measure that reshapes relationships between individuals and institutions through the selection and organisation of school knowledge.

Curriculum change is viewed as an erratic and fortuitous process dominated by fads and pendulum-like swings from one ideology to another (Ravitch, 2004). Gilbert (2011) also argues that curriculum change is not a process limited to a time period but is an ongoing and necessary part of the routine practice of educational institutions. As a follow up to the above arguments on the nature of curriculum change, three key dimensions namely the technical, political and the cultural dimensions that articulate tensions in curriculum change and hence help illustrate curriculum change as a complex, turbulent and difficult task for middle managers (Johnson, 2007), are identified as worth of mentioning below. These dimensions help to further argue for a systems thinking approach to curriculum change (Dawidowicz, 2010; Dyehouse, 2009; Johnson, 2007). Based on my understanding of the above definitions of curriculum change, my own definition would be that curriculum change is a challenging, multidimensional curriculum improvement process that seeks to improve either the curriculum materials, how they are taught

or importantly how students learn, with assessments taken only as tools to measure as well as improve how students learn a new/revised curriculum.

2.2.2.1. *The technical dimension of curriculum*

The technical dimension of curriculum relates to professional knowledge, skills, their acquisition, classroom management issues, time for planning as well as professional learning provision (Dawidowicz, 2010; Dyehouse, 2009; Johnson, 2007). The dimension implies that for AMMs to effectively perform their roles in curriculum change, they must possess adequate and current knowledge of curriculum, and use that knowledge to effectively plan, implement and manage the implementation of the curriculum change process and eventually improve the learning process (Gilbert, 2011).

2.2.2.2. *The political dimension of curriculum*

The political dimension of curriculum relates to power and influence which manifests in administrative support and leadership, collaboration with all stakeholders, and negotiation and resolution of conflict (Dawidowicz, 2010; Dyehouse, 2009; Johnson, 2007). The dimension is an articulation of the fact that AMMs need to be aware and understand that there are many competing forces in curriculum change, each of which desires their interests to be factored into the change process. To ensure successful curriculum change, AMMs therefore need to play a mediating role during the curriculum change process to ensure that they cater for these competing, and in many cases conflicting interests which in the context of private higher education in Botswana, include interests of the government, employers, parents, students, and even international partners.

2.2.2.3. *The cultural dimension of curriculum*

The cultural dimension of curriculum relates to the values, beliefs and norms, both consensual and competing in individuals, groups and organisations (Gilbert, 2011). As mentioned in the definition of curriculum, curricula are implemented in socio-cultural settings, settings which come with their own unique expectations on the role and goals of education (Gilbert, 2011; Dyehouse, 2009). This demands that when attempting to engage in curriculum change, AMMs, first gain a good understanding of the socio-cultural environment in which the new curriculum will be implemented so that the curriculum changes can be relevant in addressing the needs of

the relevant stakeholders (Gilbert, 2011). This idea is also confirmed by Curee (2010) who argues that for curriculum change to be relevant to the needs of learners and the community at large, AMMs need to ensure that they contextualise it to the needs and context of the those groups. Similarly Mafora and Phorabatho (2013) assert that the success of curriculum change depends on how contextualised the resultant curriculum will be to the needs of the learners in particular.

2.2.2.4. Contextual levels mediating curriculum change

As a follow-up to the three dimensions namely the technical, political and cultural dimensions, Owston (2007) came up with three contextual levels that affect and mediate curriculum change namely the micro, meso and macro levels which AMMs should take into consideration when planning and implementing curriculum change. The micro level comprises factors such as classroom organisation and personal characteristics of the teachers and the learners. The meso level includes school, department organisational culture as well as the role of the AMMs and school administrators in curriculum change. The macro level encompasses the above two levels and is concerned with state and national policies and international trends which might influence curriculum change (Owston, 2007). These three contextual levels articulate the fact that curriculum change is a difficult and turbulent process and requires adequate consultation, careful planning, adequate time, funding, support and opportunities for the involvement of multiple stakeholders.

There are a number of definitions that help to provide insight into the meaning of the term curriculum change. According to Chan and Luk (2013), curriculum change is a process that involves changes in the educational systems, programme structures and objectives, leading to changes in approaches to teaching and learning as well as changes to students' learning outcomes. It is also a process that involves changing the curriculum scheme, that is, changing the way curriculum is organised, changing ideas about the content, its scope and its sequence (Ndou, 2008; Seehorn, 2012). These definitions imply that curriculum change is the modification of present teaching practice in terms of goals, materials, strategies and/or assumptions into something new to the teacher. The above characterisation of curriculum change is further confirmed by Cresdee (2002) who asserts that curriculum change relates to changes to the

content, skills developed and the teaching and learning strategies implemented by teachers in their classrooms.

2.2.3. The curriculum change process

Section 2.2.2 reviewed literature on the concept of curriculum change by providing definitions of curriculum change as well as context and levels in which curriculum change takes place. Section 2.2.3 provides a description of the curriculum change process. Literature shows that an effective curriculum change process should provide a means by which high quality learning takes place (Ndou, 2008; Gruba, Moffat, Sondergaard & Zobel, 2010). In private higher education the curriculum change process follows the process defined by Ndou (2008) based on the following steps: need identification, mobilisation, implementation and institutionalisation as shown in Figure 2.1.

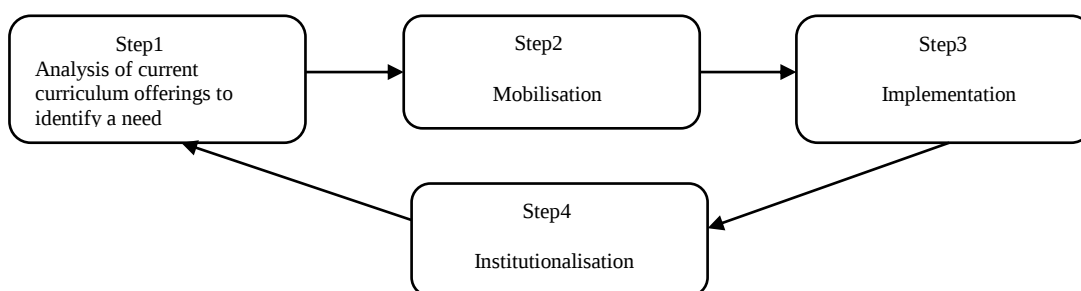


Figure 2.1: The Curriculum Change Process (Adapted from Ndou, 2008: 21)

2.2.3.1. Identification of a need stage

The root of curriculum change lies in identifying the need, concern or dissatisfaction with the current curriculum practices (Dean, 2005). This is the process that eventually leads up to and ends up with the decision to take up a specific curriculum change proposal. The curriculum change process should be informed by a needs assessment program which is an objective and detailed assessment of the situation (Lachiver & Tardif, 2002). This assessment analyses the strengths and weaknesses of the current program, the context in which the program evolves, the internal and external forces acting on the program, as well as the opportunities and challenges in the context (Norcross, Krebs & Prochaska, 2011).

Forces that influence curriculum change in higher education include the following: influential individuals in the department, financial pressures at the institution, staffing issues such as workload, employer and industry viewpoints, student view points, pedagogical argument (academic merit), government regulation, national accreditation bodies, and academic fashion (Ndou, 2008). These factors are also applicable to private higher education in Botswana.

Influential individuals in the department

People play a significant role in initiating curriculum change in departments. These are people who normally demonstrate strong leadership and capacity to attract other academic staff in the department to rally behind the change (Dan, 2008). They also play a crucial role of ensuring that there is sharing and acceptance of the need for curriculum change in the department especially through noticing any discrepancies between current output and what is desired particularly in the world of employment (Wiggins & McTighe, 2006). Ensuring acceptance of the need for change is seen as a very crucial step in initiating a successful curriculum change effort as, according to Ndou (2008), curriculum change will only be successful if the identified need for change is shared and accepted by all stakeholders.

The influential people inspire in others the need for change and initiate that change in departments. Such influential people in private higher education institutions in Botswana are normally the experienced staff on industry demands in higher education and follow current trends in the labour market. Institutional top management outside departments such as directors also propose curriculum change in departments based on the information they glean from their interaction with their peers in commerce and industry.

Industry

When developing or reviewing curriculum, it is very important to interact with industry to ensure whatever curriculum comes out from HEIs is aligned with the needs of industry. Smallwood, (2002)'s view that interacting with industry during curriculum change is critical to avoid misalignment of graduate skills and needs of industry is confirmed by a number of studies that indicate that there is a perception discrepancy between industry and universities with regards to the knowledge and skills industry expects graduates to possess and what HE offers. The issue of misalignment of graduate knowledge and skills and industry requirements is confirmed by the

fact that feedback from employers indicates that there is a skills gap in what students in universities learn in universities (Rasiah, 2009) as top employers now seek effective employees and will not settle for anything less (Gomez, 2008; Nasser, Mah'd, Nimer & Al-okdeh, 2011). According to Lee, Ponton, Jeffereys and Cohn (2011), cooperation between industry and universities on curriculum development and review is therefore crucial for the reduction or even elimination of the perceptual industry-university gap in terms of the skills and knowledge the graduates are expected to acquire in HEIs.

Previous studies on curriculum development and change indicate the need for HEIs to listen more to the voice of industry and to liaise with industry more on curriculum development and reviews in order to produce more of *fit-for-purpose* graduates (Rasiah, 2009). This observation is confirmed by Benvenuti (2011) who argues that encouraging interaction between industry and HE during curriculum development and change is an effective way of managing the tension between industry demands and good academic practice. Gomez (2008) also point to the fact that close interaction between universities and industry helps universities to ensure that new curriculum equips graduates with skills that allow them easier passage and success into the employment world.

Staffing issues

Staffing has been observed as one of the critical issues driving curriculum change in higher education in general and in private higher education in particular. According to Curee (2010), staff shortages mean that middle managers in the departments are forced to change their curriculum so that staff members are able to teach what they can in line with their staffing positions, resulting in the narrowing of the range of subjects they can offer in their curricula.

Employer view points

Employers exert strong opinions about the curriculum and curriculum change. Such employers now prefer employees who possess transferrable skills such as communication, social, analytical and critical thinking skills to complement technical skills (Jones, 2002). As a response to employers' requirement for transferrable skills, PHEIs are reviewing their curricula to include modules such as communication study skills and introduction to computers.

Student views

Students may demand certain mainstream subjects in their course, or may also demand more learning time or even less class sizes (Ndou, 2008). All these demands will lead to changes in the curriculum.

Pedagogical argument

Many curriculum changes are proposed because they are an indisputably *good thing* (Curee, 2010; Mace, 2001). Issues such as the choice of teaching methods as well as whether a subject should be core or elective are all pedagogical issues, which as a matter of principle, departments are always quick to look at for change (Mace, 2001).

Government regulations

The politics of the country that manifests through government regulations and policy changes is also a significant influence in curriculum change (Morgan & Xu, 2011; Kurasha & Chabaya, 2013). As an example, government may decide to fund certain programmes or subjects at the expense of others. This will have a negative effect on curriculum change in that AMMs will concentrate their reviews and improvements on the programmes that they feel have the backing of higher authorities who in the context of Botswana are the funders through sponsorship of students. 90% of students learning in PHEIs are funded by the government (TEC, 2005). This will be at the expense of other programmes which may need review and improvement.

National accreditation bodies

National higher education regulatory agencies scrutinise degree programs in terms of their relevance to meet national human resources needs and hence serve as a force that influences curriculum change in certain directions (Petruzzellis & Romanazzi, 2010). If curriculum change fails to conform to the requirements of these bodies, the program is not accredited since accreditation is crucial for a program to be taught in institutions (Kurasha & Chabaya, 2013). The need to keep pace with shifts in legislation and regulation of HE coupled with the ever changing expectations of the regulators and participants in HE (students, academics, government, parents, and accrediting bodies, are some of the important drivers of curriculum change in HE (Măță, 2012).

Academic fashion

The higher education environment has become very competitive as every institution or department strives to make its programs attractive to prospective students so that the best students choose to study at the institution or in the department (Gruba, Moffat, Sondergaard & Zobel, 2010). While ideally every institution or department would like their programs to be chosen by students on merit because the program is academically strong, most up-to-date, has greatest industry relevance, best teaching, and so forth, research has shown that students tend to consider how easy subjects are to pass, flexibility of delivery, hours required on campus, articulation paths, and availability of parking space, among others, as important institutional attributes when selecting an institution to study at (Gruba et al, 2010). The lure of the above institutional attributes is supported by Songhori (2008) who draws our attention to the centrality of addressing the wants and needs of learners as key to achieving organisational objectives. As a result institutions and departments, as part of curriculum change to meet the needs of such students, begin to produce and offer programs not based on merit but based on the ability to attract students. This then resultantly affects the quality of the changed curriculum.

2.2.3.2. Mobilisation stage

This stage signals the process of ensuring that all the necessary preparations for curriculum change are taken into consideration (Blignaut, 2001). It is a stage defined in terms of four key functions namely development of a curriculum change plan, planning, internal support, and external support (Jones, 2002; Ndou, 2008). Mobilisation involves expressing in terms of the mission statement, what the institution or department intends to do in following up the results of the needs analysis. It also involves clarifying what the middle manager intends to do by formulating objectives in terms of measurable results (Ndou, 2008). Since the mission statement is very important, it must reflect a broad consensus that is shared and supported by all stakeholders in the institution or department.

In the current context of private higher education institutions in Botswana, at this stage, AMMs come up with curriculum areas they want to change in their departments so that they can begin develop a curriculum change plan detailing all the areas of the curriculum that need to be changed, why and how the curriculum change process will proceed. This plan is then taken by

the middle manager to the faculty program committee (FPC) for ratification (Botho University, 2014).

Among the stakeholders to be consulted for the input on the proposed changes, especially where the curriculum changes are major before the curriculum change plan is developed in PHEIs in Botswana are the following: the market, industry, academic advisors, and comparable national and international universities. Once the faculty program committee is satisfied with the curriculum changes, the curriculum change plan is then sent by the AMM to the internal program accreditation committee (PAC) which will check the changes for plagiarism, edit them and the bind them into a document for submission to the national accreditation agencies which are the TEC if the changes are on a degree program, and BOTA, if the curriculum changes are on lower qualifications such as diplomas and certificates (TEC, 2005; BOTA, 2002; Botho University, 2014). The PAC is chaired by the dean of academic studies and also comprises the accreditation manager and the editing team. It takes between six months to two years to get major curriculum changes approved and the new program with the changes accredited by the above government regulatory authorities for implementation in PHEIs. While the private higher education institutions await approval of the new curriculum changes, they will continue implementing the old curriculum without the changes.

2.2.3.3. *Implementation*

This is a stage where the curriculum change plan is operationalised by the middle manager in the department in order to change practice (Ndou, 2008). This is the stage in which issues of extra support to promote the actual use of the innovation are identified and implemented (Ndou, 2008). In the context of private higher education institutions in Botswana, before the implementation is actually done, the regulatory authorities (TEC and BOTA) will visit the respective institution(s) to check whether the resources (textbooks, teaching plans, staff, etc.) are in place and meet the expected standards for implementing the approved curriculum changes (TEC, 2005; 2006; BOTA, 2002). Facility issues such as the library, classroom and where applicable, laboratories, are also checked by the regulatory authorities to see if they conform to the expected standards set by the Botswana Ministry of Education and Skills Development (MOESD) for implementing curriculum and curriculum changes. Implementation of the curriculum changes is checked by the regulatory authorities on an annual basis to ensure that institutions continue to conform to set

standards (TEC, 2005; BOTA, 2002). An important development that should go with implementation of the curriculum change is special training of faculty to be able to implement the curriculum change (Lachiver & Tardif, 2002).

2.2.3.4. Institutionalisation

Institutionalisation also called continuation, incorporation or routinisation stage, relates to the curriculum change being implemented in the department continuously over time (Curee, 2010). At this stage, the curriculum change (or what has been made out of the change during the implementation stage) is now built into the routines of the institution. For effective institutionalisation of curriculum changes, middle managers in private higher education institutions employ the following strategies: recruiting high caliber staff, having adequate resources, interacting with industry, and in-service training of staff. Each of these strategies is discussed in detail below.

Recruiting high-caliber staff

One of the important responsibilities of AMMs in PHEIs is to recruit highly trained and experienced staff. This is not only for the sake of ensuring that curriculum change is implemented by capable individuals, but also because it is a government accreditation requirement (BOTA, 2005). As part of the conditions of the highly regulated higher education environment in Botswana, before staff can teach in PHEIs, they should be accredited by the regulatory authorities BOTA or TEC. After the initial accreditation the staff will be reaccredited every five years, the assumption being they should have improved on their initial professional qualifications and experience. It therefore becomes mandatory, under these conditions that highly qualified staff be recruited by AMMs.

Ensuring adequacy of resources

Ensuring that resources such as relevant textbooks and other related materials are available in adequate numbers is critical for the success of the implementation of curriculum change (Gilbert, 2011). Resources also include facilities such as classrooms, libraries, laboratories and even recreational facilities to ensure students receive an all-round educational experience.

Interacting with industry

Liaising with industry on an on-going basis to ensure that curriculum changes continue to meet industry needs and if not, to identify curriculum areas needing further change is an important component of effective curriculum change. Literature shows that forming partnership with industry with regards to ensuring relevance of education and training is critical in helping higher education institutions achieve their goals and missions as this allows a closer alignment of university learning curriculum to real work tasks to better meet the needs of industry and learners (Choy, 2001). Choy (2001) in further supporting the need for partnership between industry and higher education institutions on curriculum design further posits that both industries and students prefer the learning challenges to be based on the exigencies of work so as to precisely reflect real work circumstances that overtly add to business outcomes.

The need to interact with industry is also supported by Soares (2010) who argues that a mix of technical knowledge, business acumen, and creativity to add value in firms whose imperative is to compete on innovation is critical to the success of today's curricula. Soares (2010) further adds that this complex talent mix requires knowledge and skills gleaned from both academic education and vocational training. The only way to develop curriculum and instruction models that deliver this skill set to large numbers of people is for business and education leaders to build collaborations that leverage their combined knowledge of labor markets, skills, pedagogy, and students (Harris & Ganzglass, 2008; MacAllum & Yoder, 2004)

In-service training

Training refers to a systematic approach to learning and development for the purpose of improving individual, team and organisational effectiveness (Aguinis & Kraiger, 2009). According to Noe (2010), training refers to a planned effort by a company to facilitate employees' learning of job-related competencies which include knowledge, skills, or behaviours that are critical for the successful job performance. According to van Deuren (2013), training is one of the most critical interventions to capacity development in organisations.

Training presents a primary opportunity to expand the knowledge and skill base of all employees (Frost, 2014; Mahony, 2011). This is despite the fact that employers tend to ignore training as they find it expansive and because of viewing it as a cost rather than an investment. Engaging

staff members in in-service training, also called continuous professional development, has been regarded as a sure way of capacitating lecturers to effectively teach the content of their subject areas. Research shows that employees who receive regular training perform better in their roles than those who do not (Kumar, 2009). Employees with access to training develop a feeling that they are valued and supported, and tend to show more commitment and work more productively than those not exposed to training (Hill & Lent, 2006; Satterfield & Hughes, 2007).

Hartmann (2011) argues that engaging staff in in-service training improves their subject knowledge and teaching skills and also helps them to learn how to deliver learning content more effectively by putting the students at the heart of the teaching process and encouraging them to develop independent problem-solving skills. In the context of curriculum change, in-service training helps teachers to have a clear understanding of the demands of the new curriculum as well as how to effectively present it to the students. In a study on the effect of training on firm performance, Arthur, Bennett, Edens and Bell (2003) found that training had an overall positive effect on employees' job-related behaviours or performance and the organisation. In another study, Barber (2004) also found that on-the-job training led to greater innovation and tacit skills that are useful for effective employee performance. This means that with adequate and up-to-date knowledge and skills as a result of on-the-job training, AMMs are able not only to effectively identify curriculum areas need change but also to plan and implement the changes.

Davis and Yi (2004) in their two experiments on the role of training in organisational performance found that training improves the technical knowledge and skills of employees both of which serve as important antecedents of job performance. However, employers are sometimes reluctant to offer training opportunities to their employees on the basis of costs and the fact that training sessions are viewed as making employees miss on work time thereby causing delay in the completion of assigned tasks (Frost, 2014).

Drawing from the literature on the process of curriculum change it is apparent that each of the four stages of the process is crucial towards effective and successful planning and implementation of curriculum change.

Incorporating student needs into the curriculum is viewed as *sine qua non* for the curriculum renewal process (Peretomode & Ikoya, 2010). The second stage of the curriculum change process is the mobilisation stage which deals with the planning of the change process as well as mobilisation of both internal and external support for the curriculum change. This stage is very important for the AMMs as coming up with a mission and the objectives that guide the change process are critical activities for the success of the curriculum change process. Seeking participation in the change itself by both department staff and institutional leadership is crucial for the AMMs to achieve if the curriculum change effort is able to even take off.

The third stage: the implementation stage, requires the AMMs to garner the necessary human and material resources to drive effective implementation of the curriculum change process. This calls for the AMMs to be able to recruit the right lecturers and order the right books and other materials on time and also to ensure that they lead the change process effectively. The last stage demands that AMMs ensure that the curriculum change becomes embedded into the day to day activities of the department, that is, become institutionalised. Ensuring continued support of the implementing staff through in-service training and resource provision is important for the institutionalisation of the new curriculum.

2.2.4. Conditions for successful curriculum change

Planning and implementing curriculum change is a complex process (Kurasha & Chabaya, 2013). Difficulties associated with the whole process abound because of the sinuous and sometimes chaotic manner in which the whole process is done, especially due to the fact that it is a process punctuated with philosophical discussions, questioning of current practices, fear of the unknown and sometimes open resistance (Gilbert, 2011). The following conditions are therefore viewed as critical for the success of the curriculum change effort especially with regards to issues of planning, implementing and sustaining the change process (Curee, 2010):

2.2.4.1. Ensuring the presence of a strong leadership

AMMs need to ensure that their leadership is acknowledged and accepted by the faculty. To ensure that this happens, academic middle managers need to demonstrate capacity to attract individuals in the department to a rallying objective (Curee, 2010). This can be done by coming up with a clearly articulated mission, educational vision and guiding principles backed by the

establishment and maintenance of a climate of confidence that drives determination among members to succeed.

2.2.4.2. *Collective acceptance of the origin and need for curriculum change*

For curriculum change to be successful, it must first ensure that a critical mass of faculty acknowledges the stakes (what it means or is involved) and agrees that changes are needed. Obtaining consensus across the whole department about the need for curriculum change is key to the success of a change effort (Fullan, 2001). In order to guarantee this consensus, AMMs need to ensure that all stakeholders are involved in the process from the outset (Mace, 2001). While literature shows that building consensus is a difficult and delicate task for AMMs as they have to bring together many individuals with different personal priorities to rally around a common goal, it is a task these AMMs must do if the curriculum change process is to succeed.

2.2.5. *Developing faculty consensus*

Developing faculty consensus about the desired level and degree of involvement in the curriculum change process is viewed as critically important in ensuring all members of the department pull together towards the achievement of successful curriculum change (Cresdee, 2002). Pulling together as a department during curriculum change is very important and can be enhanced if individual department members are given opportunities to actively participate in the change process leading to them seeing themselves as part of the change (Bruckman, 2008; Kotter & Whitehead, 2010). Kotter (2010) further argues that if individuals are given control over the change process, they will support and actively participate in the change process.

Curriculum change initiatives span from accommodations (minor changes) to transformations (major changes), hence it is important for AMMs to make it clear to faculty the type of changes anticipated in order to put all faculty in a proper state of preparedness right from the outset. Minor changes normally affect an aspect of the curriculum such as a series of courses, adding an option, or introducing new teaching methods aimed at improving an aspect of learning. Such changes involve a gradual and familiar process hence do not cause alarm and fear among staff in the department (Gordon, 2012). Major changes are much more ambitious and decidedly innovative often involving a dramatic departure from the status quo with the enhancement of student learning being the core objective. In both kinds of changes, the AMM needs to clearly

articulate expectations on the part of the staff and how their fears if any will be managed (Cresdee, 2002; Dyehouse, 2009).

The two change processes (minor and major) manifests in five different forms described next namely curriculum change as substitution, alteration, perturbation, restructuring and value orientation (Cresdee, 2002).

Curriculum change as substitution

Curriculum change as substitution is when one element of the curriculum may be substituted for another (Cresdee, 2002). An example is an old textbook being replaced by another, a different teaching method by another or a different way of planning teaching materials substituted for another.

Curriculum change as alteration

In curriculum change as alteration, a change is introduced into existing curriculum materials in the hope that it will appear minor and be readily adopted (small changes in the curriculum) (Cresdee, 2002). As an example, AMMs can introduce new content or the use of new teaching tools such as calculator in mathematics instead of log book.

Curriculum change as perturbation

This type of change refers to curriculum changes that are disruptive and that require teachers to adapt to them within a short period of time (Cresdee, 2002). As an example, AMMs can introduce changes to the timetable where learning times are either shortened or lengthened causing major adjustments to the timetable, disrupting teaching and learning process. Such curriculum changes would not lend themselves to support by department members or top management.

Curriculum change as restructuring

This change refers to curriculum changes that lead to a modification of the whole school system (Cresdee, 2002). As an example, AMMs can introduce e-learning such as blackboard as a teaching tool and this can cause a number of things such as for example, assessments, to be modified in the institutions. Another example could be the introduction of an integrated

curriculum requiring team teaching can completely change the way teachers traditionally look at and value teaching.

Curriculum change as value orientation

Curriculum change as value orientation refers to shifts in fundamental value orientations of institutional personnel (Gillespie, 2003). An example is when new teachers join the institution or department that places more emphasis on personal growth of students rather than on academic achievement. Such an environment will redefine the value orientations of the new teachers.

2.2.5.1. Ensuring openness and flexibility

Ensuring openness and flexibility of implementing staff in organising their work gives them autonomy and freedom to exercise their minds on the best approach to use to successfully implement curriculum change (Gruba et al, 2010). Curriculum change especially of a transformative nature requires a radical shift by staff from a professional culture with a high degree of individual autonomy and academic freedom to one with very high levels of interdependence so that all curriculum activities fit into a continuum of activities and each faculty member explicitly takes into account what is upstream and downstream of his/her own interventions during the curriculum change process (Mace, 2001; Curee, 2010). This then calls for the academic middle managers to ensure that there is change in their staff, not only in behaviour but also and most importantly in professional and departmental culture.

2.2.6. The role of middle managers in curriculum change

This section discusses the concept of role as understood by the middle manager and also as shaped by the different contexts in which the AMM performs his/her curriculum change role, and is aligned with sub-research question 1.5.1 which seeks the views of AMMs on how they implement curriculum in PHEIs. This section also articulates challenges AMMs face during curriculum change and is again aligned with sub-research question 1.5.1. Literature shows that the way the AMM understands and hence enacts his/her role in curriculum change is framed by the nature of the activity, role expectation, role conflict and the demands of the role sender among others. The AMM occupies a paradoxical position in higher education as he or she is caught between several positions, processes and interests (Kallenberg, 2007). At the very least the AMM is the linking pin between strategic and operational processes; and has to find a balance between the teaching staff and the administrators, between education and research, and

finally, between hierarchy and collegiality. Below is a discussion of each of these force fields (Kallenberg, 2007). The section further discusses how the AMM enacts his/her role in the light of different demands and competing interests that shape what exactly the AMM should call his/her role in curriculum change.

2.2.7. Role of academic middle manager defined

This section is also an articulation of the role of AMMs and how it is manifested during curriculum change. It is a section also aligned to sub-research question 1.5.1 with regards to covering issues related to the views of AMMs with regards to how they implement curriculum change in PHEIs. The definition or meaning of role in the context of what AMMs do in colleges and universities has been a subject of contestation over a long time as a result of the multiple way it is viewed (Prichard, 2000; Meek, Goedegebuure, Santiago & Carvalho, 2010; Kallenberg, 2007). Role is viewed as an intuitive but problematic notion in knowledge representation, meaning that the concept of role is quite an elusive one (Sunday & Somoye, 2011). In terms of definition, role is viewed as a pattern of behaviour which is associated with a position in a social framework (Madden, 2013). Other authorities define role as the way an entity participates in a relationship (Sunday & Somoye, 2011). Miller and Das (2011) offer a more comprehensive definition of role observing first that role has its roots in the works of Mead (1934) who asserts that role is a result of interactions, which lead to what Mead termed role structure.

Miller and Das (2011) then define role as a set of norms or expectations applied to the incumbent of a particular position by the role incumbent him/herself or by the various other role players (role senders) with whom the incumbent deals in fulfilling various obligations of the position. This again is a reflection of earlier thinking of role by Mead. This definition therefore means that role holders understand/perceive their role in line with how they interact with the role senders. Research also shows that there are a number of factors that help to explain how and why AMMs assume the different roles they play in higher education institutions, and these include role expectation, role strain, role conflict, role ambiguity, role overload and role autonomy (Patel, Patel & Patel, 2007; Singh & Kumar, 2012).

2.2.7.1. Role expectation

Role expectation is defined in terms of prescriptions and proscriptions held by members of the counter positions of the role set (Kumar, Kaur & Kalra, 2013). In other words, it is the behaviour expected of the role incumbent (Sanghi, 2011). Kumar, Kaur & Kalra (2013) also posit that role expectation comprise the rights and privileges, the duties and obligations, of any occupant of a social position in relation to persons occupying other positions in the social structure. Since role is socially constructed, its holders more often than not, determine the way they behave from the expectations of their role (Madden, 2013; Omirin & Ajayi, 2011). Sources of these expectations within an organisation are wide and varied. Role expectations in organisations can therefore be derived from the following three sources (Madden, 2013; Mahadevaswamy & Gopalaraju, 2010): specific hierarchical positions that are pre-planned, task-oriented and clearly defined; interpretations from more covert sources such as pressures from informal groups; and the role holder's characteristics that determine his/her role behaviour hence variations in the role behaviour by people occupying the same roles.

Literature identifies a number of dimensions which help in defining and shaping what role expectations really entail. These dimensions according to Kumar, Kaur & Kalra (2013) include degree of generality or specificity, scope or extensiveness, relation to formal or informal social positions, degree of consensus among other people concerning role expectation, and degree of clarity or uncertainty.

Degree of generality or specificity

According to Kumar, Kaur & Kalra (2013), on a continuum of expectations, at one end role expectations for some positions such as those in bureaucracies specify precisely the required behaviour, how and where the behaviour should be executed and the exact penalties for non-adherence to the role expectations. On the other end, some role expectations consist only of broad outlines, leaving the incumbent to enact the role in a particular way he/she prefers within a wide range of acceptable behaviour.

Scope or extensiveness

According to research, for some roles, role expectations are restricted in scope, having relevance to a narrowly circumscribed area of a role holder's life (Kumar, Kaur & Kalra, 2013). On the

other hand, role expectations like those of age and gender are applicable to a large proportion of a role holder's behaviour.

Relation to formal or informal social position

Kumar, Kaur & Kalra (2013) argue that role expectations occur in the context of both the formal social system and the informal role system and are shaped by the degree of agreement or consensus about the role expectations associated with them. The above then means that the role expectations for many formal roles in the macro-social system (society) are well known to most people. Some of these roles are formally codified through an official system of rights and duties while in the micro social system (small friendship groups for example) roles are not formal and role expectations are not officially defined but are defined through *understandings* between members (Ram, Khoso, Shah & Chandio, 2011; Tang & Chang, 2010).

Degree of consensus among other persons concerning role expectations

Balogun and Johnson (2004) argue that there is a general agreement on what a person holding a certain position is expected to do and even not do and this shapes role expectations surrounding their position.

Degree of clarity or uncertainty

The degree of clarity or uncertainty concerning expectations of a role can be defined through the following sub-dimensions: direction and intensity (Balogun & Johnson, 2004; 2005; Jeon, et al, 2010). Direction relates to the reducing of an expectation to a statement for or against something. For example, role expectations can be given through directional statements such as, "You can do this..." or "You cannot do this...". With regards to intensity, any role expectation can be placed somewhere on a continuum which ranges from the completely permissive through to the preferential, to the mandatory (Hassan, 2011; Mantere, 2008; Ram et al, 2011). Role expectations have a number of effects on the behaviour of the role holder. Firstly, since in role expectation a person is expected to behave in particular ways that are predictable, tolerable and acceptable, role expectations have the effect of limiting the range of activities that an individual can most possibly and practically perform by pegging limits of tolerable behaviour (Mantere, 2008; Sanghi, 2011). Secondly, role expectations are open to different interpretations resulting in both expected and unexpected behaviour.

2.2.7.2. *Role conflict*

Role conflict is defined as the incompatibility or incongruity of the expectations associated with a role (Katz & Kahn, 1978 in Madden, 2013; Tang & Chang, 2010), creating barriers to meeting role demands, a situation called role strain. It occurs when the expectations (role) associated with one status is contradictory to the expectations of another status, that is, it involves a contradiction of roles (Tang & Chang, 2010). According to Ram et al (2011), role conflict arises as a result of interpersonal processes that happen between the role holder who receives expectations and the people who send those expectations (role senders), including several organisational, personal and interpersonal factors that affect the meaning or definition of role.

Macionis and Linda (2010) also argue that role conflict is experienced when a person finds himself/herself pulled in various directions as he/she tries to respond to the many statuses he/she holds. Role senders can be anyone within or outside the organisation with whom the role holder associates and who are most affected by organisational factors such as organisational level, structure and practices as well as task characteristics and physical settings (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 2010; Macionis & Linda, 2010). Also personal factors such as status, education, age, and tenure of both role holders and role senders affect the meaning and/or understanding of role (Glissmeyer, Bishop & Fass, 2008; Madden, 2013).

The mode and frequency of interaction, visibility, physical location and feedback between the role sender and role holder are all interpersonal attributes that also contribute to the reframing of role as understood by AMMs (Madden, 2013). Since organisations are role systems that require individuals to perform certain roles for the achievement of organisational and departmental goals, role conflict therefore arises when the role sender's expectations diverge from one another in ways that cannot be reconciled by the role holder, posing a serious threat to the role holder and his/her performance in the organisation (Hassan, 2011; Osterman, 2009; Madden, 2013).

2.2.7.3. *Role strain*

Tang and Chang (2010) define role strain as the difficulty in fulfilling multiple role obligations while wearing *one hat*. Role strain or role stress as it is sometimes called, is defined as the pressure experienced by an individual as a result of organisational and job-related factors in the form of demands and constraints, that are placed on the role holder (Kahn, Wolfe & Quinn,

Snoek & Rosenthal, 2010; Sulksky & Smith, 2005; Leung., Siu & Spector, 2000). It occurs when the role demands from a single role status cause conflict or become stressful, for example, the demands of the board, the principal and the students are not always the same on the AMM and can be a major source of stress (Long-Crowell, 2012; Engle & Melvin, 2012; Shah & Pethe, 2008).

According to Tang and Chang (2010), the tension in role strain comes from just one role status which is expected to satisfy multiple roles or expectations. The main role stressors according to Engle and Melvin (2012) include the nature of the role, career development, organisational and departmental structures, organisational climate, powerlessness, low status, strenuous working conditions as a result of role overload, role conflict and role ambiguity. These factors are also identified by Long-Crowell (2012).

2.2.7.4. Role ambiguity

The role of the AMM tends to entail a wide range of tasks, a situation which then means that the time-framed AMM is unlikely to determine which one of the tasks is core and which is not. The idea is shared by Bush (2007) who argues that AMMs are expected to adopt a whole-school approach to managing their roles by taking on many responsibilities that were previously the domain of senior management. All this leads to role confusion or ambiguity with regards to what tasks clearly define the role AMMs should play in their departments. Wise (1999) as cited in Bush (2007) asserts that the main problem facing AMMs is role ambiguity as demands from top management and colleagues put the AMMs under confusing and great pressure causing the AMMs to be sucked between the demands of department leadership, management function and the notion of collegiality.

Role ambiguity is defined as the lack of clear and specific information regarding work role requirements (Tang & Chang, 2010; Ram et al, 2011). Role ambiguity arises as a result of failure to clarify roles and responsibilities (Engle & Melvin, 2012). According to Abramis (2011), there are a number of dimensions that help to illuminate the confusion that befalls a role holder as a result of role ambiguity. The first dimension is the goal/expectation/responsibility ambiguity dimension. This dimension relates to putting the role holder into a situation where he/she has to ask himself/herself the following: *What am I expected to do? What should I do or be doing?* The

second dimension is the process ambiguity dimensions. This dimension puts the role holder into a position where he/she asks himself/herself the following questions: *How do I get things done? What are the ways of achieving departmental and organisational objectives?* The third dimension is the priority ambiguity dimension and relates to the role holder asking the following questions: *When should things be done and in which order?*

AMM role ambiguity is also compounded by the fact that AMMs are not given detailed job descriptions at the start of their roles (Cilliers & Piennar, 2014) since they are expected to perform much more than what their departments demands them to do. That expectation is confirmed by Floyd and Dimmock (2011) who argue that the roles of AMMs are kept fuzzy by top management for the purpose of leaving more room for more administrative assignments. Literature, however, shows that detailed job descriptions are important for making work more efficient and for giving managers a chance to sort out roles and responsibilities, to specify who does what, to eliminate overlaps and to make sure that nothing is falling through the cracks (Magpie Consulting, 2013).

Harvard Business School (2002) also notes that job descriptions identify essential and non-essential tasks that are assigned to specific positions and also identify relationships and minimum requirements such as qualifications and experience for a person to assume a position such as that of an AMM. More specifically, job descriptions are viewed as important for clarifying what an employee such as an AMM is responsible for and what is expected of them on a day to day basis. A job description is a communication tool that sets clear parameters within which an employee performs his/her duties thereby reducing chances of role ambiguity (Smith & Erwin, 2005).

2.2.7.5. Role autonomy

Role autonomy is defined as the degree to which a job allows the job holder freedom, independence and discretion to schedule work, make decisions and select the methods and approaches to perform tasks (Morgeson, Delaney-Klinger & Hemingway, 2005). Role autonomy aids AMMs to modify and/or reconstruct their existing psychological states (Rousseau, 2001) resulting in both the AMM and his/her department staff developing more flexible attitudes (Morgeson, Delaney-Klinger & Hemingway, 2005) that stretch boundaries of mere compliance with rules and the fulfillment of formal orders (Hornung & Rousseau, 2007). Research also

shows that AMMs with less role autonomy tend to follow a path of least resistance, refraining from the use of personal initiative and extra effort to avoid potential punishment (Morgeson, Delaney-Klinger & Hemingway, 2005).

The meaning of role with regards to what AMMs do is also compounded by the fact that the concept of middle management is not also well defined, is open to interpretations, and is also multifaceted in nature (Cragg, 2011; Hancock & Hellawell, 2001). What further compounds the challenge is that literature presents ambiguities about the concept (Wooldridge, Schmidt & Floyd, 2008; Raes, Heijltjes, Glunk & Roe, 2011). This situation is even made tenuous by the fact that on one hand, AMMs are expected to perform their roles in a manner that shows they assume a more school-wide managerial approach while on the other hand they are expected to create conditions that depict their departments as student-centered, teaching and/or research focused as well as collegial (Prichard, 2000). Prichard's assertion is further extended by Gunter (2002) who asserts that the AMM is situated in contexts which increasingly reflect work intensification, role overload and ambiguity, and an increase in managerial administrative work.

The new emphasis on managerialism has led to the widening of the definition of the role of the AMM and also added to the confusion of what exactly the role of AMM should be in higher education institutions (Smith, 2007). According to Knight and Trowler (2001) as cited in Inman (2007), how the AMM enacts this role within the framework constructed by their institution will eventually depend on the following factors: the nature of the activity as defined by the participant (academic middle manager); the community of practice in which the academic middle manager works; the identity of the individual academic middle manager (which is likely to be multiple, dynamic and situational); the meaning attributed to the academic middle manager's role; and the discourse in which the academic middle manager operates. This means that in the context of curriculum change, the way AMMs play their role depends on a number of factors both internal (related to the AMMs characteristics) and external (related to the situation in which the AMM enact their role).

These factors imply that the role of the AMM is no longer solely constituted by the number and scope of managerial responsibilities, but also by the institutionalised meaning of management in a particular society or context (Clegg & McAuley, 2005). This argument is justified in that in

some institutions, AMMs teach while in others they do not, and for those middle managers who teach, there is no determination in most of the institutions on how these managers balance their teaching and the administrative roles (Daniel, 2009). The role of middle managers in most of the higher education institutions is further made very tenuous because from the beginning, when these managers assume their management role, Daniel argues that they must deal with strained financial resources that constrain their role in curriculum change; the demand for relevant programmes and curricula; external accountability pressures from government, parents, employers etc.; technological advances and their effect on curriculum change and education delivery; ill-equipped faculty who struggle to meet demands for higher education system and their students; diversity issues in departments; and imbalance of professional and personal duties (Daniel, 2009).

All these competing demands polarise the AMMs role between faculty instructional duties and institution-wide administrative duties making their role in curriculum change very difficult (Daniel, 2009). In the end, one agreed way of understanding the role of the middle manager is to define role as what the individual, that is, the role holder understands their job to be (Wise & Bennett, 2003). This is how middle managers enact their role in curriculum change is strongly influenced by contextual factors as well as by the responses and agency of middle managers themselves (Bennett et al, 2003).

On the question of who the academic middle managers are in higher education institutions, a number of authorities give different conceptions which arise because the role of the middle manager is difficult to define (Feist, 2008; Fitzgerald & Gunter, 2006). This is due in part to the fact that the line between top management and middle management is often blurred, and so also is the line between that of classroom teacher and the middle manager (Cragg, 2011; Hancock & Hellowell, 2001).

Literature shows that as a result of failures to both qualify and quantify the role of middle managers, a number of issues around the definition of middle manager arise (Cragg, 2011; Blandford, 2006) with the first such issue being role ambiguity which relates to middle managers not having a clearly articulated and specific job description that delineates their role (Fitzgerald & Gunter, 2006). Other authorities also argue that the term middle manager in and of itself is far

too general to adequately capture and categorise the myriad roles which fall into the term (Wise & Bennett, 2003) and such role ambiguity is seen as contributing to a large part to variability in practice by middle managers within and between higher education institutions. This leads to an even wider web of confusion of what exactly middle managers are (Cragg, 2011).

In the maze of this definitional confusion of the term middle manager, a number of authorities provide positional definitions of middle management by focusing on middle managers' position between two polarities, namely the upper echelon and the operating core (Currie & Proctor, 2005; Kumarasinghe & Hoshino, 2010). Using the positional context, middle managers are defined as people occupying a position at the intermediary level of the organisation, a position that is two or three levels from top managers and one level above front-line managers (Madden, 2013), a position in which they supervise supervisors and are also in turn supervised by others.

Positional definitions of middle management are viewed as confirmation of the strategic position of middle managers in higher education institutions that gives them leverage to have both an institution-wide overview and an understanding of the needs of those at the operational level with regards to the curriculum change process (Fitzgerald, 2009). The positional definitions of a middle manager also confirm middle managers being at a vantage point in higher education institutions, which accords them better institutional knowledge than any other member of the institution that allows them to be innovative enough to be able to propose, plan and led curriculum change in their institutions (Kedian, 2006; Gmelch, 2004). Such definitions, in the context of curriculum change show that all being equal, by occupying the middle position in a hierarchy in their institutions, AMMs should be able to effectively and successfully plan and implement curriculum change.

A number of non-positional definitions as shown below are given to describe middle managers. Academic middle managers are defined as people who perform a coordinating role where they mediate, negotiate and interpret connections between top management and the operational levels (Floyd & Wooldridge, 2000). They are people who are directly involved in the planning and coordinating of the change implementation processes in organisations and departments. This is also confirmed by O'Shannassy (2014) who posits that middle managers are viewed as implementers of management corporate changes, relationship managers who mediate between

top management and lower level employees and are also strategic actors in emergent change (Balogun, 2003: 2007).

Other authorities also see middle managers as administrators whose tasks and responsibilities typically encompass the management of human resources within the subject departments, paired with the coordinating responsibilities, budget administration and instructional planning (Dimmen, 2000). Middle managers are individuals who make decisions about how to implement the organisation and department's strategic change objectives (Balogun, 2003). They do this by interpreting information and knowledge from top management to make it meaningful to those at the operational level, and also by interpreting information and knowledge from functional managers about the technical, day-to-day realities of the organisation and the department (Balogun, 2003). Such managers also select those pieces of information that need top management's attention so that change issues in the department that need top management intervention can be attended to timeously and adequately (Beck & Plowman, 2009).

Being also referred to as teachers and hence people whose possible avenues of social influence in their departments are rooted in a seemingly inconsistent work role where the incumbent is both superior and professional colleague (Paulsen, 2008), middle managers can best be understood in two contexts, that is, school wide context and department context (Wise, 2001). In the school wide context, by virtue of their position in the school hierarchy, middle managers are seen as operating at the interface between different levels and sources of influence and change. In this context, their role shifts towards managerialism in which the middle managers find themselves managing the intersection of traditional and new organisational cultures and trying to exert school-wide influence (Wise, 2001; Hancock & Hellawell, 2003). In the department context, middle managers are tasked with ensuring good teaching and learning, a role that has traditionally been recognised as at the heart of the middle manager's work and which comes with the inherent problems of the monitoring and collegiality duality (Bennett et al, 2003; Wise, 2001). As a result of this role conflict and role ambiguity, tensions are therefore frequently observed that characterise this duality in the work role of the middle manager (Bennett et al, 2003; Wise, 2001). Middle managers are also referred to as specialists in subject knowledge, didactics and pedagogy within their specific knowledge domains (Busher, Harris, & Wise, 2000),

whose expertise and legitimacy is grounded in professional knowledge than on hierarchy (Clegg & McAuley, 2005).

2.3. Historical development of academic middle manager role

Debate about the role of middle managers in higher education in general and in curriculum change in particular has largely been confined to the dominant discourse of managerialism with middle management viewed as a multifaceted phenomenon representing the four dominant role dimensions of core organisational values, self-interested agent of control, corporate bureaucrat, and repository of organisational wisdom (Clegg & McAuley, 2005). According to the managerialism discourse, the role of the academic middle manager has been conceptualised as representing the core organisational values, a conservative self-directed agent, a reinvented managerialist corporate bureaucrat, and a transmitter of core strategic values and organisational capability respectively (Clegg & McAuley, 2005) as shown in Figure 2.2.

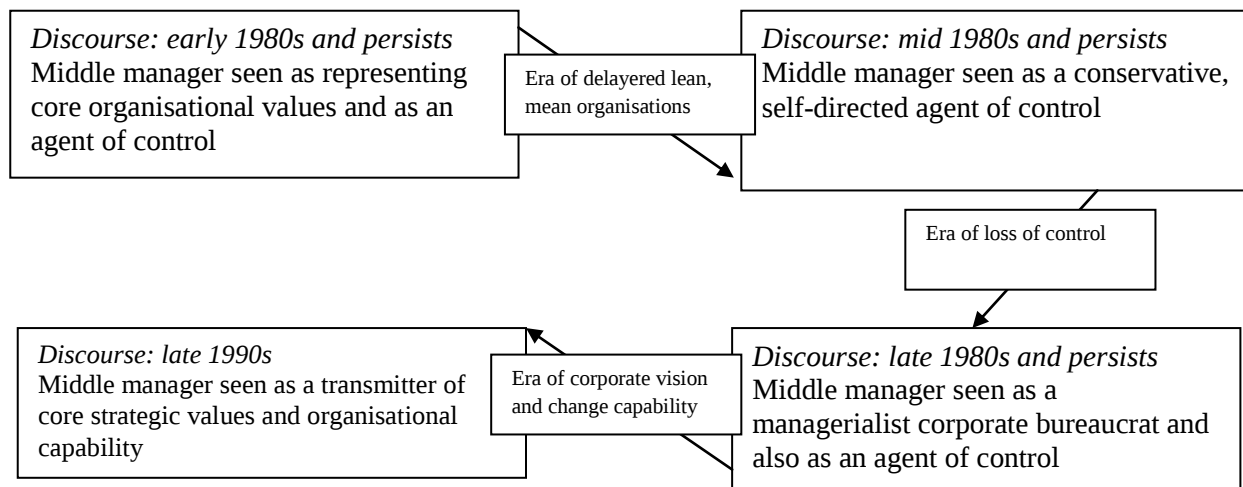


Figure 2.2: Four Discourses of Middle Manager Roles (Clegg & McAuley, 2005: 24)

These discourses show that the concept of middle management has often been misunderstood in organisational terms as a quintessence of what it is to be a manager, and at other times as the conservative impediment between top management and the workforce (Clegg & McAuley, 2005). However as years went by, the dominant narrative about the role of the middle manager centered on the twin discourses of managerialism and collegiality, with this duality pointing to the dilemma middle managers face in their day-to-day interaction with colleagues on one hand and with top management on the other (Hancock & Hellawell, 2003). As a result of this duality

since the 1970s, four dominant discourses on the role of the middle manager emerged (Clegg & McAuley, 2005; Clegg, Kornberger, & Rhodes, 2007).

2.3.1. The first discourse (Early 1980s): Middle manager as representing core organisational values

This discourse views the role of AMMs as being concerned with the enactment of the complex roles of *living* as a subordinate, an equal and also as a superior, with the ability not only to manage all the three relationships but also to shift quickly and frequently from one role to another (Uyterhoven, 1972 in Clegg & McAuley, 2005). To be able to effectively play the triple roles above, AMMs are expected to master both the technical and commercial knowledge of their institution and departments, and also develop an understanding of the procedures and relationships in the institution so as to be able to more efficiently facilitate them (Clegg & McAuley, 2005; McAuley, 2002a). This discourse sees the AMM as repositories of truth in organisations and as people who demonstrate care for their organisations (Clegg & McAuley, 2005).

This discourse further proposes that the way AMMs enact the complex roles of subordinate, an equal and also a superior simultaneously, with the ability not only to manage all the three relationships but also to shift quickly and frequently from one role to another as mentioned above, is a true reflection of the middle manager's life in organisations (Militello, Stark, Hersey, Flanary, Fede & Phillips, 2007). This discourse that began in the early 1980s and still persists, places the AMMs where: a) they have to work with senior management to create a sense of shared organisational identity in which the middle manager fosters the linkages that intensive knowledge transfer in higher education requires, and b) the middle manager has to play the role of maintaining the internal systems of the organisation by viewing himself/herself as a disturbance handler, resource allocator and negotiator (Militello et al, 2007; Clegg & McAuley, 2005). The role of the AMM as defined in this discourse calls upon the role holder to possess both the technical and relationship knowledge of the organisation.

2.3.2. The second discourse (Mid 1980s): Middle manager as conservative, self-directed agent of control.

According to this discourse, the AMM is viewed as a conservativist who may want to protect his/her position in the organisation by keeping things as they are (Clegg & McAuley, 2005). According to Militello et al (2007), the middle manager would attempt to maintain the status quo

by preventing ideas from the operating core to be transmitted to the top echelons of the organisation, and by protecting the top echelon from bad news. This is seen happening in organisations where the AMM feels powerless and insecure, i.e., feels squeezed between events and activities he/she has no power to influence because senior managers wield too much power and influence on everything in the organisation including the power to reduce the number of middle managers without consultation (Militello et al, 2007).

2.3.3. The third discourse (Late 1980s): middle manager seen as a reinvented managerialist corporate Bureaucrat

The third discourse demonstrated a paradigm shift on the role of the middle manager as the middle manager became viewed as a key factor and actor in the development of the managerialist narrative (Clegg & McAuley, 2005). This discourse was informed by the need to create hierarchy and to improve accountability (Militello et al, 2007; Clegg & McAuley 2005) as well as by the growth of numbers of people in the organisations who specifically had management role, and whose management work was defined by the types of management discussed in the first two discourses. This was a period when the role of the middle manager in higher education was viewed as that of a representative of top management.

2.3.4. The fourth discourse (Early 1990s): Middle manager seen as transmitter of organisational wisdom

While the second discourse viewed middle managers as an impediment to change as it was felt that they were people who slowed down decision-making (Boyko & Jones, 2008; Nieswandt, 2011), current research as confirmed in the fourth discourse showed that middle managers make crucial contributions to both organisational and departmental performance and change (Huy, 2011; Currie & Proctor, 2005; Boyko & Jones, 2008; Nieswandt, 2011). In this fourth discourse, the middle manager is seen as being concerned with the management of tension between long- and short-term organisational purposes that link dispersed knowledge and best practices across the organisation, and the development of individuals in embedding the processes of change and renewal into the organisation (Militello et al, 2007).

This discourse sees middle managers as being better than senior managers at leveraging the informal networks and staying attuned to employees' moods and emotional needs (Huy, 2011). Middle managers are therefore, seen as better in managing tension between continuity and change. In this discourse, they are seen as *synapses within a firm's brain* who are able to

reconcile the top management perspectives and the lower level implementation issues (King, Fowler & Zeithaml, 2001).

2.4. Conception of middle manager role in higher education

The premise of the nature of the AMM role in higher education is that it depends on the type of higher education institution the middle manager is engaged (McAuley, 2002). Literature shows four different higher education institutions which frame the role of the AMM in higher education in general and in curriculum change in particular as the corporate higher education institution, the strong culture higher education institution, the arena higher education institution, and the communication or collegial higher education institution (McAuley, 2002).

2.4.1. The corporate higher education institution

A corporate higher education is one which is well managed and which puts emphasis on the capabilities of managers at every level of the institution. The institution also emphasises core vision and purpose, organisational design and structure, and strategic business planning (McAuley, 2002a; Clegg & McAuley, 2005). Such an institution employs a top-down management approach with three scenarios defining how AMMs are viewed in the institution (Clegg & McAuley, 2005; McAuley, 2002b). In the first scenario which is related to the early days of the institution coming up with its corporate image, the institution tends to trim the number of AMMs in the institutions to reduce the threat of the more traditional and powerful middle managers, and to ensure that the top-down management style is enacted, unhindered. In the second scenario, the remaining few AMMs who are believed to be well aligned with the top management expectations are then given/assigned symbolic leadership responsibilities. In the third scenario, of the few remaining AMMs, some are assigned core corporate bureaucratic roles (managerial roles). This type of higher education institution defines and represents the AMM as conceived in the first three discourses (McAuley, 2002b). The above characterisations of the role of AMMs therefore indicate that it is a role that is dependent on what top management wants the AMMs to do not want the role itself expects them to do.

2.4.2. The strong culture discourse higher education institution

The strong culture higher education institution represents a strong understanding of what it is to be a strong higher education culture by its ability to satisfy local, national and international

educational needs (Clegg & McAuley, 2005). In such an institution, the role of the AMM is to transmit institutional culture horizontally and vertically within the institution and also to ensure institutional integration and the preservation of the sense of mission and purpose within the institution (McAuley, 2002c). This institution also describes and represents the role of the AMM in the fourth discourse.

2.4.3. The arena higher education institution

The higher education institution in this context is viewed as a political arena constituted by many competing interests in relation to how the institution should be run (Clegg & McAuley, 2005). The role of the AMM in such an institution is political. This institution therefore represents the first discourse, that is, the discourse of managerialism where the role of the AMM was viewed as that of representing core organisational values (McAuley, 2002c).

2.4.4. The communication or collegial higher education institution

In this type of institution, academics create complex networks of interest and mutual understanding and involvement by agreeing implicitly (psychological contract) to work with each other while keeping their individual interests in teaching and research (Clegg & McAuley, 2005). The role of the AMM in this institution therefore is to collaborate with other institutional members for them to be able to get the job done.

2.5. Role of academic middle managers in curriculum change

There is a general agreement in literature that the AMM is a key player with a high degree of responsibility derived from the strategic position within the organisational structure that enable him/her to be knowledgeable in day-to-day activities and strategies of the organisation (Rouleau & Balogun, 2011). Such knowledge makes the AMM an effective vertical mediator between top management and the operational core as well as a horizontal integrator who ensures the distribution of knowledge throughout the organisation and the department (Costanzo & Tzoump, 2011; Del Favero, 2006a; Huy, 2011). AMMs are therefore critical to the planning, implementation and management of change in organisations (Floyd & Wooldridge, 2000; Floyd & Lane, 2000; Clegg, & McAuley, 2005; Kallenberg, 2007).

AMMs contribute significantly to the overall success and growth of organisations through activities in their departments or work units (Harvey & Newton, 2004; Del Favero, 2006b) by being advocates for their institutions and departments as well as by controlling the inflow of information in the institutions, accumulating and allocating resources, and assessing the performance of their faculty and staff (Wood, 2004; Huy, 2002). As part of their roles and responsibilities in curriculum change, AMMs champion innovative initiatives, facilitate adaptability to new behaviour, synthesise information within and outside their departments and organisation, and implement and manage changes (Floyd & Wooldridge, 2000; Floyd & Lane, 2000, Kallenberg, 2007; Meek, Goedegebuure, Santiago & T. Carvalho, 2010; Lavarda & Giner, 2009).

Literature shows that AMMs operate at the nexus of social interactions in the organisation, act as a node in a network of communications, connect the flow of information from top to operating levels and vice versa, as well as integrate these communications (Floyd & Wooldridge, 2000). By virtue of their strategic position, AMMs are uniquely positioned to know the availability and depth of capabilities in an organisation and thus can help in synchronising strategic plans such as curriculum change plans with reality (Floyd & Wooldridge, 2000).

By being linking pins between top management and the operating core, middle managers are viewed as able to act to supply feedback to both top management and the operating core to ensure effective adjustments of plans for effective implementation. According to Fenton-O'Creevy (2001) the role of AMMs can be put into four broad categories namely: developing strategic practice (devising curriculum implementation strategy), developing and sustaining learning and the learning environment (service and student service roles), leading teams and individuals (managing the tasks, the team and the individual), and managing resources (staff and tangible assets).

To successfully perform the above roles, AMMs need to engage in a series of activities that occur at the institution's boundaries since firstly, AMMs are strategically positioned to bridge information, knowledge and objectives from different parts of the institutional design (Busher & Harris, 1999), and secondly with their knowledge of curriculum activities as a result of their vantage position at the nexus of the institution, they are able to bridge external interests with

their professional domain (Busher, 2005). The boundaries spanning activities the AMMs should perform therefore include those that occur at the internal boundaries and separate organisational subunits (Pawlowski & Robey, 2004). Such activities include scanning, mapping, and constructing a picture of the environment in which curriculum change will take place as well as predicting future trouble spots or potential allies with certain specific boundary spanning dimensions. These boundary spanning dimensions that define the middle managers' boundaries spanning role include the bridge, translation, liaison, facilitation and broker dimensions.

2.5.1. The bridge dimension

The bridge narrative captures two distinct perspectives of AMM practices, that is, the internal and external boundary spanning role. *Internally*, middle managers perform the role of head of department (HOD) and hence are responsible for downward influence, that is, ensuring acceptance of school-wide and department-wide goals and priorities (Harris, 2005) particularly those which relate to issues of curriculum. In this HOD role, AMMs are also responsible for filling communication gaps between top management and the operating core in their departments. They are also responsible for achieving effective working relations between teachers and senior management during curriculum change. *Externally*, AMMs' bridging role relates to developing, cultivating and using external linkages to gain access to knowledge and information that is dispersed across the institution (Newell, Tansley & Huang, 2004), especially the information that relates to curriculum change. In this external perspective, social linkages enable the middle managers to bridge incompatible understandings and leads to integration of knowledge and interests (Newell, Tansley & Huang, 2004).

2.5.2. The translation dimension

AMMs communicate institutional goals across internal boundaries (Busher & Harris, 1999; Allum, 2005). As a result, they are responsible for re-interpreting and manipulating curriculum change information, institutional goals and policy derivatives in order to frame and re-frame the interests of different individuals and groups. As internal communicators, AMMs are also responsible for introducing top management perspectives about curriculum change to department staff and vice-versa to ensure both perspectives are integrated into the institution and department's aims. In this case, the AMM's translator function is to synthesise the external knowledge with local (departmental) knowledge in order to make informed decisions that may

facilitate effective curriculum change. As internal translators also, AMMs play the role of reducing the cognitive distance between actors that have different views, understandings and interests (Cillo, 2005) with regards to curriculum change, and the effectiveness of the translation role depending on a common knowledge base and widely shared understandings among the different actors.

2.5.3. The liaison dimension

This dimension describes tasks and responsibilities carried out by AMMs in order to gain information, position, resources and knowledge in the institution's environment (Briggs, 2005). The liaison role of AMMs connects external stakeholders such as industry, government, sponsors and the market with departmental curriculum activities. The important feature of this connection is the strong expectation of AMMs to be professional, reliable, unbiased and independent spokespersons for professional interests such as curriculum change when interacting with the stakeholders (Mintzberg, 2009). This connection ensures that the planned and implemented curriculum changes are viewed as legitimate by the stakeholders.

2.5.4. The facilitation dimension

The dimension takes the AMMs as change intermediaries whose role is to help professional colleagues to make sense of external feedback and change initiative (Balogun, 2003). Sense giving in this case relates to the AMMs helping others understand change initiatives and demands (Rouleau, 2005). The significant role of AMMs would therefore be to help department members work their way through the change transition (Balogun, 2003). Through their access to external information, AMMs are able to provide their colleagues with new ideas, good practice or alternative solutions during curriculum change. As part of their facilitating role, AMMs should therefore create enabling conditions in their departments and at their institutions for adaptive learning among staff through workshops for teams, as well as the allocation of resources and time for department members to effectively carry out curriculum change. Within this facilitating dimension, the role of AMMs is that of a mentor, coach and guide (Clegg & McAuley, 2005).

2.5.5. Broker dimension

In this dimension, AMMs play a more active and transactional role associated with intense engagement and inference (Sadler, 2003; Briggs, 2003) where they exercise their power over others through their judgement, interpretation and perceptions of the curriculum change environment. Such power is used for dealing with issues of resistance to change, lack of political will, dysfunctional practices, ignorance and lack of skills at operational level (Briggs, 2003). In the same vein, the AMMs may also play the role of broker with senior management in order to modify policies (Briggs, 2003) that may hinder the effectiveness of curriculum change. Literature shows that for AMMs to effectively play the brokering role, they need to be trustworthy and to demonstrate the following characteristics: expertise, trust, genuineness and legitimacy in all their dialogues and ability to negotiate with both departmental staff and senior management during curriculum change. This dimension shows AMMs playing a political role where sometimes they have to push things to move and at other times they have to move a step back to compromise in order to get things (curriculum change) succeed.

2.6. Typology of middle manager role

There are a number of models that describe the role of AMMs in higher education (Briggs, 2003; 2004). Among such models the Wise (1999) model which is premised on the idea that AMM responsibilities fall somewhere on the leadership style continuum according to whether the AMM is principally concerned with management of tasks (task-orientation) or with the management of people (people-orientation). Floyd & Lane (2000) typology of middle manager influence on strategic change posits that the AMM performs the following four different roles: championing strategic alternatives, facilitating change, synthesising information, and implementing deliberate strategy. Among the typologies of AMM role in change, the model which stands out and which shall be discussed in this study is the Floyd and Lane (2000) typology as shown in Figure 2.3. This typology is adapted to suit the current study.

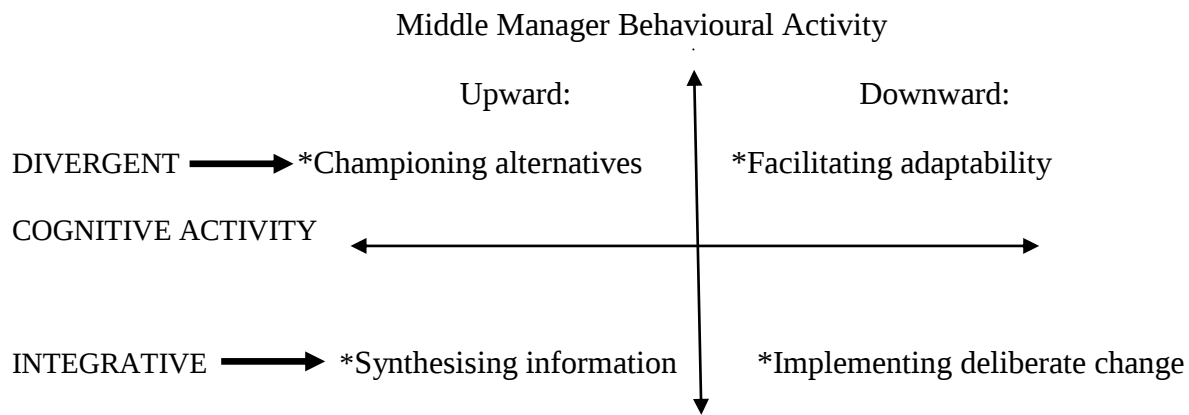


Figure 2.3: Typology of middle manager influence (Adapted from Floyd & Lane, 2000: 13)

The framework shown in Figure 2.3 describes four roles of the AMM that extend beyond the traditional provision of inputs and direct implementation of strategic change such as curriculum change. It shows the curriculum change roles of AMMs extending to serving as important sources of innovation in the curriculum change process. In playing this role, AMMs exert both upward influence and downward influence in the change process (Floyd & Lane, 2000; Floyd & Wooldridge, 2000).

2.6.1. Upward influence during curriculum change

AMMs influence curriculum change by altering the institution's direction through providing top management with unique interpretations of emerging curriculum issues (synthesising curriculum information) and proposing innovative, entrepreneurial curriculum initiatives (championing alternatives) (Floyd & Lane, 2000). In the interpretation context, AMMs interpret ambiguous diverse curriculum data related to the curriculum issues, framing the perceptions of other managers and team members and moving towards the curriculum change agenda. In the context of championing change alternatives, middle managers redefine the strategic thinking of top managers resulting in curriculum change revolving not as originally planned but in a whole new way (Floyd & Wooldridge, 2000; Floyd & Lane, 2000). AMMs use persistent persuasive communication to champion alternative curriculum changes to top management. The upward influence of AMMs affects top management's view of institutional circumstances both at strategic and implementation levels and is an influence crucial in garnering top management support for the AMM initiated curriculum change (Floyd & lane, 2000).

2.6.2. Downward influence during curriculum change

Middle managers also influence curriculum change by aligning institutional arrangements with the institution's overall strategic goals. In this role, the more traditional AMMs role of being mere transmitters of top management views in the implementation of curriculum change is complemented by a potential role of a change agent who fosters institutional teaming or facilitate adaptability by making institutions more flexible as well as stimulates behaviour that diverges from official expectations (Gmelch & Wolverson, 2002). This is done by encouraging institutional members, including departmental members, to sense (sense making) changing conditions, experiment with new curriculum change ideas, and to adapt appropriately (Chakravarthy, 1982).

Each of the four roles of the AMM in Figure 2.3 is a synthesis of action and cognition unique to the position of the AMMs (Floyd & Wooldridge, 2000). This is supported by Hornung and Rousseau (2007) who argue that within the change process, action and cognition are intertwined so that for each of the four roles in the typology, a synthesis of action and cognition unique to the position of the AMM is defined. The four roles of the AMM in the above typology do not suggest discrete breaks in the behaviour of AMMs during curriculum change as they combine synergistically into patterns of middle manager involvement (Floyd & Wooldridge, 2000). The synergy shows that when AMMs use their downward influence to build adaptive structures, they more often than not promote the development of divergent alternatives to curriculum change leading to a rich source of alternative ways at the disposal of the AMMs, of planning and implementing curriculum. The explanations of the above typology of middle manager roles in curriculum change are summarised in Table 2.1.

Table 2.1: Summary of Middle Manager Role (Floyd & Wooldridge, 2000: 45)

Role Dimension	Role Description	Functional purpose of role
Relationship building	Middle manager makes effort to build and maintain working relationships with both internal and external stakeholders on matters of curriculum and curriculum change.	Middle manager lays foundation of trust, encourages reciprocity to enable future exchanges of value on curriculum issues.
Championing alternatives	Middle manager makes effort to influence top management on curriculum change alternatives.	Middle manager promotes new ideas to top management that may result in the enhancement of the institution's current and future curriculum change goals.
Synthesising curriculum change information	Middle manager interpret and deliver privileged or insider curriculum change information to top management.	Middle manager brings to top management privileged curriculum change information that is needed to anticipate curriculum changes and assist in the institution's ability to respond.
Facilitating adaptability	Middle manager makes effort to provide flexibility to the institution to implement curriculum change initiatives.	Middle manager directly modifies the institution's internal environment in a manner that is conducive to the work of the institution with regards to curriculum change.
Implementing curriculum change	Middle manager implements curriculum change in the institution.	Middle manager directly implements and supports curriculum change in the institution.
Building communities of practice (internal and external)	Middle manager communicates with both internal and external stakeholders in areas of shared projects related to the curriculum in order to acquire information, ideas and other resources needed to inform the role of the middle manager I curriculum change	Middle manager brings into the institution information and resources that are needed to support curriculum change. The middle manager also enables curriculum change in the institution to proceed where work is dependent on contributions of outside resources.

2.7. Strategies for managing curriculum change

This section is aligned to sub-research objective 1.5.3 as it relates to AMMs views about the strategies AMMs use during curriculum change. Literature points to a number of strategies that can be used to support effective planning and implementation as well as management of curriculum change (Curee, 2010; Mace, 2001; Jones & Duckett, 2006) These strategies can be divided into two broad categories namely strategic management strategies and process management strategies (Cordingley & Bell, 2007; Curee, 2010; Mace, 2001).

2.7.1. Strategic management strategies

These are strategies that deal with sustainable management of the planning and implementation of curriculum change in higher education institutions as shown in Figure 4. All the seven strategic management strategies interact together in a symbiotic relationship so that the success of the curriculum change does not depend on a single strategy but on the complimentary effort of all of them.

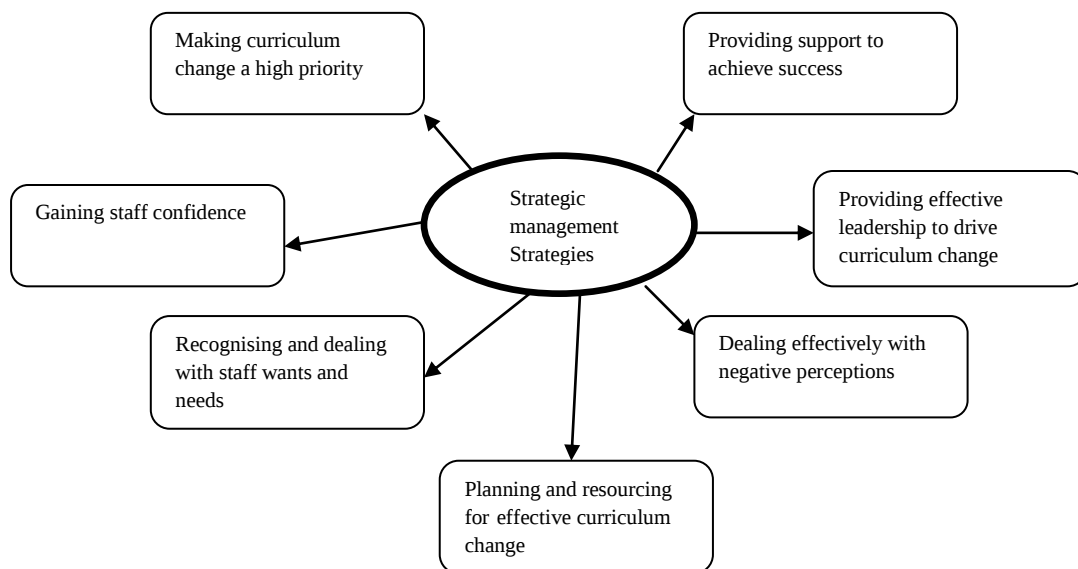


Figure 2.4: Strategic Management Strategies (Adapted from Curee, 2010:2)

2.7.1.1. *Making curriculum change a high priority*

Literature shows that giving high priority to curriculum change is the first step towards creating an environment in which effective curriculum change can take place (Mace, 2001; Curee, 2010; Jones & Duckett, 2006). The creation of such an environment shows the commitment of academic middle managers to curriculum change. When department staff see that their managers are committed to and enthusiastic about making curriculum change successful, they (staff) will also show the same level of commitment to the change.

There are a number of techniques in which AMMs can demonstrate their commitment to curriculum change (Curee, 2010; Mace, 2001). These techniques include the following: ensuring that any curriculum changes are explicit in strategic, operational and development plans; placing curriculum change at the top of agendas for departmental meetings, and making curriculum change a standing item throughout the development, implementation and evaluation phases of curriculum change; providing a clear picture of how the curriculum changes will affect staff and students, and the department as a whole; allocating responsibilities to department members in order to ensure a collective effort in curriculum change; sharing curriculum change information with all department members to ensure change becomes common knowledge to all members; and

providing adequate resources based on realistic and achievable targets to ensure that the curriculum change actually happens as shown in figure 2.4.

2.7.1.2. Providing support to achieve change

Literature shows that teaching staff are more likely to accept and show commitment to curriculum change if the change comes with additional support during the planning and implementation phases. Having someone available for staff to turn to for support on a day-to-day basis during curriculum change is viewed as critical for the success of the change (Curee, 2010). The support that academic middle managers can provide staff during the implementation of curriculum change includes the following (Curee, 2010; Mace, 2001; Jones & Duckett, 2006): Reducing big curriculum changes into small, manageable and more familiar changes to enable implementing staff to be more familiar with the changes one step at a time; providing in-service training as well as hands-on workshops with input from team leaders to enable department staff to implement curriculum more effectively and efficiently; developing one-on-one and group coaching skills of curriculum change team leaders so that they are helped and empowered to successfully drive their teams towards successful curriculum change; being visible so that help is timeously provide when needed; channeling resources where they are most needed; and reinforcing staff performance by giving praise and taking time to listen to the needs and wants of staff.

2.7.1.3. Planning and resourcing for effective curriculum change

Literature attests to the fact that curriculum change is most effective if it is adequately and effectively planned (Curee, 2010; O'Shannassy, 2014). Such planning includes costing the process in terms of resources and time. As part of the planning process, AMMs manage the implementation of the change process (Curee, 2010; Mace, 2001; Jones & Duckett, 2006) by: being realistic about timelines and resources needed for effective curriculum change, taking into consideration staff's readiness and capacity to implement the change; identifying and nominating change leaders from within the department who can motivate others during the change; allowing for collaborative participation right from the planning stage to ensure buy-in and ownership of the change effort by team members; defining what is negotiable and not so that energies are maximised, conflict is reduced and the direction of implementing curriculum change is clear; encouraging more efficient working by setting deadlines by which certain curriculum change

tasks would have been completed; and ensuring two-way communication right from the curriculum change planning to the implementation phases to promote openness.

2.7.1.4. Providing effective leadership to drive change

Effective leadership is viewed as crucial to creating a culture of change in institutions and leaders who lead by example of hard work, flexibility, responsiveness and commitment are a catalyst to successful curriculum change (Curee, 2010; Paulsen, 2008). AMMs can therefore demonstrate effective curriculum leadership through the following (Curee, 2010; Mace, 2001): providing a clearly articulated change vision and communicating it in an inspiring manner; having a rationale for change that is grounded on research and facts; recognising and valuing the contributions made by team members; creating opportunities to interact with individuals, teams and the whole department about curriculum change; and adopting a blend of top-down and bottom-up approaches.

2.7.1.5. Gaining the confidence of department staff

Literature shows that AMMs can only gain the confidence of their department staff if they are appropriately qualified and experienced, have a working knowledge of curriculum that is current and demonstrate an active involvement in professional development activities linked to curriculum change and quality initiatives (Curee, 2010; Raes et al. 2011). AMMs can gain the confidence of their staff by: having a clearly articulated communication plan that is applied consistently in the department; ensuring that both staff and department management maintain an updated working knowledge and understanding of curriculum and curriculum change; and organising curriculum development and implementation workshops and training sessions for department members.

2.7.1.6. Recognising and dealing effectively with staff wants and needs during curriculum change

A number of authorities on curriculum change attest to the fact that staff want and need support, effective leadership, open communication lines, and positive relations between themselves and their managers if curriculum change is to be effective. To ensure maximum participation in the planning and implementation of curriculum change by department staff, academic middle managers need to play the following roles: providing strong and effective leadership, open lines of communication and promote positive relations between teaching staff and themselves; and

consulting department staff and make them feel that their opinions are also valued (Curee, 2010; Jones & Duckett, 2006).

2.7.1.7. Dealing with negative perceptions of change and professional development

Academic middle managers need to create working environments that ensure that staff see that managers are committed to the change process by sticking to the action plans. Failure to adhere to the agreed action plans by academic middle managers discourages staff from improving the quality of their work during curriculum change and breeds negative perceptions towards the change (Curee, 2010; Mace, 2001). To effectively deal with such negative perceptions, middle managers need to demonstrate the following: showing that they are committed to the change; adhering to action plans and recommendations of inspecting teams; providing staff with appropriate information to keep them fully informed about curriculum changes; and ensuring staff have the necessary professional development to meet the changing needs of the curriculum. If AMMs show that they are committed to curriculum change and also regularly and effectively interact with, and update subordinates about the progress of the change process, this has an effect of motivating subordinates in departments to show commitment also (Mace, 2001).

2.7.2. Process management strategies

These strategies relate to issues that deal with the day to day operations of middle managers during curriculum change and are represented diagrammatically in Figure 2.5.

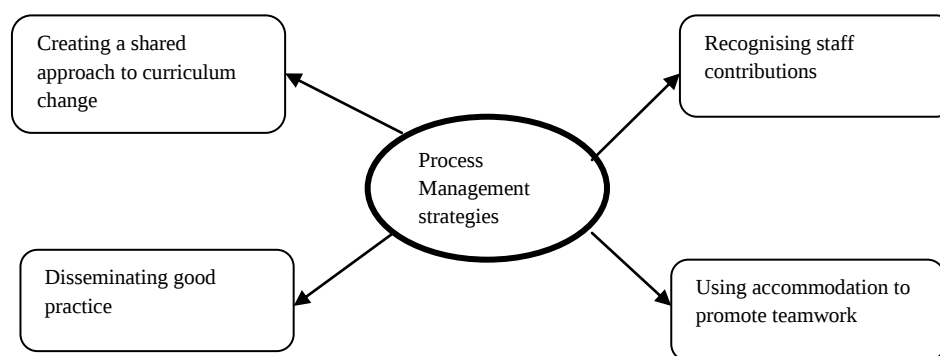


Figure 2.5: Process Management Strategies (Adapted from Curee, 2010:2-8)

2.7.2.1. Creating a shared approach as a vehicle for effective implementation of curriculum change

Literature shows that for a curriculum change effort to succeed, it must be owned by the implementing staff. This is further confirmed in literature that show that change initiatives work

best when introduced bottom-up and owned by the implementing team (Curee, 2010). To ensure buy-in and ownership of the curriculum change effort (Curee, 2010), academic middle managers need to do the following: use focus groups to get close to the perceptions and feelings of the implementing staff towards the change which could be a good indicator of how best to move forward; and create in the department working teams that have clear lines of authority and that report on their tasks on curriculum change.

2.7.2.2. Recognising and utilising staff contributions

AMMs can improve the willingness of department staff's commitment to implementing curriculum change by recognising and using team members' contributions. Literature shows that acknowledging and utilising the expertise of staff has a cascading effect on instigating change and can also improve staff morale in the process (Curee, 2010). AMMs can encourage motivated performance by department staff during the curriculum change process by doing the following: creating a data base of experience and expertise so as to be able to tap into it where and when need; using past history successes in curriculum change in the department to motivate current change effort; reinforcing performance as often as possible to enable staff to feel that their efforts are recognised and appreciated; and hosting interactive sessions about curriculum change that encourage whole team participation.

2.7.2.3. Using accommodation to promote team work

It is important for middle managers to understand that small staffrooms isolate staff and make it difficult to promote team ethos required to effectively manage curriculum change (Curee, 2010). Literature further confirms that physically isolated staff can develop a psychological detachment from what is going on and may respond less well than others to curriculum change. To ensure that there is team spirit among department staff during curriculum change, AMMs can do the following: provide staff rooms in which members can meet regularly as teams to discuss and share ideas on curriculum change; and use accommodation available to promote team ethos.

2.7.2.4. Disseminating good practice during curriculum change

Having an effective mechanism to disseminate good practice across the department so others can learn from it is very important for the success of a change effort from which staff can immensely benefit (Curee, 2010). AMMs can disseminate good practice to their staff by organising team

teaching sessions or using teaching mentors to demonstrate as well as providing in-service training days where staff share experiences in a structured manner.

Section 2.7 reviewed literature on the strategies that AMMs can use to effectively plan and implement curriculum change in PHEIs. The next section discusses literature on the role of leadership in curriculum change.

2.8. Role of leadership in curriculum change

Leadership is a nebulous and difficult concept to define and its meaning has been a subject of much heightened debate for a long time because it is neither precise nor unified (Bryman, 2007; Hallinger & Heck, 2010a; 2010b; McCaffery, 2004). As a result of the multiplicity of leadership definitions, leadership approaches have been seen to range on a leadership style continuum, from administration to management to leadership, with the current leadership approaches representing more visionary, creative, inspirational and energizing approaches than the initial ones (Bush, 2008; Gilbert, 2011).

Among some of the definitions given by authorities based on their different conceptions and perceptions of leadership include leadership as a process designed to influence a group of individuals to work together to achieve a common goal (Northouse, 2010), leadership as an influence process that drives individuals to think or act differently according to a task or situation (Hohepa & Lloyd, 2009). According to Joyce and Boyle (2013), HE has become complex and difficult to manage without the collective support of institutional members. This resonates with Jones, Lefoe, Harvey and Ryland's (2012) argument that HE management has become complex and requires distributed leadership rather than hierarchical leadership.

The importance of collective leadership in the HE environment is also raised by a number of authorities who assert that for there to be effective leadership in HE, there is need for multiple individuals to share leadership by ensuring that people work collaboratively to promote connectedness (Grint & Holt, 2011; The King's Fund, 2012). Gosling, Bolden and Petrov (2009) also confirm the importance of distributed leadership in HE when they posit that it is an approach that embraces the notion of collegiality and autonomy of members rather than command, and hence is very important for the success of any type of change in HEIs.

Curriculum change leadership is defined as a social influence process whereby intentional influence is exerted by one person or group over other people for the purpose of achieving organisational and curriculum goals (Brown, Rutherford & Boyle, 2000; Yukl, 2002). Two aspects of AMM role, namely that of school improvement and the improvement of teaching and learning have been viewed as being catalytic in necessitating the reconceptualisation of the AMM's role as a leadership role rather than a management role in curriculum change (Bush & Middlewood, 2005; Thrash, 2012). Fitzgerald and Gunter (2006) also support this reconceptualisation of the leadership role of AMMs by suggesting a paradigm shift from managerialism and management practices to leadership matters on pedagogy and pedagogic practices.

The challenge faced in this proposed paradigm shift is for the AMMs as curriculum leaders, to be able to establish a balance between leadership and management roles in order to provide both vision and direction while also ensuring effective and efficient implementation and monitoring of pre-determined curriculum policies and procedures (Humphreys, 2010). While acknowledging this balancing act predicament, AMMs are also faced with the challenge of coming up with a vision, of shaping curriculum change goals, motivations and actions of others to reach existing and new curriculum change goals (Yukl, 2002). This is so because, according to Scott-Ladd, Christopher and Chan (2004), change does not just happen, it must be led. Joyce and Boyle (2013) also argue that leadership is not defined by the exercise of power because people will just get fed up and show resistance, but by the capacity of a leader to increase the sense of power among the led so that everybody feels in charge, involved and derives a sense of ownership. This approach to leadership is viewed as highly motivational to members and an important ingredient to the success of changes such as curriculum change.

In the light of the above, middle managers' curriculum leadership role is therefore viewed as symbolizing the creation of followers not subordinates for curriculum change, a situation which calls for middle managers to possess a variety of skills and abilities which include, but are not limited to the ability to lead a heterogeneous department, possession of critical thinking skills, and ability to lead by example (Corey & Corey, 2006; Haslam, 2004; Nunn, 2008; Rosser, Johnsrud, & Heck, 2003).

In addition to the skills, Sypawka (2008) argues that AMMs as curriculum leaders need to possess the following skills: being cultural representatives of the department, good communicators, skilled managers, forward-looking planners, and above all, being able to demonstrate the ability to manage change (Del Favero, 2005; 2006a; Hyun, 2009). This argument is supported by the fact that change such as curriculum change is both an emotional as well as a rational process in which listening to both enthusiasts and resisters gives the AMM important insights into how to ensure that a desired change effort succeeds (Scott-Ladd, Christopher & Chan, 2004). The above then means that AMMs as curriculum leaders need to listen first then lead next in order to gain the trust and respect of department members.

The leadership style employed by middle managers in carrying out of their role in curriculum change has a significant bearing on the success of both the institution and the department with regards to curriculum change (Del Favero, 2006b; Gmelch, 2004). The need for effective curriculum leadership by middle managers is also viewed as important now than ever before because middle managers today are faced with the double challenge of adapting to constantly changing demands for education while at the same time ensuring that the internal dynamics of their departments are maintained (Sypawka, 2008). There are ten leadership models which attempt at explain the actions and rationale of leader behaviour in organisations and departments (Humphreys & Einstern, 2004; Thrash, 2012). In the context of the current study, there ten leadership models attempt to define how AMMs in different settings, in the different higher education institutions, engage in curriculum change (Bush & Glover, 2003; Daniel, 2009).

The ten models represent a typology of leadership models and are the managerial leadership model, participative leadership model, transformational leadership model, transactional leadership model, post-modern leadership model, moral leadership model, instructional leadership model, organised anarchy leadership model, political leadership model, and the contingent leadership model (Bush & Glover, 2003; Daniel, 2009). These leadership models help to clarify different approaches to curriculum change as well as the challenges that may affect the success of curriculum change process. These leadership models further help to highlight why some AMMs succeed and why others fail during curriculum change as this may be due to a wrong choice of a leadership style. These models are described below.

2.8.1. The managerial leadership model

This model assumes that the focus of leaders ought to be on functions, tasks and behaviour and that if these functions are carried out competently, the work of others in the organisation and also That of the department will be facilitated and enhanced (Leithwood, Mascall, Strauss, Sacks, Memon & Yashkina, 2006). To be able to effectively carry out the above functions, managers as leaders need to develop and implement a cyclical process involving seven managerial responsibilities namely goal setting, needs identification, priority setting, planning, budgeting, implementing, and evaluation as shown in Figure 2.6.

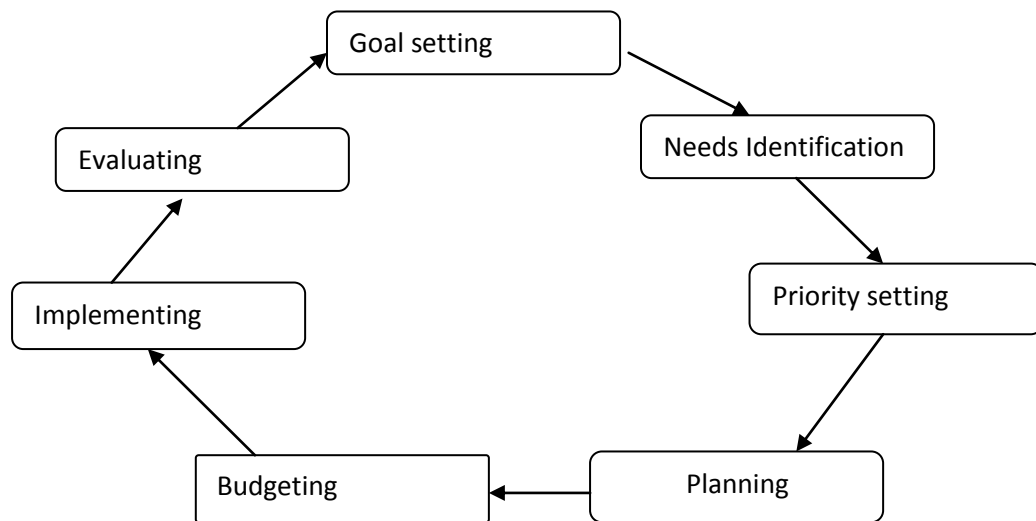


Figure 2.6: Managerial Leadership Model (Adapted from Caldwell in Bush, 2007: 395)

The model shown in Figure 2.6 does not include the concept of vision that is central to most leadership models as it focuses on managing existing activities successfully rather than visioning a better future for the institution or department (Bush, 2007). As a result, the model is not seen as effective in the planning and implementation of curriculum change in higher education institutions as curriculum change is an ongoing timeless process. However, it is also a model that is suitable for a centralised system of management such as the one that obtains in PHEIs in Botswana as it prioritises the efficient implementation of external imperatives, that is, those imperatives prescribed to the middle manager by higher authorities within a bureaucratic hierarchy in the institution. Daniel (2009) describes this model as the bureaucratic system/model in which decision making is viewed as a rational process where good and/or efficient decisions are made. This rationality is viewed from the context that in a bureaucracy, there exist clear and

consistent sets of goals and objectives that need to be achieved within a certain time frame (Daniel, 2009).

The above model is characterised by clear and formal channels of communication and reporting systems, written rules and regulations and a knowledge base. One good example of the application of the managerial leadership model is the scientific management model as proposed by Tyler (1949). This model is associated with authoritarian, hierarchical and inaccessible leadership styles. The middle manager's authority is perceived as God-given, judicial and final (Bush, 2007). While its opponents describe it as archaic and antidemocratic, it is also credited for its effectiveness in ensuring efficiency in operations (Bush, 2007). This argument is also confirmed in the context of curriculum change by Curee (2010) who argues that the model poses challenges to AMMs during the planning and implementation of curriculum change as it stifles creativity and innovation among the followers and hence demotivates those with ideas they think may be useful for the success of the curriculum change process. This model is therefore, not very effective in enhancing AMMs role in curriculum change.

2.8.2. Transformative leadership model

The transformative leadership model assumes that the central focus of leadership should be commitment and capacities of departmental members. Its major dimensions on the role of the middle manager include building the departmental vision, establishing departmental goals, providing intellectual stimulation, offering individual support, modeling best practices and important departmental values, creating a productive departmental culture, and developing structures to foster participation by members in departmental decisions (Thrash, 2012). The model primarily focuses on the processes by which middle managers as leaders seek to influence departmental outcomes rather than on the nature or direction of those outcomes (Bush, 2007; Thrash, 2012). One major criticism of the model is that the middle manager as leader has potential to become despotic because of his/her strong, heroic and charismatic traits (Allix, 2000). However in the context of AMM role in curriculum change, by allowing for decentralised decision making on curriculum change matters in the department, this model ensures growth of members as well as ownership of the change process. If prudently used, it can lead to AMMs successfully playing their role in the planning and implementation of curriculum change.

2.8.3. Participative leadership model

It is a model that assumes that the decision-making processes of the group should be the central focus of the group (Leithwood, et al, 2006). Its three major assumptions in the context of the role of middle managers during curriculum change are that participation by all members increases effectiveness in the department, participation by all members is justified by democratic principles, and in the context of site-based management, leadership is potentially available to any legitimate stakeholder. This model is also referred to as the collegial model and focuses on the creation of a community of members that share interests in the decision-making processes in either the department or organisation (Daniel, 2009). Members in this team interact and influence each other through a network of continuous personal exchanges based on social interaction, value consensus and reciprocity (Daniel 2009). Members exchange ideas with their leader at both formal and informal levels while at the same time respecting each other's professional autonomy and authority. This leadership model is highly credited for its power to bond staff together and to ease the pressures on middle managers because leadership functions and roles are shared (Thrash, 2012).

In the context of AMMs role on curriculum change, this model is viewed as critical for ensuring teamwork. Literature shows that teamwork is very important in ensuring that people pull together towards the same direction for a common goal (Griffin, 2011) and this is very important for the success of AMMs role during the planning and implementation of curriculum change. While AMMs may possess the requisite knowledge and skills they need support to ensure that that knowledge and those skills are effectively and adequately utilised. This then calls for participative leadership that ensures members participate especially through decision making in the curriculum change process.

2.8.4. Transactional leadership model

It is a model that focuses on the relationship between the leader and the subordinates. It is leadership in which relationships between the leader and the subordinates are based on an exchange of some valued resource (Miller & Miller, 2001). In the context of middle managers during curriculum change, the interaction with team members will be on a need basis, that is, will be episodic, short-lived and limited to the exchange transaction (Miller & Miller, 2001). This model is viewed as not being effective in enhancing the role of AMMs during curriculum

change as it is premised on *inducing* rather than encouraging and inspiring member participation in the curriculum change process.

2.8.5. Political leadership model

Going hand-in-hand with the transactional leadership model is the political leadership model which works on the premise that higher education institutions are microcosms of the political systems and as a result are also political arenas. This being so, the model argues that as policy decisions such as the implementation of curriculum change are made, relations among members are based on bargaining and compromise during competition for power and resources (Daniel, 2009). This model is characterised by a lack of shared leadership and abundance of conflict as every member participates in decision-making according to how much power and influence they wield (Mintzberg, 2009). This model is very critical for the success of the role of AMMs in curriculum change because AMMs occupy a position at the nexus of organisational hierarchy and as such they have to satisfy two competing interests (top management and the operational core) if they are to succeed in their role. Such a situation therefore requires political juggling between the two competing groups hence the importance of this model to the role of AMMs in the planning and implementation of curriculum change.

2.8.6. The post-modern leadership model

It is a model that assumes that organisations or their units have no ontological reality but are simply the creatures of the people within them who may hold very different views, which views should be respected (Starratt, 2010). It is a model that does not believe in absolute authority but believes in celebrating the multiplicity of subjective truths as defined by experience (Spillane & Healey, 2010). In the context of middle managers as leaders, the model asserts that middle managers respect and give attention to the diverse and individual perspectives of all departmental staff and also seek to avoid hierarchy because of its fluid nature. According to Starratt (2010), it is a model that advocates more consultative, participatory and inclusive leadership approach on the part of middle managers during projects that include curriculum change. While this model encourages participation by all members in decision making through consultations and different forms of interaction, by not emphasising the hierarchy, it then shoots down the issue of accountability. This may affect the way AMMs plan and implement curriculum change as

somebody has to be accountable for the curriculum change process to be done effectively and successfully.

2.8.7. The moral leadership model

This model works on the assumption that the critical focus of leadership should be on the values, beliefs and ethics of leaders such as middle managers themselves. It believes that middle manager authority and influence are derived from defensible conceptions of what is right or good (Leithwood et al, 2006; Leithwood & Jantzi, 2006). It further argues that successful departments have leaders who take administration of their departments as a moral duty or responsibility. This model cannot work on formal units such as departments which are guided by formal rather than moral obligations, hence is not useful in enhancing the role of AMMs in the planning and implementation of curriculum change.

2.8.8. Instructional leadership model

The instructional model focuses on the direction of influence rather than the nature and source of influence of middle managers, hence differs from all the other models above. Its emphasis is on managing teaching and learning as the core activities of managers (Leithwood, Mascall & Straus, 2009). Middle managers' influence is therefore targeted at students learning through teachers hence the need for middle managers to ensure they lead effective implementation of curriculum change. This model relates to the actual teaching of a new curriculum after the change rather than the dynamics of how the curriculum change takes place and instituted by whom. It is a model that does not enhance the role of the AMMs in the planning and implementation of curriculum change. It is a model that addresses more of pedagogical issues rather than how department members work to plan and implement curriculum change.

2.8.9. The organised anarchy leadership model

This model focuses on elements that are loosely coupled. Members of the group from the middle manager to the team members are mostly experienced and prestigious scholars who believe in scholarly work. The middle manager will be leading a team whose motivation in curriculum change is to do a very good job for the purpose of either promotion, tenure, salary increment or just individual prestige (Daniel, 2009). Such people have no time for team work as they believe in doing their work individually and complete it well. Managing such people who may be having

seriously competing interests may prove to be a very difficult job for the middle manager. This model is not effective in enhancing AMM role in curriculum change because literature shows that effective planning and implementation of curriculum change requires teamwork rather than individual effort.

2.8.10. Contingent leadership model

It is a model that recognises the diverse nature of the school context and the advantages of middle managers adapting their leadership styles to the particular situation rather than adopting a one-size-fit-all stance (Leithwood et al, 2009). It posits that what is important in leadership is how middle managers as leaders respond to the unique departmental and organisational circumstances or problems. This model of leadership is very important especially in enhancing AMM role in PHEIs which have uneven resources distribution patterns and challenges. The AMMs who adapt their leadership styles to prevailing circumstances in their departments and organisations stand a better chance of succeeding in the planning and implementation of curriculum change than those who just wait to complain that they are facing problems.

Section 2.8 reviewed literature on the role of leadership in curriculum change, highlighting the different leadership style that AMMs can choose from, depending on their different circumstances, during the planning and implementation of curriculum change. Section 2.9 discusses factors that act as enablers of AMMs role in the planning and implementation of curriculum change.

2.9. Enablers of AMM role in curriculum change

This section is an articulation of enablers of AMM role in curriculum change and is aligned o sub-research question 1.5.3. Authorities in curriculum literature have identified a number of factors that enable successful implementation and management of curriculum change. Among some of the critical factors or enablers to the success of the curriculum change process are the following: adequacy of resources, availability of time, school ethos, professional support, professional adequacy, professional knowledge, professional attitude and interest, and participative leadership (Fullan, 2005; Hargreaves & Fink, 2006).

2.9.1. Adequacy of resources

Adequacy of resources refers to adequacy of equipment, facilities and general resources required to implement curriculum change (Hargreaves & Fink, 2006). In the context of curriculum change, availability of well trained staff in the departments, relevant materials such as text books, technology and facilities, is very critical for the success of the curriculum change process. Literature shows that availability of adequate and relevant resources (human and material) is important for enhancing the role of AMMs in both the planning and implementation of curriculum change. With well qualified and experienced personnel, a diversity of quality ideas will be harnessed and used to support AMMs in departments in their role during the planning and implementation of curriculum change and to ensure the change process is successful. Adequate material resources such as books, computers, and others are also critical as support materials that enhance AMMs in their role during curriculum change.

2.9.2. Time

Curriculum change is a complex process that requires adequate time for planning and delivering the requirements of the changed curriculum (Fullan, 2005). As an example, AMMs need enough time to research and plan for curriculum change. Part of the planning process requires the correct identification of the curriculum areas requiring change, benchmarking those changes and planning for resources needed to implement the curriculum changes. All these require time.

2.9.3. School Ethos

The overall institutional philosophy towards curriculum change and the new curriculum plays a significant role in the success of any curriculum change in the institution (Fullan, 2005; Hargreaves & Fink, 2006). An institutional philosophy that recognises the importance of curriculum change as seeking improvement is important for the success of curriculum change. This means that by working in an institution that takes curriculum change as important, AMMs are able to effectively play their role in the planning and implementation of curriculum change in a tenable and unhindered way than when the institution is largely conservative. Top management in PHEIs can make the role of AMMs in curriculum change more effective if they are able to create a climate where it becomes second nature, that is, part and parcel of institutional culture, for curricula to be reviewed and improved.

2.9.4. Professional support

Adequate support for staff both within the institution and within departments is crucial for effective curriculum change (Hargreaves & Fink, 2006). Such support could be in the form of ongoing curriculum professional support. In the context of curriculum change, adequate financial resources to fund the purchase of material resources, availability of well trained personnel, facilities such as laboratories and classrooms, and supporting infrastructure such as technology, are an important support base for the effective planning and implementation of curriculum change. Professional support needs to also extend to capacitating AMMs and their members to be able to effectively participate in the curriculum change process. Gianoutsos and Monk (2011) argues for the need to create enabling conditions for the successful planning and implementation of a change effort when they assert that in order to produce successful change, institutions must practice the “7 to 1” rule which states that for every one hour of participation in professional activities, teachers need seven hours of in-school implementation support.

The above shows that it is important for AMMs to be capacitated with knowledge and skills for them to be able to effectively and efficiently carry out their role of planning and implementing curriculum change. It is therefore important for time and resources to be set aside for AMMs and their department members in PHEIs to participate in in-house trainings and where possible, to be involved on external skills training on curriculum development and change to ensure that they are adequately capacitated with current knowledge and trends in curriculum development and review.

2.9.5. Professional adequacy

Staff’s ability and competence to plan and implement curriculum change with confidence is critical for the success of a curriculum change effort (Fullan, 2005). According to Finger and Houguet (2006), professional adequacy relates to the level of confidence managers and teachers have in their ability to implement a change effort and is directly associated with a person, as well as knowledge and understanding of the curriculum in the area requiring change. According to Lewthwaite (2006), professional adequacy is part of the intrinsic factors (personal attributes) that defines and influences how a person involves himself/herself in a change process. Finger and Houguet (2006) identify the important attributes that define professional adequacy as: having good background knowledge of the curriculum area, being fairly good on facilitating change,

demonstrating adequate confidence and competence in the planning and implementation of a change effort, and generally having hands-on experience on the planning and implementation of a change effort.

Having confidence in one's ability to perform a given task is important in ensuring that the task is successfully done. In the context of the role of AMMs in curriculum change, sound knowledge and understanding of as well as adequate experience in curriculum change is important in ensuring that AMMs perform their roles more effectively. As a result, institutions need to create conditions for AMMs to gain experience by supporting a culture of periodic curriculum change. Training as explained above should be used as a tool for improving the knowledge base of AMMs on curriculum change and as a way of improving the professional adequacy of AMMs.

2.9.6. Professional knowledge

Knowledge and understandings that teachers possess regarding curriculum change especially with regards to the different ways of teaching to foster student learning, are an integral part of successful curriculum change (Fullan, 2005; Hargreaves & Fink, 2006). Professional knowledge is also viewed as relating to the diversity of knowledge and understanding of the curriculum area (Sade & Coll, 2003; Stein, McRobbie & Ginns, 2001). Lewthwaite and Fisher (2004) also posit that professional knowledge relates to having received formal training in the curriculum area requiring change and demonstration of a clear and sound understanding of the curriculum area. Such sound knowledge and understanding is critical in ensuring that subordinates have confidence in both the change process and the leader (Lewthwaite and Fisher, 2004). According to Finger and Houguet (2006), professional knowledge also implies having good background knowledge of the curriculum area in terms of the content and its related pedagogical issues.

For department members (teachers) to be able to effectively support AMMs in their role in curriculum change therefore, they should have adequate knowledge of their curriculum areas and related pedagogy. This then calls for AMMs and top management in institutions to ensure that the teachers receive relevant training on curriculum change and approaches to effective implementation of curriculum change. Such training could either be in-house or external.

2.9.7. Professional attitude and interest

Attitudes and interest of staff towards change in terms of their keenness to implement the changes are important cogs in the success of curriculum change (Fullan, 2005; Hargreaves & Fink, 2006). Professional attitude and interest according to Finger and Houguet (2006) is about *wanting to*, that is, having a positive attitude to the change process and showing motivation to get things done. According to Sade and Coll (2003), the issue of attitude and interest is very important to a change process because if it is negative, it brings about more problems than solutions to the change process as it will have a ripple effect on the attitudes of followers as well. Literature shows that if AMMs show interest in the curriculum change process, this will have a positive transference and motivational effect on the followers and the reverse is also true. This then means that for AMMs to be effective and be able to gain the support of those they lead in the planning and implementation of curriculum change, they need first and foremost, to show interest in the curriculum change process by being positive before they can expect those they lead to support them.

2.9.8. Participative leadership

Literature shows that both institutional and departmental leadership that facilitates a collaborative approach to curriculum change is critical for effective and successful curriculum change (Hargreaves & Fink, 2006). According to Thrash (2012), leadership for curriculum change needs to be distributed to ensure that all members in the institution or department are directly involved in the change process. If members feel involved, they get motivated but if they feel excluded, they may show negative attitudes or may even sabotage the project. For AMMs to be effective and successful in the planning and implementation of curriculum change, they need to develop a culture of involving everyone in their departments. Such involvement will result in even those who may be having negative perceptions about the curriculum change process changing their attitude. The AMMs need to take the curriculum change not as an individual-directed process but as a team effort both in terms of decision making and also in terms of participating in the planning and implementation of curriculum change activities.

2.9.9. Constructive feedback

In order to produce real and successful curriculum change, effective feedback systems need to be established in departments in PHEIs. According to Ramani and Krackov (2012), effective and

timely feedback is a critical component of a successful change process. Literature shows that feedback works better if it is specific to a particular change goal, timely given so that if there is need for adjustments to be done they can be done immediately, and given in a positive manner (Hamid & Mahmood, 2010). Hamid and Mahmood (2010) and Ramani and Krackov (2012) affirm that teachers seek feedback as a means to acknowledge effective practices, to identify areas of need and to provide suggestions for improvement and that feedback needs to be constructive in order to increase self-awareness, offer options and encourage development. In a research on the effectiveness of feedback on teachers by Gianoutsos and Monk (2011), it was shown that three out of four teachers support the idea of more rigorous and frequent feedback from their supervisors and peers on the effectiveness of their work.

Ensuring regular appraisal of the progress of curriculum change as well as the effort staff are putting into the curriculum change process is important in inspiring followers. Literature has shown that people want to know how they are doing regularly so that if there is need for adjustments in either effort or approach, this could be timeously done. Feedback also helps in extrinsic motivation as people always want to be told that they are doing well and this drives them to perform even better. The AMMs therefore, need to provide feedback to their followers as often as possible if they are to inspire motivated performance from their departments' members and get adequate and meaningful support for the success of their role in the planning and implementation of curriculum change.

Section 2.9 reviewed literature on factors that can enable AMMs to effectively plan and implement curriculum change in PHEIs. Section 2.10 discusses factors that can act as barriers to AMMs role in curriculum change in PHEIs.

2.10. Barriers to middle manager role in curriculum change

Challenges AMMs face during curriculum change is part of an articulation by AMMs about how they view their role in curriculum change. This section therefore is also aligned to sub-research question 1.5.1. There are a number of factors that act as barriers to the successful planning and implementation of curriculum change by academic middle managers in higher education (Kgosana, 2006; Mafora & Phorabatho, 2013; Ndou, 2008). Such factors include: institutional factors, middle manager-related factors, teacher-related factors, physical resources-related

factors, and financial factors (Geijsel, Slegers, Leithwood & Jantzi, 2003; Hall & Hord, 2006; Rogan & Grayson, 2003).

2.10.1. Institutional factors

Institutional factors fall into the political dimension category of curriculum change and relate to power and influence, including administrative support and leadership, collaboration and negotiation as well as resolution of conflicts in the institutions and departments (Morgan & Xu, 2011). These factors further relate to the cultural dimension of curriculum change that compromise the values, beliefs and norms, both consensual and competing in individuals, groups, departments and institutions (Hall & Hord, 2006; Rogan & Grayson, 2003). Institutional factors refer to conditions or situations within an organisation or department that influence or affect successful implementation of a change effort such as curriculum change. These factors include top management leadership style, institutional culture, institutional structure and expectations, and can have either positive or negative effects on how AMMs enact their role in the planning and implementation of curriculum change in PHEIs.

2.10.1.1. Top management leadership style as barrier to curriculum change

The top management team, their overall management style and the degree of their collaboration with middle managers, has a significant bearing on the success or failure of curriculum change (Bennett et al, 2003). Top management who employ the managerial style of leadership create barriers to communication with middle managers and delay or completely stifle curriculum change in institutions. According to Davis, van Rensburg and Venter (2014), AMMs are constrained by the nature of the work environments at their institutions. They argue that managerialism that has crept into HEIs has resulted in a tyranny of bureaucracy which translates into disempowerment of AMMs, a culture of conformance over collegiality, a culture of command and control, all at the cost of innovation and experimentation. This situation then leads to AMMs failing to effectively and successfully play their role in the planning and implementation of curriculum change because they are constrained by environmental factors within their institutions. For effective AMM role in curriculum change, communication between AMMs and top management needs to be smooth and timely as both are the most influential decision makers in the institutions.

A controlled and rigid work environment has led to a number of authorities concluding that there is a growing trend where HE has been appropriated by a managerialist ideology that manifests itself in a litany of costly administrative burdens for AMMs at the expense of academic work (De Boer, Geodegebuure & Meek, 2010; Kolsaker, 2008). In their research on the impact of managerialism on AMMs' role in strategy work in HE, Davis, van Rensburg and Venter (2014) found that the operational environment of AMMs in HEIs is now mostly characterised by command and control from top management. According to this study, the findings dove-tailed with the earlier works of Mintzberg (2009) which showed that a command-and-control work environment is characterised by top management making all major decisions and imposing those decisions on the organisation and AMMs, and monitoring the implementation of those decisions through the use of elaborate planning, budgeting and control systems (Davis, van Rensburg & Venter, 2014).

A situation characterised by command and control is retrogressive to the role of AMMs in curriculum change as it robs AMMs of opportunities to make critical curriculum change decisions thus affecting their role in the change process. AMMs require a more flexible work environment where they can propose changes without fear and where they can carry-out their mandates of reviewing curricula without having to consult top management even on minor issues such as changing a textbook.

2.10.1.2. Institutional structure

The tension between collegiality and hierarchy as alluded earlier, has been well documented in literature as an impediment to the success of curriculum change in higher education institutions (Bennett et al, 2003). Institutional structures that are tall and bureaucratic discourage greater middle manager and staff involvement in decision making on issues of curriculum change and also promote reluctance among institutional members to collaborate around institutional issues including issues of curriculum change (Bennett et al, 2003). According to the Teaching Quality Quarterly (2013), any structure is a compromise between control and coordination on one hand and being hierarchical on the other. Bureaucracy tilts the scale towards control rather coordination which is a recipe for chaos, frustration and unmotivated performance in organisations.

For AMMs to effectively and successfully plan and implement curriculum change in their institutions, they need to operate in a more flatter organisational structure rather than operate in a command and controlled environment which is bureaucratic and has a tall structure. A flatter organisational structure allows AMMs to sift information between top management and the operating core to ensure that issues concerning curriculum change are relayed timely and the curriculum change process goes ahead unhindered by communication flaws. Flatter organisation and departmental structures also allow for more effective coordination within the institution and within departments and this ensures that the role of AMMs in curriculum change is played more effectively.

2.10.1.3. *Institutional culture*

An institutional culture in which departments do not operate largely autonomously negatively affects middle managers' ability and even willingness to carry out their general responsibilities (Bennett et al, 2003) as well as specific responsibilities related to curriculum change. For the role of AMMs in curriculum change to be effective, curriculum change should first and foremost be treated as part of routines in the institutions, that is, curriculum change needs to be taken as a necessity for improvement rather than a burden and a cost. If such a culture in the institutions exists then AMMs will be able to enact their role in the planning and implementation of curriculum change more effectively and successfully.

2.10.1.4. *Expectations*

Literature shows that by expecting immediate curriculum changes and instant success, top management set unrealistic expectations which result in curriculum change failure (Seehorn, 2012). Without making curriculum change a gradual, well-resourced and supported process, the result will always be failure. Literature shows that curriculum change is a process and not an event and hence requires time and a lot of preparation for it to be successful. Placing a lot of demands on AMMs to quickly plan and implement curriculum change therefore sacrifices the quality of the change and also demoralizes the AMMs thus affecting how they enact their role during the curriculum change process.

2.10.2. Middle manager role-related factors

Middle manager role-related factors relate to both the political and technical dimensions of curriculum change (Morgan & Xu, 2011). The technical dimension asserts that knowledge and skills and their acquisition as well as classroom practice, are key to successful implementation of curriculum change. Middle managers not only mediate tensions between funding and curriculum change as a potential barrier to effective curriculum change but also filter competing messages from above and below, that are concerned with interpreting and translating curriculum policy (technical dimension) into practice (political dimension) (Wolverton, Ackerman & Holt, 2005).

Another problem is that despite their curriculum change, teaching and scholarship roles, middle managers have to supervise and evaluate staff performance, handle conflicting and competing demands and goals, as well as deal with student problems in their departments (Scott, Coates & Anderson, 2008). Such a boiling pot of demands represents what Sackdanouvong (2013) refers to as middle managers being caught in various positions where they have to seek balance if their efforts to implement curriculum change are to succeed. Such a situation puts a lot of pressure on how AMMs play their role in the planning and implementation of curriculum change as there is too much to be done and too little time to do it resulting in failure by AMMs to come up with meaningful curriculum changes.

The same observation is echoed by Hancock and Hellowell (2001) who argue that middle managers occupy positions in which they have to find a balance between the temporary hierarchy of their administrative position and the on-going collegiality with their peers. The importance of striking such a balance between the competing demands of teaching staff, of their roles and those of top management, between education and research, and ultimately between hierarchy and collegiality are issues that are seen as defining and pre-empting the barriers to effective middle manager role in curriculum change (Kallenberg, 2007).

Another barrier related to AMMs role in curriculum change is lack of clarity about the level of their influence in organisations and departments. There a tendency by top management to treat AMMs as their unquestioning mouthpieces with no authority to initiate projects (Briggs, 2001; 2002). The above is compounded by the fact that little is known about the actual practices of

middle managers (Rouleau, 2005; Rouleau & Balogun, 2011) and how their activities can be facilitated (Balogun, 2007). Such paucity of knowledge is also confirmed by Mayer & Smith (2007) who posit that the middle managers' role is often misunderstood and unsupported by top management.

A lack of clear written job descriptions at the start of the AMM's role in most cases has also been viewed as leaving room for top management to take advantage of the clarity gap and assigning AMMs tasks which are way outside the AMMs' mandate. This affects affecting how AMMs play their role in the planning and implementation of curriculum change. Literature viewed earlier shows that the role of AMMs is a complex one and hence requires clarity on what tasks the AMMs are supposed to do if they are to effectively play this role especially in curriculum change. As a result of the lack of clear job descriptions for the AMMs, the role of the AMM in HE in general and in curriculum change in particular has been reduced to that of a generalist who is dependent on the application of policies and rules, with logical, mechanistic and limited authorized decision-making (Foster, 2010; Kogan & Teichler, 2007). Lack of authority over the operations of their departments is one of the challenges which AMMs' fuzzily defined role presents to AMMs in HE. Literature shows that the reason why AMMs are not given adequate authority over the affairs in their departments is that they are viewed by the top management as a non-value adding stratum in the organisational structure and are further accused of adding unnecessary costs, slowing down decision-making, creating barriers between the organisation and its customers, disempowering employees, and impeding information flow in institutions (Chambers, 2009).

The fact that higher education institutions have engaged and continue to engage in a paradigm shift in their management systems by moving from collegial to more managerial systems (Rasmussen, 2002), is also leading to more pressure on middle managers who are now called upon to manage both the external and internal changes in their organisations' work process (de Boer & Goedegebuure, 2009; Rasmussen, 2002; Smith & Winter-Living, 2009), creating further pressure on their ability to effectively plan and implement curriculum change in their departments.

A lack of professional training by middle managers in curriculum development and change has been cited as one of the major barriers to their role in effective curriculum change (de Lima, 2008). Without adequate knowledge of what constitutes curriculum planning and implementation, literature shows that it would be close to impossible for middle managers to effectively lead curriculum change in their departments (de Lima, 2008). Literature further shows that employees including AMMs, value training as shown by Bisbee's (2005) study on AMMs' perception of the contribution of training to their performance, where 89% of the AMMs felt that training especially on the job training was critical to success in their roles.

Such studies show that without relevant training on issues related to curriculum development and curriculum change, AMMs will not be able to effectively play their role in the planning and implementation of curriculum change in their institutions. Training is important for capacitating both AMMs and their department members with relevant skills in curriculum change so that they are able to competently carry out their curriculum change responsibilities. Without this training it becomes difficult for the AMMs and their department members to correctly identify curriculum areas requiring change and to use the appropriate methodologies of effecting those changes.

Finding enough time to complete their academic activities such as monitoring, evaluating and engaging in curriculum activities such as curriculum development and change is a challenge for AMMs owing to the myriad non-core administrative tasks they are assigned to perform (Brown, Rutherford & Boyle, 2000). The challenge of gaining sufficient time for their enhanced role, particularly time off so that they can support their subordinates in various departmental academic activities is crucial challenge for AMMs in HE. Administrative tasks have been viewed in literature as taking considerable amount of the AMMs' department management time.

The issue of limited time available for AMMs to effectively perform their curriculum work is confirmed by Graham and Benoit (2004) who argue that the AMM's role requires individuals to have more time to fulfill diverse, if not divergent responsibilities. The fulfilling of these responsibilities requires a different skill set from the one that originally attracted the AMM to assume the role. This then is why literature shows that the role of AMM is not one for the weak hearted as it requires the AMM to juggle between the role of being a manager academic to being a manager in an academic environment all at the same time (Graham & Benoit, 2004). The

AMMs in HE institutions may fail to effectively plan and implement curriculum change because of being inundated with myriad non-core administrative activities that take much of the AMMs' curriculum change time. Streamlining the tasks and responsibilities of AMMs is therefore, important for ensuring that AMMs perform their role of curriculum change effectively.

The final institutional barrier to curriculum change relates to the nature of the middle management role of bridging the gap between top management and the academic staff (Smith & Winter-Irving, 2009). Such a role places the middle manager on the firing line of both sides, widening the confusion on what exactly constitutes their role in curriculum change. Literature shows that middle managers have to prioritise addressing and resolving the tensions inherent in the issues of collegiality, professionalism and authority on a daily basis, if they are to successfully plan and implement curriculum change (Bennett et al, 2003). The role of AMMs in the planning and implementation of curriculum change is affected when they have to take much of their time resolving tensions inherent in their roles rather than concentrating on their responsibilities of ensuring effective curriculum change in their institutions.

2.10.3. Teacher-related factors

Teacher-related factors relate to the technical dimension of curriculum change. Successful curriculum change cannot occur if staff are not properly trained to implement the new approach (Seehorn, 2012). It has been shown that teachers who are poorly trained and have poor content knowledge, are also poor in understanding and implementing curriculum change (Rogan & Grayson, 2003). Literature also testifies that the epistemological beliefs of staff impact significantly on the success of curriculum change (Blignaut, 2008; Handel & Herrington, 2003).

Teachers' epistemologies refer to their beliefs about the content, pedagogy and specific context which may impact their ability to accurately interpret and successfully enact the curriculum changes and are a function of the nature training they would have received (Blignaut, 2008). Without massive investment of time, money and appropriate coaches to adequately and effectively capacitate staff to implement a new curriculum, there will always be resistance to curriculum change (Seehorn, 2012). Resistance to change is viewed as natural and expected of any major curriculum change (Fullan, 2001) as change always involves a sense of loss of the treasured and familiar, for the participants (Cragg, 2011). Negative attitudes by staff are also

viewed as the most frustrating and paralyzing barrier to the AMM's role in the planning and implementation of curriculum change in higher education (Seehorn, 2012).

For AMMs to get adequate and meaningful support from their subordinates (department staff) so as to effectively play their role in the planning and implementation of curriculum change, they need to ensure that their staff members are capacitated with knowledge and skills on curriculum change. Without this knowledge and skill, there will be resistance towards the change by the staff members which consequently compromises the success of AMMs role in the curriculum change process. Staff who are not adequately trained on curriculum change will not meaningfully contribute to the curriculum change process thereby affecting the role of AMMs due to lack of meaningful support from the subordinates.

2.10.4. Physical resources-related factors which include lack of support materials for learners.

Literature shows that curriculum change can succeed if it is resourced with good quality student materials (Ball & Cohen, 1999). The presence of appropriate text books has been found to have a positive impact on the success of curriculum change and by extension, on student learning (Walberg, 1991).

2.10.5. Status quo comfort

According to Seehorn (2012), staff, senior management, parents, and students may resist curriculum change because they are comfortable with the way things are, especially when the institution is performing well. Given such a situation, without adequately articulating the benefits of curriculum change to the stakeholders who include students, it will be very difficult to get their support for the proposed change. By adequately communicating the change to all stakeholders, middle managers enable them to see that the benefits of the change, for themselves and the stakeholders, outweigh the personal cost likely to occur (Fullan, 2001, 2003). For AMMs to effectively plan and implement curriculum change, they need the support of all stakeholders from students to industry. By engaging these stakeholders during the planning phase of curriculum change AMMs will therefore ensure that their role in curriculum change is effectively played.

2.10.6. High workloads

Research shows that middle managers in higher education face workload pressures during the conduct of their roles (Fitzgerald, 2009; Wise & Bennett, 2003). Such high workloads result in middle managers having less time to lead and manage curriculum change (Ingvarson, Meiers, & Beavis, 2005). Literature further attests to high workloads emanating from tasks considered managerial rather than those tasks related to improving teaching and learning (Fitzgerald, 2009; Hipkins & Hodgen, 2004; Cragg, 2011). This is confirmed by Bennett et al (2007) who argued that while on one hand top management demand that middle managers take a whole-school approach to managing educational policies and strategies, on the other hand, the operational core also demands that middle managers represent their needs at the top management. The amount of work which AMMs perform in HE therefore needs to be trimmed to allow them to do research and be able to effectively plan and implement curriculum change.

Without a streamlined job description, AMMs fall into the trap of being left with little time to concentrate on curriculum issues such as ensuring effective planning and implementation of curriculum change. Heavy workloads also leave AMMs without enough time to coach and develop their members in departments, resulting in institutions and departments descending into a high-challenge-low productivity systems that demoralizes members with a lot of work they either do not understand or cannot perform (Teaching Quality Quarterly, 2013). The major effect of heavy workloads on AMM role in the planning and implementation of curriculum change will be on the quality of the planning process of curriculum change since AMMs will not have enough time to research.

2.10.7. Team culture

Literature shows that a strong team culture can come in very handy in promoting team learning and in assisting particularly newly promoted novice AMMs to effectively manage curriculum change, if well managed (Cragg, 2011). Where it is well managed, it can more often than not be toxic as it can inhibit team learning and also undermine efforts to implement curriculum change (Ruding, 2000; de Lima, 2008). If a department is composed of members who believe in individualism and are not willing to collaborate, the role of AMMs in the planning and implementation of curriculum change will be affected since the process of curriculum change is a team effort as literature has shown. Right from the first day, AMMs need to nurture a culture of

teamwork and collaboration in their departments to ensure that department members are able to work together as a team.

2.10.8. Financial factors

In many private higher education institutions, there are always powerful budgetary pressures that affect the ability of middle managers to effectively plan and implement curriculum change (Lachiver & Tardif, 2002). These pressures are normally reflected when: certain courses may be felt to be too expensive to be fully reviewed or in other cases, some areas of the curriculum may be deliberately left out thus ultimately affecting the overall quality of the curriculum change; classes are made too large to reduce the number of staff employed thus affecting the type of methodologies to be incorporated into the curriculum change process (Lachiver & Tardif, 2002). Financial pressures lead to institutions' inability to provide the much needed resources especially for the implementation of curriculum change and this affects the success of the AMMs' role in the curriculum change process. Resources that may be lacking and that may compromise the role of AMMs in curriculum change may include lack of adequately trained staff as institutions may not be prepared to pay large salaries as well as lack of adequate stationary and classrooms to support new curriculum changes. All these have a telling effect on the role and efforts of AMMs to effectively implement curriculum change.

2.10.9. Student abilities

While in the ideal world curricula are actuated by the desire to create graduates of the highest caliber, reality on the ground dictates otherwise because of the nature of student abilities (Lachiver & Tardif, 2002). Literature shows that the exigencies of filling quotas for both local and international students impact the type and/or quality of curriculum change. Faced with the choice, middle managers take the path of least resistance and end up planning curriculum change not for the excellent students but for the mediocre ones that muddle their way through degree programmes (Lachiver & Tardif, 2002). This particularly affects the nature of curriculum changes AMMs are able to plan and implement. The pressure to ensure that as many students as possible pass is one of the factors that affect how AMMs enact their role in curriculum change especially bearing in mind that sponsors such as governments want to see sponsored students successfully graduate. AMMs therefore, end up compromising their roles in curriculum change to ensure that even the mediocre students go through the programme.

2.11. Conclusion

The above literature has explored the concept of curriculum change and has shown that it is often a problematic process for middle managers and teachers because of its being political, complex, contradictory and occasionally symbolic. Literature further showed that curriculum change is also a process which links to a broader social context, a process in which broader, deep-rooted questions about school and society, especially with regards to the nature of knowledge and which knowledge is useful, are addressed. The role of AMMs in the planning and implementation of curriculum change was also discussed with particular reference to factors that inhibit as well as enable this role during curriculum change. It was shown in the literature that both technical (issues related to AMs competencies) as well as political factors (institutional factors) influence the way AMMs enact their role in curriculum change.

The next section describes the theoretical framework that guides the study. Leadership is important for the effectiveness and success of a change process and hence the distributed leadership theory will be discussed in the next section as the theoretical framework guiding this study.

2.12. Theoretical framework

2.12.1. Introduction

This section introduces the theoretical framework that provided the organisation as well as guidance of the study. The purpose of the theoretical framework was to help the researcher make conceptual distinctions and to organise ideas in the study. This study was guided by a leadership theory. Literature shows that change is a complex process that needs effective leadership for it to succeed hence the theoretical framework for this study is a leadership theory. The importance of effectively leading change is confirmed in studies that showed that successful curriculum change results from effective leadership (Bush, 2007; Busher, 2005; Knight & Trowler, 2001). Studies also show that it is no longer enough to categorise the role of the AMMs in curriculum change as that of head of department (manager) but rather as leader as this captures both the management and leadership attributes of AMMs in managing a change process and in leading curriculum improvement (Brundrett, 2007; Gronn, 2010; Muijs & Harris, 2003). Literature further shows that AMMs as academic leaders need to possess a wide range of leadership skills to be able to effectively lead and manage change in their units (Thrash, 2012). Such leadership and

management skills include the ability to lead a diverse unit, possession of critical thinking skills, and the ability to lead by example (Corey & Corey, 2006; Haslam, 2004; Nunn, 2008; Rosser et al, 2003).

2.12.2. Distributed leadership theory

The theoretical framework for this study is the distributed leadership theory which was propounded by Gibb (1954). Effective change in higher education especially in curriculum change, is viewed as a function of effective leadership in general and distributed leadership in particular (Thrash, 2012; Wood, 2004; Northouse, 2007; Spillane, 2006; Bolden, 2007). The concept of distributed leadership has become popular in recent years as an alternative to leadership models that concerned themselves primarily with the attributes and behaviours of individuals such as traits, style, situational and transformational theories (Bolden, 2007; Snipes-Bennett, 2006; Wood, 2004). Literature shows that distributed leadership unlike transformational, trait or situational leadership, has become a popular pre-heroic representation of leadership that marked a shift away from personality of individuals to a more systematic perspective whereby leadership is conceived of as a collective social process emerging through interactions of multiple actors (Northouse, 2007). Leadership in the distributed leadership frame, is not something done by an individual to others or a set of individual actions through which people contribute to a team or organisation like what happens with situational, trait or transformational leadership styles, but is a group activity that works through and within relationships rather than individual action (Bennett et al., 2003; Gronn, 2010; Muijs & Harris, 2003).

The popularity of distributed leadership is also further confirmed in research that has shown that distributed leadership has over the years been one of the most preferred leadership styles by academic middle managers in higher education (Lustik, 2008; Rhodes, Brundrett & Nevill, 2008) as it a style that seeks to explain and show how leaders through the sharing of formalized power and authority (Lo, Ramayah & de Run, 2010), can effectively, efficiently and sufficiently lead change in their organisations and departments (Thrash, 2012).

The premise of distributed leadership is that leadership should be more systemic to ensure that leadership responsibility is dissociated from formal organisational or departmental roles and the

action and influence of people at all levels should be the ones recognised as integral to the overall direction and functioning of organisations or departments (Bolden, 2007). As a result, distributed leadership is viewed as defining leadership in a way that shifts focus from the traits and characteristics of leaders to the shared activities and functions of *leadership* (Spillane, 2006). This means that distributed leadership is a move away from the traditional leader-follower dualism that places all the responsibility for leadership on the leader and represents followers as somewhat passive and subservient (Bolden, 2007). The above is also echoed by Pearce & Conger, (2003) who point that leadership has been historically conceived around an individual and his or her subordinates leading to the leadership field focusing attention on the behaviours, mindsets and actions of the leader in a team or organisation.

The above traditional conception of leadership has however, been challenged by scholars who argue that leadership is not a role but an activity that is shared or distributed among members of a group or organisation (Harris, 2009; Holt, 2011, Leithwood et al, 2009; Northouse, 2010, Spillane, 2006, 2007). This new conception views leadership as a group quality or a set of functions that must be carried out by the group not just one individual (Gronn, 2008a; Gronn, 2008b), thus creating more leaders in organisations and departments (the numerical or additive function of distributed leadership) and facilitating concerted action and pluralistic engagement (Gronn, 2010).

2.12.3. The historical development of distributed leadership

The origin of distributed leadership lies in cognitive and social psychology as propounded in the works of Gibb (1954). It draws particularly from distributed cognition and activity theory which emphasise the role of social context as an influence on human learning and behaviour (Menon, 2011; Spillane, 2006). The role of cognitive and social psychology as influences on the development of the concept of distributed leadership was founded on the belief that cognition was better understood as a distributed phenomenon across individuals, artifacts and internal representations (Leithwood et al, 2007; Bennett, 2008; Hallinger and Heck, 2010).

Earlier theorising conceptualised distributed leadership in a variety of ways (Leithwood & Jantzi, 2006), for example, Shelley (1960) and later Melnick (1982) viewed distributed leadership as describing tolerance of difference of opinion among team members. In the early 1990s, the term

distributed leadership was viewed as synonymous to a *baseless team* or *self-managed team* (Barry, 1991), a description which resonates well with current conceptualisations of distributed leadership especially in its recognition of leadership as an emergent property (Leithwood et al, 2006).

It was until the late 1990s and early 2000s that a more contemporary conceptualisation of distributed leadership emerged, a conceptualisation that showed distributed leadership as a web of leadership activities and interactions stretched across people and situations (Copeland, 2003; Spillane, Halverson & Diamond, 2004). In this context, distributed leadership was being viewed as a social process of distribution of leadership where the leadership function is stretched over the work of a number of individuals and the task is accomplished through the interaction of multiple leaders (Spillane, Halverson & Diamond, 2004; Harris, 2009).

2.12.4. Definition of distributed leadership

As an emergent leadership concept, distributed leadership has been assigned different meanings as people tried to make sense of what the concept actually meant (Bennett, Wise & Woods, 2003; Mayrowetz, 2008; Woods, Bennett, Harvey & Wise, 2004). According to Copeland (2003), distributed leadership is a set of functions or qualities shared across a much broader segment of an institutional community that encompasses administrators, teachers and other professionals. Harris (2008) also defines distributed leadership as a broad-based leadership activity with multiple levels of involvement in decision making that focuses primarily on classroom practices and encompasses both formal and informal leaders, linking vertical and horizontal leadership structures in a way that taps into the potentials of each and every member of the institution or department. Other authorities also define it as consciously existing and managed collaborative patterns involving some or all leadership sources in the organisation or department (Gronn, 2008). Distributed leadership is also viewed as a form of collective leadership in which members develop expertise by working collaboratively, with leadership in this context residing in the human potential available to be released within the organisation or department (Gronn, 2010; Harris, 2009; Spillane, 2006; de Lima, 2008).

Distributed leadership is therefore dynamic, relational, inclusive, collaborative and contextually-situated (Bolden, 2007; 2008; Harris, 2004; 2007) and involves leadership opportunities for all

members to surface and mediate perceptions, values, and beliefs through continuous interaction. This is in order for members to generate ideas together and make sense of work in the light of shared beliefs and new information as well as create actions that grow out of these new understandings (Harris, 2008; MacBeath, 2005; Woods, 2004; Fitzsimons, 2011). The above definitions also imply that the role of those chosen to be in leadership positions such as AMMs is to hold the pieces of the organisation or department together in a productive relationship through the creation of a common culture of expectations around the use of individual skills and abilities. This can be done by leading and managing different segments of the organisation or department (Obadara, 2013), thereby maximising human capacity.

Referring again to Bolden (2007)'s assertions about leadership, distributed leadership can be viewed as a leadership theory that heavily draws on systems and process theory and that locates leadership clearly beyond the individual leader and within the relationships and interactions of multiple actors and the situations in which they find themselves. Also based on the above definitions of distributed leadership given by a number of authorities, three distinct elements of distributed leadership according to Bennett, Wise & Woods (2003) emerge. These are: that it is an emergent property of a group or network of interacting individuals in which the outcome is greater than the sum of its parts; that it suggests openness of boundaries of leadership between team members and leaders so that any or all members can play some leadership role; and that it recognises that expertise, ideas and capabilities can be found in individuals spread throughout the organisation and distributed leadership links closely to the importance of teamwork, collaboration, collective responsibility and flexible application of expertise.

2.12.5. Relevance of DL theory to the current study

The relevance of the DL theory in guiding or informing the current study lies in the benefits it provides that enhance the role of AMMs in the planning and implementation of curriculum change in PHEIs. Firstly the flexibility of DL allows AMMs to create working teams that are not permanent but which are fluid and interchangeable to ensure maximum opportunities for members to share curriculum change ideas and learn from each other (Harris, 2008; Heck & Hallinger, 2009; Heikka, Wainganayake & Hujala, 2012). Such an arrangement ensures optimisation of diverse knowledge and skills among the ever changing (fluid) collaborating team. A number of studies have linked DL to successful performance by staff in higher education

institutions. Two studies are noteworthy. The first study by Mascal, Leithwood, Straus & Sacks (2008) which examined the relationship between distributed leadership and teachers' academic optimism showed that there is a significant association between planned approaches to DL and high levels of academic optimism by teachers. In yet another study conducted by Hulpia & Devos (2010), which investigated the link between distributed leadership and teachers' commitment and hence improved performance, results showed that teachers were more committed to the responsibilities and showed improved performance when their leaders encouraged their participation in decision making through distributed leadership.

The importance of using DL as a tool which middle managers can utilise to drive effective curriculum change in departments is multifaceted (Hulpia & Devos, 2010; Mayrowetz, 2008). First it uses vision as a unifying force especially where the vision is clearly articulated. Second, DL encourages AMMs as curriculum leaders, to use expert rather than formal authority which shifts according to the need and the task. This is important because expert authority is inspirational while formal authority is largely based on enforcing and commanding, characteristics which have a tendency of inciting resistance. Third, use of DL style by AMMs encourages the creation of collaborative teams for specific purposes with fluid membership thus encouraging wholesome sharing of knowledge and skills among department members. Fourth, by using DL AMMs encourages the emergence of communities of practice often to brainstorm future needs and further possible collaborations, which are capable of maintaining their affiliation long after the collaborative activities of the task are completed. Fifth, use of DL by AMMs encourages individuals in the teams to perceive themselves as stakeholders, which boosts willingness to assume leadership positions when needed. Sixth, use of DL by AMMs leads to departmental disaggregation to ensure roles are distributed to the teams that are best able to achieve them. It also allows the distributed roles and tasks to take place at different times, different places and under widely varying conditions that foster success.

The above characterisation of the benefits of DL implies that for curriculum change to succeed, AMMs need to ensure that the authorship and scope of activities to be performed in the department during curriculum change are redefined to encompass pluralities so that team members' actions can mesh and new patterns of interdependent and collaboration among members can emerge.

2.12.6. Research model

Based on the literature reviewed and theoretical framework, the research model or conceptual framework in Figure 2.7 is designed to guide the research. This section is an articulation of independent, dependent and moderating variables which help to shape how the planning and implementation of curriculum change occurs in PHEIs under the facilitation of AMMs. By discussion how biographic factors influence how AMMs plan and implement curriculum change, this section is aligned to sub-research question 1.5.2. There are three main variables that can be used to explain how AMMs play their role (Independent variables) in curriculum change, what factors affect this role (moderating variables) and what model that can be developed and used to enhance the role of AMMs in curriculum change (dependent variable).

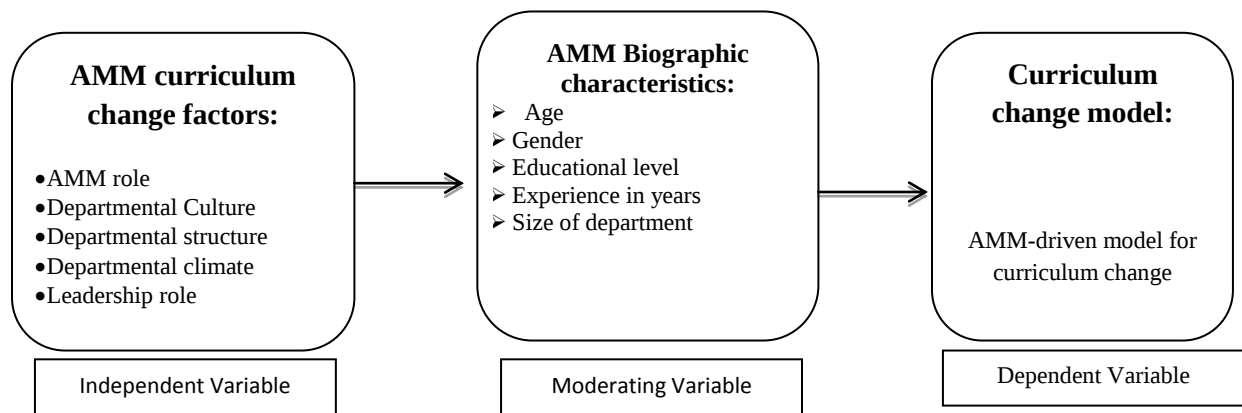


Figure 2.7: Research model (Researcher's Own Model)

2.12.6.1. Dimensions of the independent variable

The AMM Role dimension

The role of the academic middle manager is critical to the success of institutional change (Thrash, 2012). Based on the literature review on the role of AMMs, it can be concluded that the academic middle manager's role is defined as a mix of the following dimensions: synthesiser, facilitator, champion and implementer of curriculum change (Floyd & Lane, 2000; Floyd & Wooldridge, 2000; Rouleau & Balogun, 2011), a snapshot of which is explained.

Change defender/champion

The change defender/champion role is also referred to as issue selling. In this role, middle managers guide and promote as well as defend and present change alternatives to top management. This, they do after first screening the change curriculum information, getting informal cooperation, providing resources for experimentation and establishing the feasibility of the curriculum change proposal.

Change information synthesiser

This role is also referred to as sense making. It relates to the middle manager's role in synthesising (attending to, framing and diagnosing curriculum change issues) curriculum change information and influencing both operational level and top management perceptions about the change (Floyd & Wooldridge, 2000). Overall this middle manager role deals with categorizing ideas, selling these ideas to both top and bottom levels of organisations, as well as combining and applying change information.

Change facilitator

This middle manager role is also referred to as sense making and sense giving. In this role, middle managers facilitate the generation of variant behaviour, cooperation and help in stimulating experimentation leading to innovation (Floyd & Wooldridge, 2000), which can then lead to new curriculum change ideas. In so doing, middle managers will be protecting and promoting adaptation of activities, communicating curriculum change information, guiding the adaptation process, and facilitating learning.

Change implementer

This middle manager role is also referred to as sense giving. In this role, middle managers translate curriculum change plans into operational plans, and then facilitate implementation. The middle managers also perform the role of reviewing and adjusting change processes as well as motivating and inspiring subordinates to achieve curriculum change goals.

The department culture dimension

Department culture relates to the kind of supportive working environment the middle manager creates to ensure that the process of curriculum change progresses effectively and efficiently. It relates to issues such as teamwork and the level of commitment of all departmental members.

Level of teamwork

Level of teamwork refers to whether department members are prepared to work together as a team to achieve a given task or assignment or not (Griffin, 2011).

Level of commitment

Level of commitment refers to whether or not there is willingness of department members to complete the task at their level and demonstrating a sense of achievement and pride for successfully completing the department tasks (Griffin, 2011).

The department structure dimension

Literature shows that an effective and flatter department structure is crucial for enhancing effective communication and coordination by department members during curriculum change (Griffin, 2011). The following ensure that the middle manager driven curriculum change become a success: degree of authority, degree of coordination in the department, and effectiveness of communication.

Degree of authority

Degree of authority refers to whether the line of authority in the department is clear enough from the middle manager to the lowest rank in the department; whether there is clarity on the duties, responsibilities and authority of all department members as well as the extent to which authority is delegated in the department; and whether the department structure is receptive and/or flexible to adopting change (Griffin, 2011), of what change managers actually do during change.

Degree of coordination in the department

Degree of coordination in the department refers to the extent of interdependence of work tasks in the department, i.e., how programmes and activities are coordinated and the mechanisms for coordinating them (Griffin, 2011).

Effectiveness of communication in the department

Effectiveness of communication in the department deals with whether there is downward, upward or multidirectional communication in the department; and whether the department structure allows for high or low participation of department members in departmental communication (Goodman, 2001).

The Leadership role dimension

Leadership dimensions such as fostering effective leadership, embodying visionary leadership, leading a learning department, promoting instructional leadership, demonstrating facilitating leadership, managing department operations and resources, understanding and responding to the larger societal and global context, and locus of control, all draw from the distributed leadership theory (Northern Gateway Public Schools Administration Manual, 2009; French & Raven, 2005; Luiz, 2006).

Fostering effective relationships

This dimension refers to the leader acting fairly, demonstrating sensitivity to and genuine care for followers and cultivating a culture of respect, modeling and promoting open and inclusive dialogue, using effective communication, facilitation and problem solving skills, supporting processes for improving relationships and dealing with conflict in the department, as well as adhering to professional standards of conduct. These dimensions are discussed in detail below.

Embodying visionary leadership dimension

With regards to the dimension of embodying visionary leadership, the AMM as the curriculum leader leading the planning and implementation of curriculum change should effectively communicate and be guided by educational philosophy based on sound research, personal experience and education; providing leadership in keeping with the department's vision and mission; meaningfully engaging the whole department in identifying and addressing areas of curricula improvement; ensuring planning, decision-making and curriculum change implementation plans are based on a shared vision and an understanding of the departmental culture; facilitating change and promoting innovative ideas consistent with the departmental needs; analysing a wide range of curricula data to determine progress towards effective curricula

change; and communicating and celebrating department achievements on curricula change to inspire continuous motivation and growth.

Leading a learning department dimension

This dimension asserts that the AMM should promote and model life-long learning for department staff; foster a culture of high standards in the department; and promote and facilitate meaningful professional development for all members of the department. This ensures that through this continuous learning, department members continue to acquire relevant knowledge and skills to support the role of AMMs in the planning and implementation of curriculum change.

Promoting instructional leadership dimension

This dimension shows the AMMs as responsible for curriculum change through the use of sound understanding of contemporary pedagogy and curriculum strategies; and ensuring the development of fair, appropriate and balanced student assessment and evaluation practices in the department. The AMMs also promote instructional leadership by ensuring that student will have access to relevant learning materials for the new curriculum; and integrating modern technology into new curricula to support the teaching of the new curriculum.

Demonstrating facilitating leadership dimension

The AMM, according to this dimension, considers multiple perspectives during the planning and implementation of curriculum change through open dialogue with department members when making decisions; promotes teamwork and shared leadership in the department; and identifies and mentors department members for future leadership roles in the department.

Managing department operations and resources dimension

The AMM as curriculum leader in this dimension performs the role of effectively planning, acquiring, organising and managing the human, physical and material resources of the department; and ensuring that the department's curriculum change is aligned with the organisation's vision and mission of both the department and the institution.

Understanding and responding to the larger societal and global context dimension

For meaningful curriculum change, the AMM as curriculum leader should demonstrate adequate knowledge of local, national and global issues and trends that need to be considered during curriculum change. Further to that, he or she should be able to assess and respond to unique and diverse curriculum needs of the community in the context of the department's vision and mission.

Locus of control

This dimension relates to the extent to which AMMs believe that they can control events that affect them during the planning and implementation of curriculum change. Having an internal locus of control means that AMMs hold the belief that any event affecting their lives or work is solely as a result of their own behaviour and actions. Middle managers who exhibit an external locus of control believe that events in their lives and organisations are primarily determined by fate, chance or other people.

The relevance of leadership on the role of AMMs in curriculum change is explained by the five dimensions model developed by Victor and Franckeiss (2002). The model helps to demonstrate how effective curriculum leadership can lock together all aspects of the curriculum change process throughout the department and also ensure that all curriculum change activities and interventions by the AMM and his/her team are coordinated and consistent. According to Victor & Franckeiss (2002), effective curriculum leadership is premised on five principles. First it is premised on the principle that curriculum change cannot be easily defined but needs to be managed proactively and in a manner responsive to the contingent circumstances. Second, curriculum change is optimally managed through a structured yet flexible approach. Third, consistency of leadership behaviours is of paramount importance throughout the curriculum change process. Fourth, congruence is needed through every level of the department and at every stage of the curriculum change process. Lastly, the interventions that deliver curriculum change can also be used to define and secure commitment to the required change (Victor & Franckeiss, 2002).

Drawing from the above model, the dimensions of directing, describing, defining, delivering, and training and development help illuminate the important role of leadership in supporting the role of AMMs in curriculum change:

Directing

It refers to ensuring that the overall direction and purpose of the curriculum change are thought through and articulated in an appropriate manner.

Describing

It refers to the translation of the department vision and direction by AMMs into enabling strategies and operational strategies (the functional plans and approaches adopted by the department through which it deploys its expertise to deliver curriculum change) during the planning of curriculum change. The enabling and operational strategies for effective management of curriculum change by AMMs in the department include *reward strategy* (rewarding of the department staff for recognising their role in implementing curriculum change), *resourcing strategy* (ensuring availability of adequate resources in the department), *performance management strategy* (ensuring department staff's strengths, weaknesses and plans for improvement are factored in the change process), and *communication strategy* (ensuring that communication to both department staff and other stakeholders is clear and timely).

Defining

Defining refers to the clarification of department curriculum change processes, policies and procedures and ensures the change is implemented and the goals are achieved in a consistent manner. According to Victor & Frankeiss (2002), communicating the appropriate approaches and demonstrating the desired behaviours as encompassed within the values statements and the competence frameworks of the curriculum change approach should be given priority by AMMs if curriculum change is to be successful.

Delivering

This dimension refers to the actual development of the curriculum change management model by AMMs and their teams as operationally defined through the preceding three dimensions and ensuring that the curriculum change processes and procedures are implemented in a manner that is congruent with the overall vision and values of the department and organisation.

Training and development

A successful curriculum change process requires a continuous and consistent programme of training and development to capacitate department staff to deal with new curriculum implementation. Such training also helps staff to deal with curriculum review issues related to developments in the marketplace in terms of customer requirements, technological advancements, competitor actions, global economic conditions and other factors pertinent to the department curriculum. AMMs need meaningful support from members of their departments to successfully plan and implement curriculum changes in their institutions. For department members to render support they should be given relevant training to develop the skills and knowledge needed for them to effectively support AMMs during curriculum change. This training should come well before the planning phase of curriculum change so that staff approach the whole process of curriculum change with confidence knowing that they have the relevant skills and knowledge to face the demands of both the planning and implementation of the curriculum change process.

Dimensions of the moderating variables

Literature shows that the role of the AMMs in planning and implementation of curriculum change can be moderated by the following personal or demographic variables: age, gender, educational level, years of experience, and department size. Personal or biographic factors play an important role in how individuals interpret and participate in change (Mason, Aihara-Sasaki & Grace, 2013; Otanga & Mange, 2014). Previous studies by a number of authorities reveal that several factors that include age, gender, educational level, years of experience, stress level and department size may have some bearing on perception and participation of managers in a change process (Capella, Donsbach, Kremnitzer, Ross & Thorson, 2009; Mason et al., 2013; Smith, 2005). Some studies have also linked teacher age, educational level, gender and experience to curriculum adoption (Mason, Aihara-Sasaki & Grace, 2013; Otanga & Mange, 2014). The current study on the role of AMMs in the planning and implementation of curriculum change wishes to establish whether these biographic characteristics have the same effect on the way AMMs enact their roles during curriculum change in PHEIs.

Educational level

The level of a manager's education has overall been viewed as contributory to the way managers perceive and participate in curriculum change because the level of education reflects an individual's cognitive ability and skills to effectively lead a change process such as curriculum change. According to Wiesrsema and Bantel (1992) in Mayer et al., (2011) high educational levels are associated with high capacity for information processing and ability to discriminate among a variety of alternative change choices by managers. Dollinger (1984) in Mayer et al (2011) also argue that highly educated individuals are more likely to engage in boundary spanning change activities, tolerate ambiguity and show ability for integrative complexity during the period of change. In their study on the influence of educational qualifications, Salleh, Yaakub and Dzulkifli (2011) found that a person who possesses high levels of education and skill tends to succeed because of high levels of job knowledge (unique skills, intelligence and work methods) than a person with less or without. Kimberley and Evanisko (1981) as cited in Mayer et al (2011) also argue that high levels of education have consistently been associated with receptivity to innovation and change and that managers with high levels of education are more aware of, and more receptive to, the need for change than those with lower levels of education.

According to Anderson (1977) in Salleh et al., (2011) skills and practices are learned and developed through education and training as well as through experience. In a study on socio-cognitive factors that mediate the relationship between work and job performance, Dokko, Wilk and Rothbard (2009) found that there is a positive correlation between prior related task knowledge and performance. Mullins (1992) cited in Salleh et al (2011) also argues that educational levels and training are factors that mediate performance. Mullins (1992) cited in Salleh et al., (2011) goes further to argue that training and education enhance the competitiveness and skill sets of managers and also instill necessary attitudinal and mindset changes to ensure effective and efficient delivery of outputs during a change process. Education and training are, in this case, viewed as a means of transforming and upgrading employees and managers skills for the purpose of maintaining as well as improving their capacity and capability to deliver change.

Years of experience

In his study, Brown (2004) found that the ability to plan and implement curriculum change is not a function of how long an individual has taught or managed. This is because a good teacher, according to West (2000), will always do a good job despite how long he/she has taught/managed. Other authorities however argue that experience has a significant role to play in how people perceive and get involved in the process of change. The pro-experience authorities argue that experienced teachers and managers operate from a deeper and more sophisticated knowledge base than the less experienced ones (Feldman; 2006; Fullan, 2003; Sergiovanni, 2002).

To support the above argument on the positive influence of years of experience on AMMs role on curriculum change, Fullan (2003) provides seven types of knowledge which give experienced people advantage over the less experienced with respect to involvement in the process of change. These are content knowledge, pedagogical content knowledge, general pedagogical knowledge, curriculum knowledge, knowledge of educational context, knowledge of learners and their personal characteristics, and knowledge of educational aims, values, as well as their philosophical and historical backgrounds.

Content knowledge

This relates to knowledge of the genetics of the subject. Fullan (2003) notes that a manager who has long years of experience should be able to demonstrate sound knowledge of his/her subject and this should make him/her an effective leader during a change process such as curriculum change.

Pedagogical content knowledge

This relates to knowledge of how to make the subject more interesting and understandable. Long years of experience according to Fullan should provide a manager with a strong foundation of how curriculum change should be planned and implemented to ensure that the content taught is both interesting and understandable to the learners.

General pedagogical knowledge

This relates to knowledge of strategies for managing student behaviours. Fullan (2003) argues that long years of service provides managers with a good knowledge of how students behave in a learning situation and with the skills of managing their behaviours during curriculum change when compared to the less experienced managers.

Curriculum knowledge

Curriculum knowledge relates to knowledge of the content of the school or national curriculum. According to Fullan (2003), extensive years of translating school and national curricula provides experienced academic middle managers with a stronger understanding of the curriculum as well as more effective skills of translating the curricula than would the less experienced managers.

Knowledge of educational context

This knowledge relates to how school and classroom work can be related to community and employment demands. Long years of service provides academic middle managers with an understanding of how to link classroom practice with community and labour expectations in terms of the development of skills in students so as to ensure that the graduates contribute productively to the improvements of their communities as well as to providing the much needed labour.

Knowledge of learners and their characteristics

Knowledge of learners and their characteristics relate to knowledge about who the students are and how to get them to learn. According to Fullan (2003), an experienced manager has an advantage over the less experienced manager in that he/she, through many years of working and interacting with students, is able to gain a comprehensive understanding of how students learn, how they behave, how they react to certain situations at school. It is this knowledge, acquired through all the years of interacting with students, that gives an experienced manager the ability to change the curriculum in a way that suits the needs and expectations of students.

Knowledge of educational aims, values, their philosophical and historical backgrounds

Fullan (2003) argues that years of experience in working with different curricula helps an experienced middle manager understand and appreciate the educational aims, values and philosophical and historical backgrounds of curricula better than a less experienced middle

manager. Fullan further argues that years of translating the educational aims into curricula action plans helps an experienced middle manager, to better understand the aims, values, philosophical and historical contexts of curricula and better plan and implement curriculum changes in ways that respect the values, as well as philosophical and historical contexts of the curriculum.

In a study by West (2000) on factors affecting the implementation of curriculum change in Business Education, the findings showed that there was a strong positive correlation between years of teaching experience and the ability of a manager to plan and implement curriculum and curriculum change. In another study carried out by Okolo (2001), findings showed that there was a significant influence of experience on managers' performance. Research by Eyike (2001) also shows that managers with more years of experience and better training were more effective in their management roles than those with less experience and training. Amanchi (1998) cited in Ibukun, Oyenole and Abe (2011) argues that higher levels of experience empower and motivate managers. The above is corroborated by Ibukun et al. (2011) who, in their study on the influence of experience on leadership effectiveness, found that more experienced managers perform better than less experienced managers. Mason, Aihara-Sasaki and Grace (2013) and Otanga and Mange (2014) also confirm the above assertion.

In the context of the current study, the influence of experience is important in the way AMMs manage and lead the planning and implementation of curriculum change. This assertion is based on the fact that literature has shown that curriculum change is a complex process that requires people with adequate knowledge and skills of engaging the process and such practical knowledge and skills more often than not come about as a result of experience.

Age

Age has been viewed as one of the biographical factors that exert an influence on the middle manager's perception and involvement in a change process despite there being a lot of contestation on its influence (Ibukun et al, 2011). Earlier studies such as the one conducted by Hitt and Tyler (1991) on the influence of age on manager performance, found that as people get older, they become less flexible, more rigid and more resistant to change than younger managers who tend to be more risk-oriented in their change decisions. According to Kurga (2014), age has no influence on how managers perceive and participate in a change process. In a study on the

role of age on leadership effectiveness, Glasscock (1991) findings showed that age did not have an influence on how managers lead a change process such as curriculum change.

A study carried out by Ibukun et al. (2011) found that age has a significant influence on leadership effectiveness especially during the process of change when they intimated that age significantly influences leadership effectiveness during a change process. Mason et al. (2013) also linked the age of managers to successful leadership of the change process. According to Otanga and Mange (2014), an individual's age significantly influences strategic decision making perspectives and choices during a period of change. In the context of the current study, the views which indicate that age has an influence on how managers engage in a change process are therefore, suggestive of the assumption that there are performance differences between AMMs of different ages during the planning and implementation of curriculum change.

Gender

There are mixed reactions to whether gender has an influence on how middle managers lead the process of change in higher education (Ibukun et al., 2011; Charness & Greezy, 2012; Eckel & Grossman, 2008). While some authorities feel gender has no influence, others view gender as one of the key influences of middle manager role in the change process (Smith, 2005). In a study conducted by Awofala et al (2012) on how male and female managers perceive change, results showed that there is no gender difference between how male and female managers perceive and participate in a change process. In their study on gender influences on leadership, Hemphill, Griffiths and Fredrickson (1992) found that men and women managers perform equally and these findings were also confirmed by other findings by Barter (2001). Kurga (2014) in his study further confirmed the above findings by his study which found that gender has no influence on managers' and teachers' perception towards change. Ibukun et al.'s (2011) findings on the impact of gender on management performance especially during the period of change showed that there was no significant difference in management performance between men and women.

Other studies also had different findings on the influence of gender in management performance. The study by Wiles, Hare, Grobman and Hiries (1996) found that men perform slightly better than women in their management of change especially with regards to ensuring more participation by subordinates. The above findings were also corroborated by Adigwu (2004) who

noted that men were slightly above women in the management of performance. In a study by the Institute of Leadership and Management (2011), results showed that 85% of female managers showed less confidence especially in situations where the managers perceived male managers to be better qualified to handle certain managerial matters. A study on gender differences on performance of managers by Kellerman and Rhode (2006) also showed that because male AMMs use more of masculine leadership styles, they are more effective in pushing forward their agendas than female AMMs who are more feminine in their approach.

Eagly (2003) in his study also found that female AMMs tended to have a low belief of their abilities than male AMMs during periods of change. In the same study it was further found that male AMMs tended to use equality with male counterparts as a demonstration of their opinion of while on the other hand male AMMs tended to demonstrate a high opinion of themselves by arguing that they are not equal but better than their female counterparts in terms of performance. This showed that male AMMs rated themselves higher while female AMMs use others as benchmark of their abilities which is a show of lack of confidence. That male managers are more confident than female managers during times of change is also confirmed by Bengtsson, Persson and Willenhag (2005). This according to Schumann (2011) is because female managers judge themselves more harshly and are more apologetic than male managers in situations where they feel they have caused harm to others by their actions. In the context of the planning and implementation of curriculum change, male AMMs are perceived as more forceful while female AMMs prefer a more feminine approach. This does not denote a limitation on the part of either gender as both approaches may be effective depending on the situation.

Table 2.2 summarises some of the gender differences between male and female managers especially when leading change.

Table 2. 1: Gender differences of managers

Female Managers	Male Managers
Less effective in competitive environments	More overconfident
Generally more risk-averse	More optimistic
Generally prefer to take risks in social situations rather than professional and other situations	React by action
Have higher social sensitivity	Are less people-based
React by feeling	Direct/command

(Adapted from Lighthall et al (2012: 15))

Table 2.2 shows striking differences in approach to the management of change between male and female AMMs. The summary shows that male AMMs are more authoritative, risk-oriented and action-oriented while female AMMs prefer a less aggressive, less risky and people-oriented approach to managing change.

A study by Lighthall et al. (2012) also showed that female AMMs are more risk averse than their male counterparts, when confronted with uncertainty. Whereas female managers are prone to show fear, male managers normally show anger in those situations (Grossman & Wood, 1993). The consequences of fear are diminished risk-taking behaviour while that of anger is increase in risk-taking behaviour (Lerner & Keltner, 2001; Lighthall et al., 2012). The above may also be the reason why some studies have also shown that 70% of female managers are afraid to be in a losing situation where they may have to show risk-taking behaviour no matter how minor (Ferh-Duda, de Gennaro & Schubert, 2006; Croson & Gneezy, 2009).

Research also shows that the leadership style of female managers gives them an advantage over their male counterparts. In their study on women and leadership, Mckinsey and Company (2009) found that female managers' leadership style that is typically people-based, role modeling focused and that shows clear expectations and rewards, helps them earn the confidence and trust of their subordinates, which is very critical during periods of change. In his study, Folkman

(2012) also found that female managers are more competent than male managers in practicing self-development, using transformational and collaborative leadership style as well as in driving results. A study on gender differences on leadership by Trinidad and Normore (2005) found that female AMMs tend to use transformative (motivating others by transforming their self-interest into goals of the team), empowering and collaborative leadership styles during a change process while male leaders tend to be directive and authoritarian. By using interactive team approach leadership styles that encourage participation, sharing of power and authority, female managers are viewed as being more effective in leading change than their male counterparts (Rosener, 1990; Bass, Avolio & Atwater, 1996). Literature shows that these characteristics of female managers help them to more effectively and successfully drive change in organisation than their male counterparts.

Literature, therefore, indicates that different AMMs prefer different approaches to implementing change depending on their gender. In the context of the current study, the above literature shows that female leaders prefer to plan and implement curriculum change in environments that are less competitive, less risky and using a team approach while male AMMs prefer to be robust and commanding in their approach.

Department size

Studies show that there is a significant positive association between the size of a department, information sharing and goal clarity (Nasser et al (2011). According to Young (2007), AMMs in larger departments tend to place importance on leading and managing people while AMMs in small departments place importance on actually doing academic work. According to Deem (2003a, 2003b), the size of a department influences how middle managers enact their role in curriculum change. A large department creates a burdensome workload for the AMM and in the end limits the chances of the AMM providing subordinates with the much needed professional support especially for effective involvement in a change process (Capella et al., 2009; Council for Higher Education (CHE) (2009); Wiersema and Bantel, 1992 cited in Mayer et al, 2011). Large department sizes limit the ability of the AMM to introduce more creative ways of leading curriculum change thereby affecting the planning and implementation of curriculum change (Organisation for Economic Co-operation and Development (OECD), 2010; Otanga and Mange, 2014).

2.13. Summary

Chapter two presented the theory that guides the study. Important issues discussed in this chapter was that curriculum change is a dynamic and on-going process and that the role of AMMs in the planning and implementation of curriculum change is difficult. Literature showed that the planning of curriculum change should be as effectively done as the implementation. Also a number of barriers that impact on curriculum change were identified and discussed as were the enablers of AMMs' role in curriculum change. The idea of role as understood by AMMs and also as defined and shaped by the environment in which the AMMs enact the role was discussed in detail. Chapter two also discussed the distributed leadership theory as the theoretical framework for the study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

Chapter two reviewed literature which showed that the role of academic middle managers is critical to the success of curriculum change in higher education institutions in general and in private higher education institutions in particular. Literature specifically showed that academic middle managers play the role of champions of curriculum change, synthesisers of curriculum change information, facilitators of curriculum change, as well as implementers of curriculum change. Literature reviewed also indicated that effective leadership by AMMs can significantly contribute to successful curriculum change in higher education institutions that include private higher education institutions. Chapter three seeks to explain and justify the research methodology used in this study.

As part of delineating the research process for this study, the following is discussed in chapter three in terms of how they contribute to the successful carrying out of the current study: research paradigm and paradigmatic assumptions underpinning the study, research approach, research design, population and sampling procedures employed, data collection instruments, issues of validity and reliability, data trustworthiness, data collection procedures, data analysis procedures and ethical considerations. Private higher education institutions were targeted for this study because preliminary research has shown that there is very little substantiated body of literature on the role of academic middle managers in curriculum change in private higher education institutions as well as because the role of academic middle managers in higher education in general and in PHEIs in particular has largely remained a grey area in educational research.

3.2. Research Paradigm

In any study, it is crucial that the researcher starts with a clear articulation of the paradigm that informs the research process since a paradigmatic stance has a direct influence on how the research will be carried out. In that regard, Mertens (2010) who opines that a research philosophy or paradigm has a direct influence on the decision about the nature of phenomena to be studied and the manner in which the study will be carried out. The term paradigm has its roots in the Greek word *paradeigma* which means a pattern that is used to denote a conceptual framework shared by a community of researchers (Gill, 2012). A research paradigm is defined as

an overarching philosophical or ideological stance, a system of beliefs about the nature of the world, and ultimately, the assumptive base from which we go about producing knowledge (Harrits, 2011; Rubin & Rubin, 2005). It is also defined as a planning framework for a research process that includes issues such as methodology, assumptions/hypothesis and models (Neuman, 2006; 2011).

Bogdan and Biklen (2007) also define a paradigm as a collection of logically related assumptions, concepts or propositions that orient thinking and research while Ticehurst and Veal (2002) also allude to the fact that a research paradigm provides guidelines and principles for the researcher to follow and Weaver and Olson (2007) view a paradigm as patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished. Literature further shows that a research paradigm has an impact on research methodology to be adopted in a study especially in terms of why one collects certain data, what data is to be collected, where data is to be collected, how data is to be collected, and how data is to be analysed (Collis & Hussey, 2003; Harrits, 2011).

There are basically three commonly used ontological paradigms in social science research namely the interpretivist, positivist, and the pragmatic paradigms (Harrits, 2011; Neuman, 2006). Literature shows that methodological choices made in research do not exist within a philosophical void but are driven by philosophical (ontological, epistemological, axiological and methodological) assumptions which constitute the research paradigm (Brannen, 2005). This assertion resonates well with the description of a paradigm given by Denzin and Lincoln (2008) which posits that a paradigm is the net set that contains the researcher's epistemological, ontological, axiological and methodological premises. In the context of social research, a researcher's paradigmatic position relates to his/her understanding of the nature of knowledge (epistemological standpoint), nature of reality (ontological standpoint), values that underpin the research (axiological stand point) and the process of carrying out the research (methodological standpoint) (Creswell, 2003). This research therefore, was located within the pragmatic paradigm, a philosophy that mediates between the positivist and interpretivist ontological paradigms.

Literature shows that the research process flows from the researcher's philosophical position (paradigm) to the research method or approach to be used for collecting, analysing and reporting data. If on one hand a researcher is guided by the positivist philosophy, he/she employs the quantitative approach that holds that there is one objective reality that is measurable. On the other hand, if the researcher is guided by the interpretivist philosophy, he/she employs the qualitative approach to data collection and analysis that holds that there are multiple realities out there and that through social construction, this knowledge can be determined. If also a researcher is guided by the pragmatic philosophy, he/she will employ the mixed methods approach that uses quantitative and qualitative tools for data collection and analysis in order to come out with a more global picture of the phenomenon under research.

Table 3.1 demonstrates how the different paradigmatic assumptions define the nature of knowledge and its purpose and how knowledge is determined when a research is guided by each of the paradigms namely: positivist, interpretivist and pragmatist.

Table 3.1: Philosophical Assumptions

Major research paradigms and their philosophical assumptions				
Assumption	Question	Positivism	Interpretivism	Pragmatism
Ontological stance	What is the nature of reality?	Reality is objective and singular	Reality is subjective and multiple, socially constructed and as seen by participants in the research	Reality can be singular or multiple as researchers can test hypotheses and also provide multiple perspectives
Epistemological stance	What is the relationship between researcher and the researched?	Objective: Researcher is independent from what is being researched	Interactive/subjective: researcher interacts with what is being researched	Practicality, i.e., researchers collecting data by <i>what works</i> to address the research question.
Methodological stance	What is the process of research?	Quantitative; Randomized controlled trials (RCTs);	Qualitative approaches	Combining, e.g., researchers collect both qualitative and quantitative data and mix them
Purpose	What is the purpose of research?	Prediction/control/Explanation Framing of general laws.	Understanding/ Reconstruction Transfer of findings.	Come out with knowledge that <i>works</i> .
Axiological stance	What is the role of values	Value-free	Value-laden, and biased	Multiple stances, e.g., researchers include both biased and unbiased perspectives.
Rhetoric	What is the language of research?	Formal, based on set definitions, impersonal voice, use of accepted quantitative words	Informal, evolving decisions, personal voice, use of accepted qualitative words	Formal and informal, e.g., researchers may employ both formal and informal styles of writing.

(Adapted from Creswell (2007: 17))

The above four paradigmatic assumptions that inform the research process are further explained below in detail.

Epistemology

Epistemology is defined as the study of the nature of knowledge (Stroud, 2011) and is the body of knowledge that enquires into the nature of knowledge and truth (Chilisa, 2012). It concerns itself with what is or should be considered as acceptable knowledge in a discipline (Bryman & Bell, 2011; Chilisa & Kawulich, 2012).

Ontology

Ontology is viewed as a body of knowledge that deals with the essential characteristics of what it means to exist and relates to whether the researcher believes that there is one verifiable reality or whether there exist multiple realities which are socially constructed (Chilisa, 2012). As a philosophical assumption, ontology addresses the question about what we believe about the nature of reality (whether realist or relativist) (Creswell, 2013; Creswell & Plano Clark, 2011; Mertens, 2010).

Axiology

Axiology refers to the analysis of values to better understand their meanings, characteristics, origin, acceptance as true, as well as their influence on people's daily experiences (Chilisa, 2012; Creswell, 2013). As a branch of philosophy, axiology deals with issues such as ethics and their role in the construction of knowledge (Guba & Lincoln, 2005).

Methodology

Methodology relates to the process of collecting, analysing data and reporting results (Chilisa, 2012). It includes the collection, analysis and reporting of either qualitative, quantitative data or both.

3.2.1. The positivist paradigm

Positivism as a philosophy or paradigm has its roots in logical positivist philosophy that is based on rigid rules of logic and measurement, truth, absolute principles and prediction (Ponterotto, Mathew & Roughly, 2013; Saunders, Lewis & Thornhill, 2012; Weaver & Olson, 2007). It is a

philosophical position or approach that holds that the scientific method is the only way of establishing truth and objective reality (Chilisa, 2012; Creswell & Plano, 2011) and is premised on the view that natural science is the only foundation for true knowledge. It holds that the methods, techniques and procedures used in natural sciences offer the best framework for investigating the social world (Chilisa, 2012; Creswell & Plano Clark, 2011).

The above is also confirmed by Henning, van Rensburg and Smit (2004) who assert that the positivist paradigm gives a description and explanation of features of reality by collecting data on observable behaviours of the sample and using numerical data analysis leading to an objectivist, empirical and quantitative research approach. Positivism justifies the choice of methods and techniques of data collection and analysis by asserting that the world operates on fixed natural laws that can only be discovered through observation and reason and that these fixed laws can be tested and measured quantitatively with verifiable results verifiable (Chilisa, 2012). The positivist paradigm holds the following philosophical assumptions namely ontological, epistemological, axiological, methodological assumptions and purpose with regards to the nature of knowledge.

The positivist paradigm adopts an *ontological position* that asserts that there exists an objective reality out there in the world (a realist ontology) and posits that by using numerical analysis and facts, we can discover this reality (Neuman, 2011). Positivism is a philosophy that is concerned with uncovering objective truth and presenting it by empirical means (Henning, Van Rensburg & Smit, 2004). According to Chilisa (2012), with regards to the nature of knowledge, positivists argue that there is a single, tangible reality that is relatively constant across time and settings and that the researcher's duty is to discover this objective reality. The ontological stance of positivism in research is further extended by the fact that it assumes that knowledge is independent of the researcher's interest in it and that this reality is measurable and can be broken into variables (Mertens, 2010).

Positivism holds the *epistemological position* that knowledge relates to statements of belief or fact that can be tested empirically, confirmed and verified or disconfirmed, that are stable and can be generalised (Chilisa, 2012). It further assumes that knowledge is the hard data that is objective and independent of values, interests and feelings of the researcher (Chilisa, 2012;

Creswell & Plano, 2011) and hence proposes that an objective researcher needs the right data-gathering tools (methods and techniques) to be able to come out with absolute truth for a given inquiry (Chilisa, 2012; Creswell, 2009; Stroud, 2011). In terms of how data is collected, positivism holds the epistemological position that designs such as experimental, causal, quasi-experimental, correlational, comparative and survey can be used, and techniques such as questionnaire, observations, tests and experiments can also be employed to collect data (Chilisa, 2012; Creswell, 2007; Creswell & Plano Clark, 2011).

Positivism adopts an *axiological position* that all researches should be value-free for them to be objective. To be able to do this, it asserts that researchers should employ scientific methods of gathering data to achieve objectivity and neutrality during the research process. The above ensures that the results of what is studied are not influenced in any way (Chilisa, 2012; Creswell & Plano Clark, 2011).

According to the positivists, since the purpose of research is to predict, test theory and to find the strength of relationships between variables or to determine a cause-effect relationship, positivism holds the *methodological position* that a deductive approach should be used where the researcher begins with ideas, theories or concepts that are operationally defined to point out the variables in the study (Chilisa, 2012; Cohen, Manion & Morrison, 2007; Creswell, 2007; Creswell & Plano Clark, 2011). By operationally defining variables, the research is able in the end to be replicated, verified and confirmed by different researchers (Chilisa, 2012; Creswell & Plano Clark, 2011).

The positivist paradigm also holds that the major *purpose* of quantitative research is to explain how things happen in order to predict what comes next and to be in a position to control the situation as well as to derive generalizations from the examination of the specific (Flick, 2002).

3.2.2. Interpretivist/constructivist paradigm

Interpretivism as a paradigm focuses on a holistic perspective of the person and environment during inquiry and is associated with methodological approaches that provide an opportunity for the voice, concerns and practices of research participants to be heard (Ponterotto, Mathew & Raughley, 2013; Weaver & Olson, 2006). The interpretivist paradigm guides the researcher into discovering meanings and interpretations of phenomena by studying cases intensively in a

natural setup and applying the resultant data for analytic induction (Henning, van Rensburg & Smit, 2004).

Literature shows that the interpretivist paradigm differs from the positivist paradigm on the nature of reality, what counts as knowledge, its sources, the values the knowledge sources hold as well as their role in the research process (Chilisa, 2012). Interpretivism assumes a phenomenological perspective that asserts that truth or reality lies within the human experience and is therefore multiple and bound by time, space and context (Chilisa, 2012; Creswell & Plano Clark, 2011; Creswell, 2013). It is a paradigm that also holds distinct philosophical assumptions about knowledge: ontological, epistemological, axiological and methodological assumptions as well as the purpose of the research.

The interpretivist paradigm adopts an *ontological position* that assumes that reality is socially constructed and arises out of social interaction hence it is subjective and anti-positivist, and leads to qualitative research (Denzin & Lincoln, 2003; 2005; Creswell, 2009; Creswell & Plano Clark, 2011; Mertens, 2010). According to Myers (2009) the premise of interpretive research is that access to reality (whether given or socially constructed) is only through social constructions such as language, consciousness and shared meanings. Interpretivism believes that reality is socially constructed (Creswell & Plano Clark, 2011; Creswell, 2009; Mertens, 2010) and that there are as many intangible realities as there are people constructing them (Chilisa, 2012). Interpretivism also holds that reality is mind-dependent and hence a personal and social construct (Chilisa, 2012; Creswell, 2009).

Interpretivism holds an *epistemological position* that assumes that knowledge or reality is subjective because it is socially constructed and mind-dependent (Chilisa, 2012; Creswell & Plano Clark, 2011). It further argues that truth is part of human experience and hence what is true or false is therefore, culture bound, historical and context dependent, and hence subjective although some may be universal (Chilisa, 2012; Creswell & Plano Clark, 2011; Mertens, 2010). Reeves and Hedberg (2003) also note that the interpretivist paradigm stresses the need to put analysis of reality in context since interpretivism is concerned with understanding the world from subjective experiences of individuals. Myers (2009) further asserts that the interpretivist paradigm uses meaning (versus measurement) oriented methodologies, such as interviewing or

participant observation, and relies on a subjective relationship between the researcher and subjects.

By asserting that knowledge is subjective and reality is mind-dependent, and socially constructed, (Chilisa, 2012), the interpretivist paradigm holds an *axiological position* that social inquiry is value bound and value laden (Chilisa, 2012; Cohen, Manion & Morrison, 2007; Creswell, 2009; Creswell & Plano Clark, 2011). The above assumption means that research is inevitably influenced by the researcher's values. These values also inform the paradigm chosen for inquiry, the choice of issue, data collection and analysis methods, methods of interpreting findings, and the way the findings are reported (Chilisa, 2012; Creswell & Plano Clark, 2011). Interpretivism also holds a *methodological assumption* that since knowledge is socially constructed, the inductive method of research should be used to understand people's experiences (Chilisa, 2012). As a result, the research should take place in a natural setting where the participants are found (Chilisa, 2012; Creswell, 2009).

The major *purpose* of qualitative research according to the interpretivist paradigm is transfer of findings based on contextual applicability (De Lisley, 2011). Transferability is viewed as depending on the similarity between the sending and receiving contexts hence the researcher needs to collect sufficient detailed descriptions of data in context and report them with sufficient detail and precision (Fetters, Curry & Creswell, 2013).

3.2.3. Pragmatic paradigm

The origin of pragmatism lies in the ideas of scholars such as John Dewey, Richard Rorty and Donald Davidson who believed that truth is *what works best* for understanding a particular research problem (Maxcy, 2003; Patton, 2002; Teddlie & Tashakkori, 2009). It is a philosophy that emerged in the second half of the nineteenth century (1860-1930 period) in the United States of America (Hammersley, 2012) which was then as now, referred to as a bridge between paradigm and methodology or as Green and Caracelli (2003) put it, as a stance at the interface between philosophy and methodology that offers a practical approach to solving a problem. Pragmatism is defined as a philosophy that allows the researcher to study what is of interest and of value in ways he/she deems appropriate and to use the results in ways that can bring about positive consequences within the values system (Teddlie & Tashakkori, 2009). As a philosophy,

pragmatism has been hailed as the foundation of mixed methods research and, depending on the nature of research, can be adopted to yield better research outcomes than any known research philosophy (Pansiri, 2005).

The relevance of pragmatism in research has been exemplified by the fact that right from the early years, much of research was driven by pragmatic (technical) assumptions as much as by philosophical assumptions, showing that sound methodological practice is based on choosing the method appropriate to the research question (Creswell, 2007; Mason, 2002). Pragmatism is an attitude, a method and a philosophy that uses practical consequences of ideas and beliefs as a standard for determining their value and truth (Creswell & Plano Clark, 2011).

The whole idea of pragmatism has been to find a middle ground between philosophical dogmatism and skepticism and to find a workable solution (and sometimes outright rejection) to many longstanding philosophical dualisms between positivism and interpretivism (Johnson & Onwuegbuzie, 2004). The pragmatic paradigm was viewed as the best paradigm for mixed methods research (Tashakkori & Teddlie, 2010) or a philosophical partner for mixed methods research (Descombe, 2008) which accepts the perspective that quantitative and qualitative methods are compatible (Creswell, 2007). Pragmatism rejects the subjectivism versus objectivism dualism in preference for more moderate and commonsense versions of philosophical dualisms based on how well they work in solving problems (Johnson & Onwuegbuzie, 2004). As a result pragmatism considers the research question as being more important than either the research method or the world view that is supposed to underlie the method (Lofgreen, 2006).

Pragmatism argues that regardless of circumstances, both quantitative and qualitative methods may be used to complement each other in a single study (Tashakkori & Teddlie, 2010b). Such mixing of methods provides completeness, adequacy and solidity to the research findings (Johnson, Onwuegbuzie & Turner, 2007; Tashakkori & Creswell, 2007).

As a philosophy, pragmatism views knowledge as both socially constructed and based on either reality of the world we experience or reality of the world we live in and endorses fallibilism (a view that current beliefs and research conclusions are rarely, if ever, viewed as perfect, certain

and absolute) (Johnson & Onwuegbuzie, 2004). It is also a philosophy that endorses eclecticism and pluralism, that is, it argues that different or even conflicting theories and perspectives can be useful and that different ways of gaining an understanding of people and the world are important (Creswell, 2007). Furthermore, pragmatism views truth, meaning and knowledge as tentative and as changing over time. It argues that what we obtain on a daily basis in research should be viewed as provisional truth that works at that time and that needs to be refined according to changes in the conditions of our daily lives (Creswell, 2007; Johnson & Onwuegbuzie, 2004).

By accepting the compatibility between quantitative and qualitative methods, pragmatism as a philosophy provides a number of claims about the nature and purpose of reality and knowledge (Creswell & Plano Clark, 2011; Creswell, 2013). First, it claims that in a study, individual researchers have the freedom of choice to choose the methods, techniques and procedures of research that best meet their needs and purposes. It allows the researcher to work with participants from either an objective and/or subjective point of view. Second, it claims that reality can be viewed from two perspectives, that is, reality as being consistent with the positivist and post-positivist view of reality that argues that reality is situated outside the human mind and can be observed, measured and understood; and the interpretivist reality that posits that there is no one truth but that there are multiple truths (Bazeley, 2003; Green & Caracelli, 2003; Johnson & Onwuegbuzie, 2004; Patton, 2002; Tashakkori & Teddlie, 2010; Teddlie & Tashakkori, 2009). Third, it claims that truth is what *works* at the time and is not based on a strict dualism between the mind and a reality completely independent of the mind, a claim which resonates well with mixed methods research procedures.

The above draws attention to the fact that a researcher uses both quantitative and qualitative data to provide the best understanding of a research problem. Fourthly, pragmatism claims that researchers look at the *what* and *how* of the research based on its intended consequences, that is, at the outcome they want to get with the research. This also resonates well with what mixed methods researchers wish to do, that is, establishing a purpose for their mixing. Fourth and last, pragmatism claims that that research occurs in social, historical, political and other contexts and hence concentrating on what *works* during research is better and more productive than asking theoretical questions about reality and the laws of nature that govern this reality.

The importance and popularity of pragmatism as a philosophy in research is evident in that there have been a number of successful research studies that have applied this paradigm before. A number of authorities in mixed methods research and in the application of the pragmatic paradigm assert that the increased and successful application of the pragmatic paradigm in research has been noted in: law (Posner, 2003), social theory (Baert, 2004), philosophy (Kloppenber, 1996), medical ethics (Hester, 2003), education (Biesta, 2007), and public administration (Shields, 2003).

3.2.4. Justification for the pragmatic paradigm in the current study

Pragmatism as a philosophy was selected as a suitable paradigm for the current study on several grounds. First, the basic insight that motivates the use of pragmatism as the overarching research philosophy for this study was that pragmatism allows a theory to be interpreted both as a theory about some particular existing practice and also as a theory that generates implications for reform of that practice (van Aken, 2005). In the context of the current study, the main aim of the study was to gain an understanding of the practices of AMMs in the planning and implementation of curriculum change so as to be able to generate theory not for theory's sake but to improve how AMMs plan and implement curriculum change in PHEIs. Pragmatism allows the researcher to examine the prevailing practices in a critical way with the aim not being simply to describe the nature of practices, but to determine how best the practices can be improved.

Second, since the pragmatic paradigm is a practical outcome-oriented philosophy of inquiry that seeks to determine what works, the use of two methods so that one method (qualitative) further explains and clarifies quantitative results helped the researcher to delve deeper into the practices regarding how exactly, in their different and unique settings, AMMs planned and implemented curriculum change in PHEIs. This enriched and gave credibility to results and the elimination of doubt on the results on how AMMs drive curriculum change in PHEIs.

The choice of the pragmatic paradigm for this study is further supported by the fact that it is a paradigm that allows for flexibility in the selection of methods to help the researcher to better and more fully respond to the research question on the role of AMMs in the planning and implementation of curriculum change. The pragmatic paradigm therefore allowed the investigation of the perceived problems without undue methodological constraints as any of the

possible research tools could be used to address the research problem in a more comprehensive and complete manner. Pragmatism helped the researcher to take a more global and complete approach to answering the research question on the role of AMMs in the planning and implementation of curriculum change than would the use of either the positivist or interpretivist philosophies.

3.3. Research Approach

A research approach is defined as a plan or procedure for research that spans the steps from broad assumptions to detailed methods of data collection, analysis and interpretation (Creswell, 2007; 2012). A research approach is also defined as a way of collecting and analysing data, developing and modifying theory, elaborating or refocusing the research question and identifying and dealing with threats to validity and reliability during the research (Corbetta, 2003; Thomas, 2003). From the above definitions, a research approach can be viewed as a procedure that involves several decisions such as which research methods, data collection and analysis techniques to use.

There are three main approaches to research that are commonly used namely: quantitative research, qualitative research, and the mixed methods (Alzheimer-Europe, 2009; Creswell, 2007). Research approaches are directly related to the philosophical stance taken, research design to be used, and the research methods to be used, see Figure 3.1.

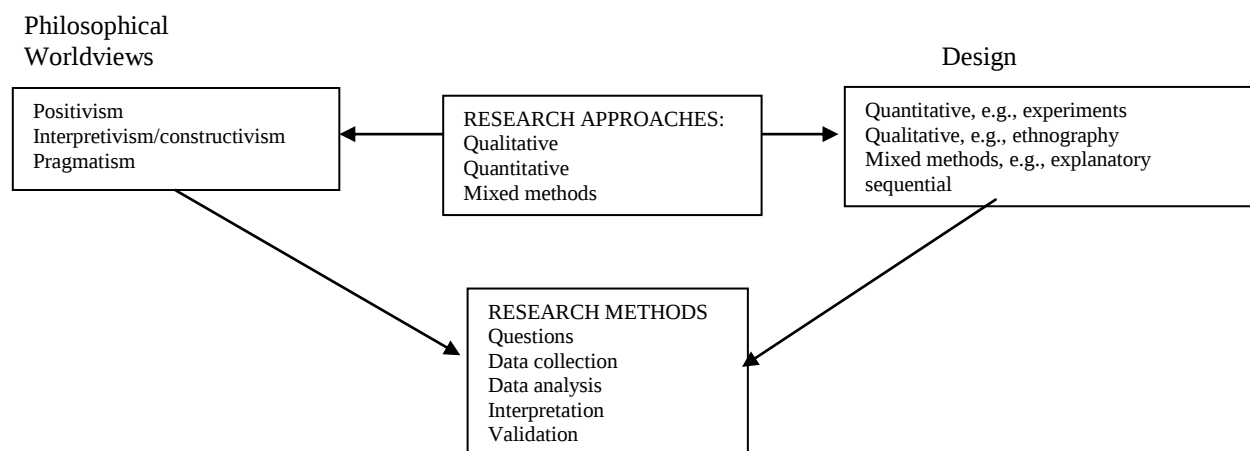


Figure 3.1: The interconnection of worldviews, research design and methods (Creswell, 2007: 5)

3.3.1. Quantitative approach

The quantitative (QUAN) research approach refers to the investigation of phenomena using statistical, mathematical or computational techniques (Cortey, 2013; Zandvamar & Daryapoor, 2013). It is also defined as an approach in which the researcher works from either a positivist or postpositivist perspective (Tashakkori & Teddlie, 2010) and describes relationships among variables statistically, presenting a numerical analysis of the social relations under study (Chege, 2011; Creswell, 2007, 2009). Research conducted under this approach is viewed as value-free, hypothesis-driven and measurable. Results collected are viewed as generalisable to a larger population (Creswell, 2007). It is an approach that employs deductive reasoning to find causes that precede or occur at the same time as effects (Creswell, 2012; Tashakkori & Teddlie, 2010) and uses strategies of inquiry such as experiments and surveys to collect data using pre-determined instruments that yield statistical data (Creswell, 2010; Creswell & Plano, 2011). The main purpose of the quantitative approach is to identify themes and patterns that are potentially exclusive to the study (Cortey, 2013; Denzin & Lincoln, 2005; Miller & Gatta, 2006; Tashakkori, 2006; Yin, 2006).

Overall, according to Johnson, Onwuegbuzie and Turner (2007), the quantitative approach is characterised by several features. First, it is used often for deductive research when the goal of the research is to test theories or hypotheses, gather descriptive data or examine relationships among variables. Second, it is used when variables are to be measured to produce numerical data that can be analysed statistically. Third, it has potential to provide measurable evidence to help establish (probable) cause and effect, to yield efficient data collection procedures, to create the possibility of replication and generalization to a population, to facilitate the comparison of groups and to provide insight into the breadth of experiences. Fourth, the researcher's epistemology assumes that there exists one objective reality and that this reality can be observed and measured numerically and that *facts* are independent of an individual's subjective experience and values.

3.3.2. Qualitative approach

The qualitative (QUAL) approach refers to an inductive, holistic, emic, subjective and process-oriented method for understanding, interpreting, describing and developing a theory on phenomena or setting (Burns & Grove, 2003; 2007). This research approach also called the

naturalistic approach, is systematic, subjective and is characterised by intense study, description of events and interpretation of meanings (Chege, 2011) in its attempt to understand phenomena in context-specific settings (Cortey, 2013; Morris & Burkett, 2011). Researchers using this approach work from a constructivist/interpretivist perspective which supports the notion that there are many realities that are socially constructed as the researcher engages with participants (Tashakkori & Teddlie, 2010; Zandvamaru & Daryapoor, 2013).

The qualitative approach is inductive (bottom-up) and uses interviews, observations, case studies, video and audio tapes as instruments for data collection (Cortey, 2013). The main purpose of the qualitative approach is to examine and interpret social and human experiences. The above assertion is confirmed by Dunlop (2013) who posits that the qualitative approach seeks to understand human experiences, perceptions, motivations, intentions and behaviour by employing interactive, inductive, flexible and reflexive methods of data collection, analysis and interpretation.

According to Ticehurst and Veal (2000), the qualitative approach is interpretivist as the researcher's main task is to explain how people create meaning in socially constructed situations. Mason (2002) identifies some characteristics of the qualitative approach: The qualitative approach is grounded in an interpretivist position, that is, it is concerned with how the phenomena of interest are interpreted, understood, experienced, produced and constituted. This approach is also based on research methods which are flexible and sensitive to social contexts. The above characterisation is also extended by Johnson, Onwuegbuzie and Turner (2007) who argue that among the characteristics of qualitative research are the following.

It is an approach that focuses on the contexts and meanings of human lives and experiences for the purpose of inductive. The qualitative approach is also a systematic and rigorous form of inquiry that uses in-depth methods of data collection and analysis. It helps the researcher understand processes, especially those that emerge over time, provides detailed information about the setting or context, and emphasises the voices of participants through quotes. It is viewed as an approach that facilitates the collection of data when measures cannot provide in-depth understanding of the phenomenon under research; and finally when using this approach, a

researcher's epistemology assumes multiple realities that consist of meanings produced or constructed by individuals within their *natural* settings.

3.3.3. Mixed Methods approach

This study will employ a mixed method research approach that uses both the qualitative and quantitative research methods. By utilising both qualitative and quantitative approaches to research, the mixed methods approach allows for greater flexibility in the methods used than either approach used alone (Bogdan & Biklen, 2007; Morgan, 2006; Myers, 2009; Neuman, 2011; Teddlie & Tashakkori, 2006). Attention in research literature is also further drawn to the fact that the deployment of a combination of research techniques and approaches results in a stronger research position as each approach will complement the other (Creswell, 2009). According to Neuman (2011), the mixed method approach overcomes the dichotomy between the qualitative and quantitative research approaches as each of the two approaches (qualitative and quantitative) offers a unique perspective and style which when combined, enrich the study. Combining both the qualitative and quantitative research methods into the mixed method approach is also viewed as key to enhancing the validity of a research (Leech & Onwuegbuzie, 2009). Use of the mixed method approach also allows the researcher to gain a deeper and broader understanding of the research phenomenon as well as improve the research output quality (Green, 2007).

3.3.3.1. Definition of mixed methods research

While the definition of mixed methods research remains contested, a number of scholars have attempted to define mixed methods research using their own unique understanding of the concept (Cameron & Molina-Azorin, 2011). In early years, mixed methods was referred to by an array of names from multi-method, integrated, hybrid, combined to mixed methods (Creswell & Plano Clark, 2011; Driscoll et al, 2007). Some of probably the most common and current definitions of mixed methods research are presented. Mixed methods is defined as a class of research methods where the researcher combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study (Borrego, Douglas & Amelink, 2009). Mixed methods research is also defined as an approach in which the researcher uses the quantitative research approach for one phase of the research and a qualitative research approach

for another in order to understand and answer a research problem more completely (Creswell, 2005).

Creswell and Plano (2011) provide a more comprehensive definition of mixed methods research by defining it as an approach with philosophical assumptions as well as methods of inquiry, and which as a methodology, involves assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study or series of studies. The above definitions observe that mixed methods research relates to the mixing of two approaches namely qualitative and quantitative for the purpose of providing a better understanding of research problems than either would (Hall, 2012; Johnson & Onwuegbuzie, 2007; Teddlie & Tashakkori, 2010). By allowing quantitative and qualitative approaches to complement each other, the above definitions also show that mixed methods can be used as an approach to enrich research findings.

3.3.3.2. Strengths of mixed methods research

Connelly (2009), Tashakkori and Teddlie (2010) as well as Creswell and Plano (2011) highlight strengths and weaknesses of the mixed methods approach and by combining both the qualitative and quantitative approaches, the mixed methods approach ensures that weaknesses in one method can be compensated for by the strengths in the other. As an example, the shortcomings of the quantitative approach which include the fact that it is a highly structured approach that imposes pre-arranged limits and boundaries to knowledge, which makes it very difficult to capture the complex interplay of phenomena in a single research, are compensated for by the qualitative results which provide clear and vivid descriptions and meanings of the interplay of phenomena in a social setting.

Another advantage includes the fact that the mixed methods approach can triangulate or cross-examine results by using different research methods to produce the same result.

3.3.3.3. Weaknesses of mixed methods research

The mixed methods approach has a number of weaknesses (Cortey, 2013; Creswell & Plano, 2011; Tashakkori & Teddlie, 2010). First it is time consuming and labour intensive as the use of two or more approaches requires time to be effectively and successfully carried. To deal with this

weakness, the researcher allocated adequate time to the use of the approach in the following manner: design of the structured questionnaire and semi-structured interview was allocated one month, approval of the instruments by the supervisor was allocated two weeks, pilot testing of questionnaire was allocated one month, data collection using the two instruments was allocated three months, analysis of results from the two instruments was allocated three months, and interpretation of results was also allocated two months. Second, it is an approach that requires the researcher to be adequately schooled in both quantitative and qualitative methods. To enhance further the knowledge and skill of using the mixed methods approach, the researcher participated in an intensive one week research workshop facilitated by research professors from the University of Venda. It requires the researcher to have a working knowledge of and experience in both qualitative and quantitative research. Literature shows that interpreting results in mixed methods is not an easy exercise especially for the novice researchers (Teddlie & Tashakkori, 2009). Lastly, mixed methods research is expensive as it requires more of financial and material resources. To deal with this weakness, the researcher got sponsorship from the university where he is working.

3.3.3.4. Justification for selecting mixed methods approach in current study

The mixed methods approach was selected for this study for various reasons. It is an approach which applies deduction (testing of theories and hypothesis), induction (discovery of patterns) and abduction (uncovering and relying on the best of a set of explanations for understanding one's results) all at the same time to present a complete and enriching package of research results in one study (Johnson & Onwuegbuzie, 2004). As an example, in the context of this study, deduction was used to test the veracity of a number of hypotheses proposed with regards to the ability of AMMs to plan and implement curriculum change. Induction was used to discover patterns in the way AMMs in the different PHEIs plan and implement curriculum change while abduction was employed to provide explanations and boost understanding of the role of AMMs in the planning and implementation of curriculum change in PHEIs.

Another reason that motivated the selection of mixed methods as the approach for the current study is that it allowed the researcher to collect multiple sets of data on the role of AMMs in the planning and implementation of curriculum change using different research methods, epistemologies and approaches in a way that enriched the study. The idea of complementary

strengths helps to improve the quality of research results (Fetters et al., 2013; Johnson & Turner, 2003) on how exactly AMMs plan and implement curriculum change and also on the nature of challenges the AMMs face in doing so.

The mixed methods research was also selected as most appropriate for the current study as it allowed the researcher to employ different methods for different purposes without being constrained or tied down by the use of only one method of research. As an example in the current research, the researcher used the quantitative method to get a global view of the role AMMs play in the planning and implementation of curriculum change from a large sample. The researcher also employed the qualitative method to delve deeper into how and why the AMMs planned and implemented curriculum change the way they do in PHEIs. The above approach to mixing methods is seen by Tashakkori and Teddlie (2006) as enriching when they argue that since quantitative research tells us about the *if* and qualitative research tells us about the *how* or *why*, by combining the two methods the researcher enriches the quality of the study.

The researcher used the mixed methods approach to explain and expand further on quantitative results using qualitative results thereby enriching the findings. By using qualitative data in the mixed methods approach, the researcher was also able to come up with detailed descriptions of how AMMs planned and implemented curriculum change enabling the development of a model that to be used to enhance the planning and implementation of curriculum change by AMMs in PHEIs. The mixed methods research also provided the researcher with the flexibility to choose which method was most appropriate for the study in line with the goals of the study and at which point of the research process. As an example, the main goal of the current research was to examine the role academic middle managers played in the planning and implementation of curriculum change in PHEIs. The researcher, through the flexibility offered by the mixed methods approach used words and narratives from the qualitative phase of the research to add meaning to numbers from the quantitative phase of the research (Hesse-Biber, 2010). Lastly, the mixed methods approach was also used in the current study as an aid to sampling as the structured questionnaire results were used to screen potential participants for inclusion in the qualitative phase of the study.

3.4. Research design

A research design has been defined in different ways by different scholars and researchers demonstrating the multidimensionality of the concept. Among such definitions is that it is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process (Polit & Beck, 2012; Shuttleworth, 2008). A research design is also defined as a broad plan that specifies the methods and procedures for collecting and analysing the needed information (Kalian, 2011). A research design is also viewed as a blueprint or detailed plan of how a research is conducted starting from the formulation of the research questions and hypotheses to the reporting of research findings (Caruth, 2012; Cortey, 2013; Fink, 2009).

There are three commonly used non-experimental mixed methods designs in social research namely the explanatory sequential design, exploratory sequential design and the concurrent triangulation (parallel) design (Cortey, 2013; Creswell & Plano, 2007, 2011; Tashakkori & Teddlie, 2006) as summarised in Table 7. These designs, also referred to as descriptive designs, aim to answer research questions about the current state of affairs in a situation, provide factors and relationships among factors, and to create a detailed quantitative or qualitative description of phenomenon (Kalaian, 2011). Non-experimental research designs also provide a snapshot of the feelings, opinions, practices, thoughts, preferences, attitudes and behaviours of a sample of subjects as they exist at a given time and place (Kalaian, 2011).

Table 3.2 shows that different designs have different timings in terms of how the quantitative and qualitative phases of the research are implemented. Furthermore, it shows that weighting of the phases could either be equal or could be given to either while integration of both qualitative and quantitative data could be done at either analysis or interpretation stages.

Table 3.2: Mixed Methods Designs

Design Type	Timing of QUAN and QUAL phases	Relative weight of QUAL and QUAN components	Mixing: When QUAL and QUAN phases are integrated	Notation
Triangulation (parallel) design	Concurrent	Equal	During interpretation or analysis	QUAN + QUAL
Explanatory	Sequential: QUAN then QUAL	Usually QUAN is given priority	Phase 1 informs phase 2	QUAN $\rightarrow$ QUAL
Exploratory	Sequential: QUAL THEN QUAN	Usually QUAN is given priority	Phase 1 informs phase 2	QUAL $\rightarrow$ QUAN

(Adapted from Creswell & Plano Clark, 2007: 179)

3.4.1. Concurrent (parallel) Triangulation design

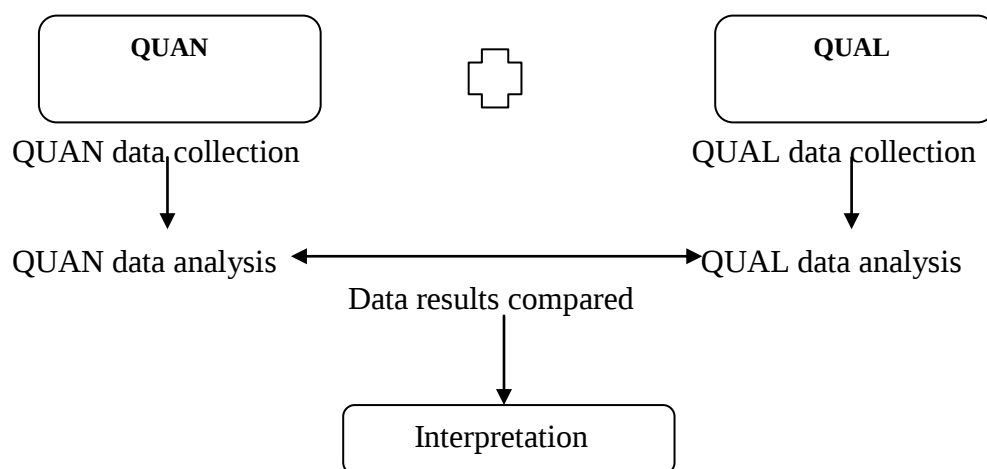


Figure 3.2: Concurrent Triangulation (Creswell & Plano, 2007: 181)

This study employed the concurrent triangulation mixed research design as shown in Figure 3.2. The concurrent triangulation design involves collecting QUAN and QUAL data concurrently (Creswell, 2009; 2012; Tashakkori & Teddlie, 2006; Terrell, 2012). In this design, no phase between QUAN and QUAL is prioritised over the other as priority can be given to either phase (Creswell, 2009). Data can be integrated during either the analysis or the interpretation phases, with the interpretation taking note of either a lack or presence of convergence that either weakens or strengthens knowledge claims (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2006). Dunlop (2013) also argues that the concurrent triangulation design is meant to investigate whether respondents give similar responses on both quantitative and qualitative methods. The primary purpose of the concurrent triangulation design is confirmation,

corroboration or cross-validation within a single study (Tashakkori & Teddlie, 2006; Terrell, 2012).

According to Johnson and Onwuegbuzie (2004), the strengths of the concurrent triangulation design are multifaceted. First it is a research design familiar to many researchers and being familiar, it can easily be used by even beginning researchers. Second it that requires a shorter data collection time when compared to the sequential designs since the two phases of data collection and analysis are done concurrently. Lastly the triangulation design offsets the weaknesses inherent in one approach by using the strengths inherent in the other.

The major weaknesses of the concurrent triangulation design which was observed was that it required a great deal of expertise and effort to study the phenomenon under consideration using two different approaches at the same time as the researcher will need to have adequate knowledge of both approaches. This weakness was resolved through the allocation of adequate time of twelve months from instrument preparation to interpretation of data as well as enhancing research skills through attendance of workshop, presentation in conferences and publishing of articles based on the different mixed methods designs.

3.4.1.1. Integration of QUAL-QUAL data in concurrent triangulation design

The integration of the two sets of data can occur at several stages in the research process (Creswell, 2010). As an example, the integration can occur during data collection, data analysis, data interpretation or in some combination of these strategies (Creswell, 2010). In the current study, the integration of QUAN and QUAL data occurred at the data analysis stage. Integration of data at analysis stage in this study involved analysing QUAN and QUAL data simultaneously to check how the two data sets converge or diverge in terms of the following research constructs that both data sets will be seeking to describe, that is, the planning and implementation of curriculum change by AMMs, barriers to effective curriculum change, enablers of successful curriculum change, and the role of AMM leadership in curriculum change.

3.4.2. Justification for using the concurrent triangulation design

The concurrent triangulation design is perhaps one of the most popular designs in social sciences to date. In the context of the current study, the concurrent triangulation design was selected on

the basis of diverse reasons. It uses separate quantitative and qualitative methods in a single-phase study as a means of offsetting the weaknesses inherent within one method with strengths inherent in the other method resulting in well-validated and substantiated findings (Creswell, 2007, 2011). In the context of this study, concurrent triangulation design ensures that the weaknesses of using the structured questionnaire in collecting data about the role of the AMMs in the planning and implementation of curriculum change in PHEIs are offset by the strengths of the semi-structured interviews and vice versa.

The design therefore, ensures the collection of a richer pool of valid data with regards to the role of AMMs in the planning and implementation of curriculum change in PHEIs. Secondly when using the concurrent triangulation design, interpretation of findings can either note the convergence of the findings as a means of strengthening the knowledge claims of the study or also explain the lack of convergence of findings as a means of facilitating feature research (Creswell & Plano Clark, 2007). In the context of this study integration of findings was done during data analysis and areas of convergence of findings were noted with regards to how AMMs planned and implemented curriculum change in PHEIs. It was noted during the analysis that there was convergence between quantitative data and qualitative data. Integrating data at analysis stage made the interpretation phase richer as the interpretation was based on the already noted convergence of the two sets of data. Thirdly by ensuring the collection of data in a one-phase process, it results in a shorter data collection period when compared to the other mixed methods designs. This leaves enough time for the researcher to adequately concentrate on the next phase of the research after the data collection.

3.4.3. Exploratory sequential design (QUAL → QUAN)

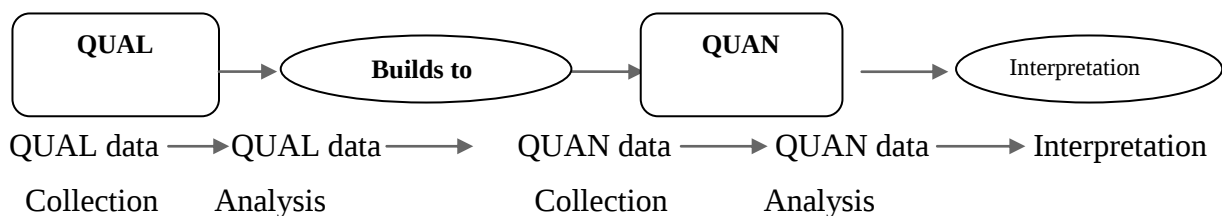


Figure 3.3: Exploratory Sequential Design (Creswell & Plano, 2007: 180)

The exploratory sequential design shown on Figure 3.3 symbolises a qualitative dominant mixed methods research (Johnson & Onwuegbuzie, 2004). It is a type of mixed method design in which the researcher relies on a qualitative, constructivist-poststructuralist-critical view of the research process while at the same time recognising that the addition of quantitative data and approaches is likely to benefit the research (Creswell, 2010; Creswell & Plano, 2011; Johnson & Onwuegbuzie, 2004). In the exploratory sequential design, the collection and analysis of qualitative data is immediately followed by the collection and analysis of quantitative data. While equal priority is given to the two phases, it can also be given to either (Tashakkori & Teddlie, 2006). Data are integrated during interpretation. Tashakkori and Teddlie (2006) assert that the main purpose of the exploratory sequential design is to explore potential patterns with a qualitative method and then verify the patterns with a quantitative method.

The strength of the exploratory sequential design lies in it being relatively straight forward due to its clear, distinct stages (Creswell, 2010; Tashakkori & Teddlie, 2006). The weakness of the exploratory sequential design lies in it being time consuming especially when both phases are given equal consideration and priority (Tashakkori & Teddlie, 2006).

3.4.4. Explanatory sequential design (QUAN → QUAL)

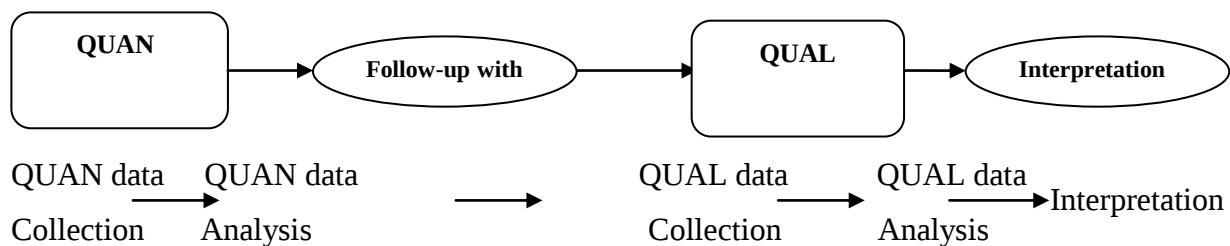


Figure 3.4 : Explanatory Sequential Design (Creswell & Plano Clark, 2007: 180)

The explanatory sequential design as shown in Figure 3.4 is implemented in two distinct interactive phases, just like the exploratory sequential design. It is a design that is quantitative dominant and that relies on a quantitative, post-positivist view of the research process while at the same time recognising that the addition of qualitative data and approaches is likely to benefit the research (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2006). The first phase starts with the collection and analysis of quantitative data with the priority for addressing the research question, followed in the second phase by the collection and analysis of qualitative data meant to refine and explain the initial quantitative results (Caruth, 2013; Creswell, 2003; Cronholm &

Hjalmarsson, 2011; Greene, 2007). This type of design is also called the qualitative follow-up design. In this design, equal priority is given to the two phases though it can be given to either approach. Data is integrated during interpretation (Tashakkori & Teddlie, 2006).

The purpose of the explanatory-sequential mixed methods design is to employ a qualitative strand to explain initial quantitative results (Creswell, 2003). On a similar note, Dunlop (2013) argues that one of the main purposes of the explanatory design is to use a qualitative method to explain the *blindsides* results from a quantitative method. The primary focus of the explanatory design, therefore, is to explain quantitative results by exploring certain results in detail or explain unexpected results using follow-up qualitative research (Creswell, 2010; Tashakkori & Teddlie, 2010). The strength of the explanatory design lies in it being relatively straight forward due to its clear and distinct stages (Tashakkori & Teddlie, 2006). Its major weakness lies in it being time consuming especially when both phases are given equal consideration and priority (Creswell, 2010; Tashakkori & Teddlie, 2010a).

3.5. Population and sampling

3.5.1. Population

Population refers to all elements that meet certain criteria for inclusion in a study (Burns & Grove, 2003). It is any group of individuals, events or objects with one or more characteristics in common that are of interest to the researcher (Babbie, 2009; Given, 2008; Neuman, 2011; Yount, 2006). The population of this research consists of 280 AMMs made up of heads of department, assistant heads of department, deans of faculty, assistant deans of faculty, and module leaders in the five private higher education institutions. All these AMMs are responsible for the planning and implementation of curriculum change in PHEIs in Botswana.

3.5.2. Sampling procedures

Sampling is the process by which a relatively small number of individuals, objects or events is chosen and analysed in order to find out something about the entire population from which the sample was chosen (Salaria, 2012; Yates, Moore & Stames, 2008). A study sample can therefore be defined as a collection of elements drawn from the population that is studied (Neuman, 2008). Mixed methods sampling requires a sound understanding and acknowledgement of the sampling

strategies that occur in the QUAN and QUAL researches and includes purposive and probability sampling strategies (Creswell, 2009; Tashakkori & Teddlie, 2010) where the basic mixed methods sampling technique is the stratified purposive sampling technique (Creswell, 2012; Tashakkori & Teddlie, 2010).

Patton (2002) states that basic mixed methods sampling strategies include stratified purposive sampling and purposive random sampling, strategies which are typically discussed as types of purposive sampling techniques yet by definition they both include a component of probability sampling (Teddlie & Yu, 2007). The stratified purposive sampling technique involves identifying subgroups in a population and then selecting participants from each subgroup in a purposive manner (Teddlie & Tashakkori, 2009). When using the explanatory sequential mixed methods sampling, the researcher selects units of analysis (participants) by using probability and purposive sampling strategies one after the other in the order given (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2010). Kemper, Stringfield and Teddlie (2003) similarly note that in sequential mixed methods sampling (QUAL->QUAN), information from the first sample (typically derived from a probability sampling procedure) is often required to draw the second sample (typically derived from a purposive sampling procedure).

When generating a sample for the QUAN phase of the mixed methods on one hand, the researcher typically seeks to obtain a sample that is representative of the population (Tashakkori & Teddlie, 2010a). On the other hand, when generating a sample for the QUAL phase of mixed methods, the researcher seeks to obtain a sample that will provide information at multiple levels of meaning or provide a *thick description* of the phenomenon under study (Teddlie & Tashakkori, 2009).

Stratified random sampling procedure was therefore used in this study to select a total of 162 AMMs (deans of faculty, assistant deans of faculty, heads of department, assistant heads of department and module leaders) who responded to the structured questionnaire. Stratified random sampling is defined as a procedure in which the researcher identifies subgroups within a population and then randomly selects a representative sample which mirrors the subgroups from each of the stratum (Given, 2008; Ross, 2005; Yates, Moore & Stames, 2008; Yount, 2006). The 162 AMMs came from a total of 280 AMMs in the PHEIs. These 162 AMMs who formed the

sample that participated in the structured questionnaire were large enough a sample to representative of the population. The sample constituted 57.9% of the population and hence according to Yates, Moore & Stames (2008) and Yount (2006) this number was large enough to assure the validity of results. The 162 AMMs were selected from the following AMMs stratum: Deans of Faculty, Assistant Deans of Faculty, Heads of Department, Assistant Heads of Department and Module Leaders as shown in Table 3.3.

The sampling process in the quantitative phase included dividing the population into subgroups (strata) based on common characteristics, selecting random samples from each stratum with the sampling fractions for each stratum taken in the same proportion as the stratum has in the population. The overall study sample was the total of all the subsamples from each of the five institutional strata. In this study, the study sample was 162 AMMs as given in Table 3.3.

Table 3.3: Sample Size Table

N1	S1	N2	S2	N3	S3
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317

(Adopted from Krejcie & Morgan, 1970 in Bartlett et al. 2001)

Key:

N_i = Population sizes, where $i = 1, 2, 3 \dots$

S_i = Sample sizes for corresponding populations, where $i = 1, 2, 3 \dots$

Using the above total sample size ($S=162$) in relation to the total population ($N=280$) of AMMs in PHEIs, the sample sizes of each stratum of PHEI are shown on Table 3.3. The strata included Heads of Department (HODs), Deans of Faculty (DOFs), Assistant Deans of Faculty (ADOFs), Assistant Heads of Department (AHODs) and module leaders (MLs) who were included in the sample. Their numbers were calculated using simple proportion based on the actual numbers of

each of the AMMs stratum from each institution. Thereafter, simple random sampling was used to select the AMMs to be included into the institutional samples from each stratum of AMMs. The total samples from each of the different institutions based on the number of AMMs in each institutional stratum was then calculated to determine the sample size of AMMs for the QUAN phase of the study as shown in Table 3.4.

Table 3.4: Proportionate Samples Table (Designed by the Researcher)

Institutions		DOF	ADOF	HOD	AHOD	ML	AMMs per institution	AMM sample per institution
	A	5	2	12	10	47	76	
	S _A	3	1	7	6	26		43
	B	5	1	15	3	39	63	
	S _B	3	1	8	2	21		35
	C	4	0	13	1	35	53	
	S _C	2	0	8	1	20		31
	D	3	0	10	1	35	49	
	S _D	2	0	6	1	20		29
	E	3	0	11	2	23	39	
	S _E	2	0	6	1	14		24
	Total AMMs in PHEIs	20	3	61	17	179	280	162

Key: HODs = Heads of department from institution
 ML = Module leaders from institution
 DOF = Dean of faculty
 ADOF = Assistant dean of Faculty
 AHOD = Assistant head of department
 S_i = sample sizes of different stratum from each institution
 A, B, C, D, E, = PHEIs

Purposive sampling was used to select ten AMMs from the five PHEIs to respond to the semi-structured interview. Purposive sampling is a sampling procedure in which decisions concerning the individuals to be included in the sample from each of the subgroups identified are based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research (Jupp, 2006). Sandelowski (2003) also defines purposive sampling as a combination of sampling techniques where the researcher wants to ensure that certain cases varying on preselected parameters are also included. Similarly, Cohen et al (2007) posit that in purposive sampling, the researcher handpicks participants based on his/her judgement of their typicality and experience of the central phenomenon under investigation.

Because the interview method that was used in the study is labour intensive, it was imperative to limit the sample to only 10 participants ($\sum s_{qi} = 10$) participants from the total sample of ($S=162$) participants selected. Table 9 therefore was constructed to represent the 10 respondents to the interviews for the QUAL component of the study to determine the sample for each stratum. The number of participants in the QUAL phase per institution was determined using simple proportion. HODs were purposively selected for the interview phase of the study because they were more directly involved in curriculum change than any other AMMs in PHEs and were considered as more information rich than any other AMMs. Since from appointment records in the PHEIs it was acknowledged that some HODs were new in their roles, only those HODs who had participated in curriculum change before, were selected into the QUAL sample. Having determined the number of HODs per institution, purposive sampling was used to select AMMs (HODs) for this phase of the study with results shown in Table 3.5.

Table 3.5: Calculation of QUAL samples for Each Institution (Designed by Researcher)

PHEIs	A	B	C	D	E	Totals
Number of HODs per institution (s_i)	12	15	13	10	11	$\sum s_i = 61$
QUAL institutional samples $s_{qi}=(s_i/\sum s_i) \times \sum s_{qi}$	2	3	2	1	2	$\sum s_{qi} = 10$

Key: s_{qi} = Sample size per institution for the QUAL phase

s_i = HODs in the different strata

$\sum s_i$ = Total HODs in PHEIs

$\sum s_{qi}$ = Total sample for the QUAL phase

3.6. Data collection instruments

Data collection instruments are devices for obtaining information relevant to one's study (Mathers, Fox and Hunn, 2009; Wilkinson & Birmingham, 2003). Two data collection instruments that were used in this study are the structured questionnaire and semi-structured interview.

3.6.1. Structured questionnaire

A questionnaire according to Given (2008) is a method of collecting data that consists of a series of questions and other prompts for the purpose of gathering information from respondents. The current study will use a structured questionnaire. A structured questionnaire is defined as a structured technique for data collection that includes a series of questions, written or verbal, that a respondent answers (Neuman, 2011; Phellas, Block & Seale, 2011; Yount, 2006). A structured questionnaire was used to solicit responses of module leaders, Assistant HODs and HODs on the role they play in curriculum change. Specific issues addressed by the questionnaire were about the extent of academic middle managers' involvement in the planning, implementation and management of curriculum change.

There are major advantages in the use of a structured questionnaire (Timpany, 2011; Yount, 2006). The first advantage relates to gaining access to *remote subjects* as a questionnaire allows a researcher to gather data from any part of the world any time. This is because a questionnaire can also be e-mailed, or sent by post to any required destination and not only personally administered. To ensure the questionnaire for the current study reached the remote areas, the researcher e-mailed them to selected respondents and thereafter followed up after one month. The second advantage relates to minimization of *researcher influence* (Timpany, 2011). With regards to this advantage, the researcher standardised the instrument. The standardised wording of a printed questionnaire reduces researcher influence/interference in subject responses as the researcher's gender, appearance, mannerisms, social skills, etc., have no effect on how subjects respond to the questions. The third advantage relates to *cost* (Timpany, 2011; Yount, 2006). Use of a questionnaire is the most economical means of gathering data as large numbers of questionnaires can easily be sent through e-mail or even by post rather than travelling to each of the participants. In the context of the current study, by e-mailing the questionnaire to remote areas, the researcher reduced costs of administering the instrument. The fourth advantage relates

to the high degree of *reliability* of results (Timpany, 2011; Yount, 2006).. The standardised wording and structured design of a questionnaire provides a higher reliability in the data than is practically obtainable through an interview as questions are presented in a clear and uniform structure to all respondents. The questionnaire for this study was structured and had standardised wording to ensure reliability of results. The fifth advantage of a questionnaire relates to *subjects' convenience* (Timpany, 2011). The questionnaire is completed at the subjects' convenience who may even check necessary records, and reflect on their answers making data more valid under these conditions than on the spot completion. After administering the questionnaire, participants were given enough time to respond to it. As an example those within Gaborone were given two weeks while those in remote areas were given one month to respond and this also led to generally high return rate as provided for in the next advantage. The sixth advantage of a questionnaire relates to *response rate* (Timpany, 2011; Mathers et al, 2009). Literature shows that a questionnaire leads to higher response and more accurate data than any other data collection instrument (Mathers et al., 2009). The final advantage of a questionnaire relates to *coding and analysing of data* (Mathers et al., 2009). A questionnaire is viewed as much easier for the researcher to code and analyse than interview data. With regards to this advantage, the researcher used the Software Package for Social sciences (SPSS) to code the quantitative data.

A structured questionnaire also has a number of weaknesses (Phellas et al, 2011; Yount, 2006). The first disadvantage relates to *rate of return* (Yount, 2006). The rate of return of a questionnaire is sometimes low as calculated by the following formula: $\text{Rate of return} = R/(S - NR) \times 100\%$ where R=Returned questionnaires, S=Sent questionnaires, and NR=Not returned questionnaires. To deal with this shortcoming, the researcher made follow-ups through telephonic calls, e-mails and in the case of Gaborone where the researcher was located, personal visits were made as a way of following up. The second disadvantage relates to *inflexibility* (Timpany, 2011). The structure of a written questionnaire (which increases reliability of subject responses) also acts as a weakness as it limits the researcher's ability to probe subject responses or to clarify understanding. To handle this weakness, the researcher used a semi-structured interview to make follow-ups on issues that needed further probing and clarification. The third disadvantage relates to *subject motivation* (Timpany, 2011; Mathers et al., 2009). There is no way of determining the motivation levels (state of mind) of the subjects at the point when they complete the questionnaire, e.g., whether they were busy, overworked, contemplative, sorrowful,

etc., as all these may have an impact on how the subjects seriously take the whole exercise. To deal with this shortcoming, the researcher gave respondents more time (two to four weeks) to respond to the questionnaire. Such a relatively long time, it was felt would enable the respondents to have time to settle down and be in the right frame to respond to the questionnaire. The last disadvantage relates to *verbal behaviour* (Mathers et al., 2009). Questionnaire data tends to be limited to the responses subjects choose to provide as there is no room for further probing. To deal with this shortcoming, a structured interview to probe further major issues requiring more clarification was used.

3.6.2. Justification for the use of the structured questionnaire

The structured questionnaire was been selected for the current study primarily for two reasons. First, it allowed the researcher to get the views of a large proportion of the population with regards to how AMMs planned and implemented curriculum change. This was important for ensuring that the results could be generalised to other comparable settings/situations. Second a structured questionnaire enhanced the reliability and validity of findings on the role of AMMs on the planning and implementation of curriculum change since by being structured, it is able to produce more accurate results on the actual practices of AMMs with regards to curriculum change.

3.6.3. Semi-structured interview

Neuman (2008) defines a research interview as a way of collecting data and gaining knowledge from individuals which allows the interviewer to probe the interviewee further for clarification. Interviews can be used to collect rich descriptions of a phenomenon under study, from participants (Creswell, 2009). Interviews can be structured, semi-structured or unstructured (Kiriakidis & Jenkins-Williams, 2013). This study used a semi-structured interview guide to collect data. A semi-structured interview is a data collection method where the interviewer has a clear picture of the themes that need to be covered (and perhaps even a preferred order for these) and is moderately prepared to allow the interview to develop in unexpected directions and open up important new ideas (Phellas et al, 2011).

A semi-structured interview is characterised by a series of open-ended questions based on the topic the researcher wants to cover (Adejimi, Oyediran, & Ogunsanmi, 2010; Mathers et al,

2009; Phellas et al, 2011). The open-ended nature of the questions provides opportunities for the interviewees and interviewer to discuss some of the topics in depth. Semi-structured interviews also give the interviewer freedom to probe the interviewee to elaborate on the original response or to follow up on a line of response given by the interviewee (Freestone, 2013; Mathers et al, 2009).

Interviews are not simply concerned with collecting data about life but are in fact part of life itself. They use open-ended questions in the form of “Tell me about...” or “You said a moment ago that....can you tell me more?” etc. (Pathak & Intratat, 2012). The defining characteristic of semi-structured interviews is that they have a flexible and fluid structure, unlike structured interviews which contain a structured sequence of questions to be asked in the same way of all interviewees (Mason, 2004; Pawlak, Bielak & Mystkowska-Wiertelak, 2014).

The structure of a semi-structured interview is usually organized around an interview guide containing topics, themes, or areas to be covered during the course of the interview, rather than a sequenced script of standardized questions (Mason, 2004; Berger, 2010; Pathak & Intratat, 2012).

The major aim of semi-structured interviews is mostly to ensure flexibility on how and in what sequence questions are asked, and how particular areas might be followed up and developed during the interview (Mason, 2004; Phellas et al, 2011). Interviews were conducted to help clarify and expand on the results from the questionnaire with regards to how AMMs enacted their role during the planning and implementation of curriculum change in PHEIs. Since semi-structured interviews are more about flexibility and generation of meaningful, rich data, three useful interviewing techniques namely rapport-building technique, thought-provoking interjections and critical event analysis technique (Pathak & Intratat, 2012) were employed during the interview sessions.

3.6.3.1. Rapport-building technique

According to this technique, time should be spent by the interviewer building rapport with the interviewee in order to share common ground and common experiences at the beginning of the

interview (breaking the ice). Leech (2002) calls this putting the interviewee at ease. This serves to gain unfettered perspectives and counter-perspectives on the issue under inquiry.

3.6.3.2. *Thought-provoking interjections*

The use of thought-provoking interjections helps to indicate to the interviewee that the interviewer would like to hear more about an issue. This technique also helps to show the interviewee that the interviewer has as much expert knowledge on the subject under consideration as the interviewee thus creating room for mutual respect during the session (Leech, 2002).

3.6.3.3. *Critical event analysis technique*

By encouraging interviewees to describe critical events and talk about them, this technique helps the whole picture of the research phenomenon to come out.

3.6.4. Strengths of semi-structured interviews

The main strengths of the semi-structured interview explain its use in the study. First, it is a very simple, efficient and practical way of getting data about things such as feelings and emotions that cannot be easily observed (Phellas et al., 2011; Mathers et al., 2009). Second, semi-structured interviews allow respondents to talk about a phenomenon in detail and depth, thus ensuring that meanings behind an action are revealed, as the interviewees speak for themselves with little direction from the interviewer (Mathers et al., 2009). Third, it is a method that allows complex questions and issues to be discussed and clarified as the interviewer is able to probe areas suggested by the respondent's answers, picking up information that earlier on, the interviewer had no prior knowledge of (Mathers et al., 2009). The fourth advantage is that it resolves the problem of the researcher pre-determining what will or will not be discussed in an interview since it is the direction of the interview not the interviewer that determines what needs to be discussed next (Phellas et al., 2011). The fifth advantage is that it is easy to record (video or audio tapes) (Phellas et al., 2011; Mathers et al., 2009).

3.6.5. Weaknesses of semi-structured interviews

Literature identifies weaknesses of the semi-structured interview. Mathers et al. (2009) and Phellas et al. (2011) provide some of the weaknesses. First, the semi-structured interview's success depends on the skill of the interviewer to ask clear questions. If the interviewer asks

unclear meandering questions, the interviewee will not be able to understand the questions and may therefore answer out of context or may not be able to answer at all. To ensure that there was clarity on the nature of questions to be asked in the interview guide, the guide was subjected to expert scrutiny of three curriculum specialists purposively selected from the PHEIs. Secondly, the semi-structured interview has potential for the interviewer to give out unconscious signals/cues that may guide the respondent on the type and nature of response to give. This is seen to normally happen when the interviewer uses long questions or interjects too frequently (Phellas et al, 2011). To deal with this shortcoming, expert scrutiny of the interview guide ensured that questions were well structured and not too long. Also the researcher did a pre-run of the interview using the guide, with two AMMs who were not part of the selected sample. This pre-run enabled the researcher, under the guidance of experienced researchers in the department, to polish up the interviewing skills especially with regards to how to interject during the interviews. The third disadvantage of a semi-structured interview is that it is time consuming and labour intensive since time must be given for expanding on the answers and providing necessary clarifications. To deal with the time issue, the researcher ensured that the interviewed started on time and finished within the allocated time.

3.6.6. Justification for the use of semi-structured interviews

Semi-structured interviews were used in the current study for a number of reasons. First, semi-structured interviews helped in providing rich descriptions of and meaning about how AMMs plan and implement curriculum change in PHEIs. This is important in helping build understanding with regards to how AMMs enact their role in the planning and implementation of curriculum change as well as in appreciating the challenges AMMs face when playing their role in curriculum change. Second and equally important, data collected from semi-structured interviews helped to clarify as well as expand on the findings from the structured questionnaire thereby building a solid case about how AMMs plan and implement curriculum change in PHEIs.

3.6.7. Aligning research items

The alignment between research questions, unit of data and research instruments is shown on Table 3.6.

Table 3.6: Alignment of research objectives, questions, unit of analysis, instruments and design phase

Research Questions	Sub- Research Objectives	Unit of analysis	Research Instrument Items	Research Design Phase
1. What are the views of academic middle managers about the role they play in the planning and implementation of curriculum change in their disciplines?	1. Establish the views of the academic middle managers concerning their role in the planning and implementation of curriculum change in their different disciplines.	AMM	Interviews validated by questionnaire	QUAL validated by QUAN
2. What is the influence of biographic characteristics on the role of AMMs in the planning and implementation of curriculum change in PHEIs?	2. Establish the influence of biographic characteristics on AMM role in curriculum change in private higher education institutions.	AMM	Questionnaire validated by interview	QUAN validated by QUAL
3. What strategies do AMMs employ for effective planning and implementation of curriculum change in PHEIs?	3. Identify strategies AMMs employ during the planning and implementation of curriculum change in PHEIs.	AMM	Questionnaire validated by interview	QUAN validated by QUAL
4. What are the enablers of academic middle manager involvement in the planning and implementation of curriculum change in private higher education institutions?	4. Investigate the enablers of academic middle managers' role in the planning and implementation of curriculum change in private higher education institutions.	AMM	Questionnaire validated by Interview	QUAN validated by QUAL
5. What model can be developed to ensure enhanced implementation and management of curriculum change by academic middle managers in higher education institutions?	5. Develop a model for enhancing the implementation and management of curriculum change in higher education institutions.	AMM	Questionnaire validated by interviews	QUAN validated by QUAL

3.7. Reliability and validity

3.7.1. Reliability

A pilot test was used to assist in the measurement of reliability of the structured questionnaire. A pilot study is defined as collected data for a small-scale exploratory research project that uses sampling but does not apply rigorous standards (Zikmund, 2013). Neuman (2011) also asserts that the purpose of a pilot study is to detect the weaknesses in the design and instrumentation of a research instrument. More specifically the purpose of the pilot test in this study was to test

questions in order to make sure they would actually work in practice, in terms of how people would understand them and how they were likely to respond. Another purpose of piloting, as given by Teijlingen, Rennie, Hundley and Graham (2001), was to get advance warning about where the main research project could fail, where research protocols would not be followed, or whether proposed methods or instrument(s) would be inappropriate or too complicated.

Reliability is defined as the dependability of the research or the degree to which the research can be repeated while obtaining consistent results (Burns & Grove, 2007; Bryman & Bell, 2011; Quinlan, 2011). Orodho (2008) also posits that reliability measures consistency of results if a test is given repeatedly. The above definitions imply that reliability is the degree to which an assessment tool produces stable and consistent results, that is, it is the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects. Of the three procedures for measuring reliability namely: test-retest reliability, inter-rater reliability, internal consistency reliability, internal-consistency reliability was adopted to ensure reliability of quantitative results in the current study.

3.7.1.1. Test-retest reliability

Test-retest reliability is a measure of reliability obtained by administering the same test at least twice over a period of time to a group of individuals. This is confirmed by De Vaus (2002) who mentions that the method of test-retest reliability addresses the question of consistent responses from multiple occasions of instrument use. The test is conducted twice to check on reliability and the interval at which the retest can be done ranges from two weeks to six weeks interval (De Vaus, 2002). The scores from Time 1 and Time 2 can then be correlated in order to evaluate the test for stability over time using the Pearson correlation coefficient r . An r equal or greater than 0.7 will be considered an acceptable value for an instrument to be viewed as reliable (Burns & Grove, 2007). For ease of analysis of the test-retest reliability, the Pearson correlation coefficient can be calculated for questions section by section so that if a questionnaire has five sections, five coefficients will be calculated.

3.7.1.2. Inter-rater reliability

Inter-rater reliability is also referred to as inter-rater agreement or concordance and is the degree of agreement between or among raters (Shoukri, 2010). It is a measure of reliability used to

assess the degree to which different judges or raters agree in their assessment decisions (Burns & Grove, 2007; Gwet, 2012). It measures the extent to which test results are consistent when measurements are taken by different people using the same instrument(s) or method(s). There are a number of statistics which can be used to determine inter-rater reliability. Different statistics appropriate for different types of measurement include joint-probability of agreement, Cohen's kappa and the related Fleiss' kappa inter-rater correlation, concordance correlation coefficient and intra-class correlation (Gwet, 2008, 2012; Krippendorff, 2013; Shoukri, 2010).

3.7.1.3. Internal consistency reliability

Internal-consistency reliability is a measure of reliability used to evaluate the degree to which different test items that probe the same construct produce similar results (Quinlan, 2011). The Cronbach Alpha coefficient was used in this study to measure internal consistency reliability.

3.7.1.4. Measures taken to ensure reliability

In this study, internal-consistency reliability was used to measure reliability. Internal consistency means that test items collectively or individually measure the same construct and also it shows the homogeneity of the items under a construct. In order to ensure that the findings of the research are reliable, the researcher tested for internal consistency using the Cronbach's alpha.

The Cronbach's alpha can be interpreted as the percent of variance on the observed scale that would have explanatory value on the hypothesized true scale composed of all possible items in the universe (Green & Salkind, 2005; Sekaran, 2003). Cronbach's alpha can alternatively be interpreted as the correlation of the observed scale with all possible other scales measuring the same thing using the same number of items. As a measure of reliability, alpha should be at least 0.7 to retain an item on an *adequate* scale though other researchers require a correlation coefficient cut off of 0.8 for a *good* scale. In the context of this study, Cronbach alpha ranged from 0.683 to 0.882 which showed that the questionnaire instrument developed to measure curriculum change constructs in private higher education institutions was judged as overall reliable as shown in Table 3.7.

Table 3.7: Internal Consistency Analysis

Scales (Themes)	Cronbach's Alpha	Number of items
AMM job requirements	0.882	6
Planning curriculum change	0.747	23
Strategies for implementing curriculum change	0.683	10
Role of leadership in curriculum change	0.780	20
Challenges AMM face in curriculum change	0.823	18
Enablers of AMM role in curriculum change	0.882	6

3.7.2. Factor analysis of the indicators from the research constructs

Factor analysis technique was used to reduce the dimensionality of data without losing vital statistical information. Dimensionality of 76 indicators from the six constructs constituted the independent variables and dependent variable of the study. Each indicator in the study construct was evaluated for internal consistency within the model. Any indicator with less than 0.7 internal consistency was removed. The iterative process is displayed in Table 3.8.

It can be observed from Table 3.8 that item 7 was dropped after the first loadings and is therefore not included in the second loading and the third loadings. Item 14 was dropped during the third loading and is not included in the measurement of internal consistency. The remaining items are believed to be containing the information as the original number of indicators. As a result of the analysis, sub-constructs of the original constructs were found and incorporated in the designing of the research model.

Table 3.8: Factor Analysis of the Research Indicators

Construct Name		Sub constructs	First loading	Second loading	Third loading
AMM job requirements			.936	.853	.853
			.925	.945	.945
			.822	.953	.953
			.802	.834	.834
			.663	DRD2	DRD2
			.609	DRD2	DRD2
	planning curriculum change				
		C12	.841	.851	.859
		C13	.861	.871	.876
		C14	.630	.629	Drd3
		C15	.839	.842	.843
Construct 1		C16	.795	.811	.805
		C17	.688	Drd2	Drd2
		C18	.781	.762	.761
		C19	.876	.875	.882
		C20	.242	Drd2	Drd2
		C25	.844	.853	.867
		C21	.823	.829	.829
		C22	.695	Drd2	Drd2
Construct 2		C23	.867	.908	.908
		C24	.771	.797	.797
	Strategies for effectively implementing and managing curriculum change				
		S27	.802	.802	.802
		S28	.834	.834	.834
		S29	.850	.850	.850
		S33	.760	.760	.760
		S34	.872	.872	.872
		S30	.883	.883	.883
		S31	.811	.811	.811
		S32	.891	.891	.891
	Leadership				
		L35	.916	.916	.916
		L36	.865	.865	.865
		L38	.838	.838	.838
		L39	.794	.794	.794
		L43	.773	.773	.773
		L44	.848	.848	.848
		L37	.783	.779	.779

	L40	.747	.797	.797
	L41	.846	.860	.860
	L42	.487	DRD1	DRD1
Challenges faced by AMM in the implementation of curriculum change				
	C49	.851	.851	.851
	C50	.824	.824	.824
	C51	.860	.860	.860
	C52	.892	.892	.892
	C53	.991	.791	.791
	C45	.815	.815	.815
	C46	.260	DRD1	DRD1
	C47	.865	.873	.873
	C57	.849	.848	.848
	C58	.854	.859	.859
	C56	.888	.888	.888
	C60	.779	.779	.779
	C64	.890	.890	.890
	C55	.992	.719	.719
	C59	.752	.854	.854
	C63	.787	.814	.814
	C48	.642	Drd1	Drd1
	C62	.543	Drd1	Drd1
Enablers				
	E66	.715	.676	Drd2
	E67	.599	Drd2	Drd2
	E68	.256	Drd2	Drd2
	E69	.770	.777	.747
	E73	.759	.763	.733
	E74	.563	Drd2	Drd2
	E75	.511	Drd2	Drd2
	E76	.703	.693	.714
	E79	.687	.703	.882
	E80	.823	.845	.839
	E81	.797	.807	.902
	E82	.826	.861	.714

	E70	.791	.832	.906
	E71	.834	.877	.918
	E72	.571	Drd2	Drd2
	E77	.799	.802	.75
	E78	.674	.634	Drd3
	E66	.814	.884	.922
	E76	.683	.643	Drd3
	E67	.814	.873	.922
	E68	.296	Drd2	Drd2
	E74	.597	Drd2	dr2
	E75	.378	Drd2	Drd3

***DRD subscript indicator show the iterative order in which the indicator was dropped**

3.7.3. Validity

Validity refers to the technical soundness of a study (Creswell, 2009; Onwuegbuzie & Johnson, 2006; Tashakkori & Teddlie, 2006). A number of validity measures were considered in this study:

3.7.3.1. Face validity

Face validity is concerned with whether a test is perceived to measure what it is supposed to measure, that is, it is about whether an instrument has an appearance of measuring what it is supposed to measure (Ley, McGreevy, Pauleen & Bennett, 2007). It is validity at face value (by merely looking at the instrument) (Churchill & McLaughlin, 2001). Ayodele (2012) also defines face validity as a researcher's subjective assessment of the presentation and relevance of the measuring instrument, whether the items in the instrument appear to be reasonable, unambiguous and clear. Other authorities such as Anastasi and Urbina (2007) argue strongly that face validity is a desirable feature of tests in ensuring that the content of the measuring instrument, right from the onset, does not appear irrelevant, and inappropriate to the target group since without this test, results obtained may provide false information and misleading conclusions. The face validity of an instrument was achieved by having experts in the field of study rate the suitability of the measuring instrument for its intended use.

3.7.3.2. External validity

External validity is about generalization, that is, it is a measurement of the extent to which the results of a study can be generalized to populations, settings, treatment variables, or measurement variables (Aronson, Wilson, Akert & Fehr, 2007; Shuttlesworth, 2009). To ensure external validity, some measures can be taken. First, simple random sampling within each stratum can be used to select respondents to the study. Second, a large sample can be selected and used on the questionnaire to ensure generalisability of findings. Third, telephonic and e-mail contacts of respondents can be requested for the purpose of making follow-ups in case of submission delays or non-submissions. Fourthly, the use of a multi-method research approach can be employed to ensure the strengths of one method compensated for the weaknesses of the other methods. Finally, an expert population in relation to the phenomenon under investigation can be used to ensure valid responses.

3.7.3.3. Content validity

Content validity is a systematic examination of the measuring instrument to determine if it covers all the areas of the study (Babbie, 2007; Cohen, Manion & Morrison, 2008; Orodho, 2008). When a test has content validity, the items on the test represent the entire range of possible items the test should cover (Ayodele, 2012; Rubio, BergWeger, Tebb, Lee & Rauch, 2003). Determination of content validity was done using expert judgement. In multiple judges rating, the researcher consulted the experts in the field of the research to rate each item in the instrument in terms of its match or relevance to the content. To further ensure content validity, a questions in the questionnaire were drawn from all the subthemes of the research area to ensure that the whole research area was covered. Also the researcher consulted curriculum experts in the five PHEIs to examine the content of the questionnaire and its coverage of the whole research area and their comments were incorporated into the final research instrument to ensure the desired content validity was achieved.

3.7.3.4. Overview of measures taken to ensure validity

The researcher ensured validity of results by measuring the face, content and external validity of results. With regards to ensuring face validity, the researcher gave the research instrument to experts in the field of curriculum change to rate the suitability of the structured questionnaire in terms of nine criteria as given by Ayodele (2012) which are identified next. (a) The structure of

the instrument in terms of construction and well-thought out format: This criterion was satisfied using expert opinions; (b) The clarity and unambiguity of items: Based on the comments from curriculum experts who scrutinised the instrument, the researcher made some changes to questions which were felt to be ambiguous; c) The appropriateness of difficulty level of the instrument: This was assured based on expert advice; (d) The correctness of spellings of difficult words: Expert scrutiny of the instrument was used by the researcher to ensure all words were correctly spelt; (e) The correctness of spacing of items between lines: Expert scrutiny of the instrument was used by the researcher; (f) The adequacy of instructions on the instrument: Expert scrutiny was used; (g) The correctness reasonableness of items in relation to the perceived purpose of the instrument: Expert scrutiny was used by the researcher; (h) The legibility of print: Expert scrutiny was used by the researcher; and (i) The attractiveness of paper used to print the questionnaire: Expert scrutiny was used by the researcher.

With regards to external validity, the researcher ensured validity of results in a number of ways. First, simple random sampling within each stratum was used to select respondents to the study. Second, a large sample of 162 out of 280 possible respondents was selected and used on the questionnaire to ensure generalisability of the questionnaire findings. Third, the researcher used the mixed method research approach to ensure the strengths of one method compensated for the weaknesses of the other. Finally, an expert population in relation to the phenomenon under investigation was used to ensure valid responses.

With regards to content validity, the researcher used two strategies. First, questions in the questionnaire were drawn from all the subthemes of the research area to ensure that the whole research area is covered. Second, opinions were sought from curriculum experts from the five PHEIs on whether the content of the questionnaire adequately covered the research questions and the whole research area. Comments from these experts on the data collection instrument were incorporated into the final instrument to ensure the desired content validity is achieved.

3.7.4. Data trustworthiness

Qualitative researchers discuss the validity of data in terms of its trustworthiness and credibility (Lincoln & Guba, 1985; Teddlie & Tashakkori, 2009). Trustworthiness is defined as findings

that are worth paying attention to (Lincoln & Guba, 1985) and is characterised by the following four dimensions: credibility, dependability, transferability and confirmability.

3.7.4.1. Credibility

The credibility dimension relates to the evaluation of whether or not the research findings represent a *credible* conceptual interpretation of the data drawn from the participants' original data (Lincoln & Guba, 1985) and compares with external validity in QUAN studies. Shenton (2004) also posits that to address credibility, a researcher demonstrates that a true picture of the phenomenon under scrutiny is being presented, that is, the researcher has to demonstrate congruency between the findings and reality on the ground with regards to the research construct. For the researcher to ensure credibility of data in this study, strategies proposed by Shenton (2004) were used. First the researcher used research methods that are well established both in QUAL research and in general. As an example, specific research procedures such as the line of questioning pursued in data collection sessions and the methods of data analysis were derived, where possible, from those that have been successfully used before in comparable studies. Second, to help ensure honesty in participants' responses, the researcher approached each individual to give them the opportunity to refuse to participate in the study if they so wish so that only those who are genuinely willing to take part and prepared to offer data freely participate. Third, thick description of phenomenon under study was another strategy that was used to ensure credibility of the study. This was done by providing detailed description of the phenomenon to convey the actual situations that would have been investigated and to some extent, the contexts that surround them. Fourth, a pilot test was conducted to test the efficacy of the interview guide. Neuman (2008) assert that the purpose of a pilot study is to detect the weaknesses in the design and administration of a research instrument. More specifically, and also as given by Bryman (2008) and Teijlingen, Rennie, Hundley and Graham, (2001), the purpose of the pilot test in this study was to test questions in order to make sure they would actually work in practice, in terms of how people would understand them and how they were likely to respond to them. Finally, peer scrutiny of the study through feedback offered by colleagues, peers and academics at forums such as conferences also helped the researcher to look at the whole research process in a more informed and objective light.

3.7.4.2. Transferability

Transferability is the degree to which the findings of the study can apply or transfer beyond the project (Lincoln & Guba, 1985). According to Shenton (2004), transferability deals with issues of external validity, that is, it is concerned with the extent to which the findings of one study can be applied to other situations. Literature acknowledges that while transferability or generalisability (QUAN studies) is difficult in QUAL studies because of small samples, it can be ensured by the researcher if he/she is able to convey to the reader the boundaries of the study by providing particular information from the outset (Shenton, 2004). First, the number of organisations taking part in the study and where they are based should be sizable and acceptable enough for results to be judged as valid. Second, criteria to be used for selecting participants need to be clearly articulated to ensure relevant people are chosen to participate. Third, the data collection methods used should be well established in research. Fourth, the number and length of the data collection sessions should be spelled out to enable the reader to judge whether enough time was given to data collection. The above boundaries were provided by the researcher in the current study.

3.7.4.3. Dependability

This compares with reliability in QUAN studies (Shenton, 2004). Dependability is an assessment of the quality of the integrated process of data collection, analysis, interpretation and theory generation (Lincoln & Guba, 1985). Literature shows that in order to address the issue of dependability of the findings, the processes within the study should be reported in detail enable future researchers to replicate the work, and gain comparable results (Shenton, 2004). Such detailed and in-depth coverage was meant to allow the reader to assess the extent to which proper research practices had been followed.

To ensure dependability of the findings, Lincoln and Guba's (1985) and Shenton's (2004) tactics were used. First, the research design and its implementation were adequately explained. Second, adequate and in-depth detail was given as a minutiae of what was to be done in the field.

3.7.4.4. Confirmability

Confirmability is a measure of how well the study's findings are supported by the data collected (Lincoln & Guba, 1985). This dimension is associated with objectivity in QUAN study. The role

of the confirmability dimension is to ensure that as far as possible the study's findings are the result of the experiences and ideas of participants rather than characteristics and preferences of the researcher (Shenton, 2004). The tactics given by Shenton (2004) were used to ensure confirmability (Shenton, 2004). First, triangulation was used to promote confirmability and to reduce researcher bias. Second, beliefs underpinning decisions made and research methods used were acknowledged within the research report as well as the reasons for preferring one research approach over the other(s). Third, detailed methodological descriptions were provided to enable the reader to determine how far the data and constructs emerging from it may be accepted.

3.7.4.5. Measures taken to ensure data trustworthiness

To measure trustworthiness of data in the study, the researcher adopted a number of measures to ensure that the data is credible, confirmable, dependable and transferable. To ensure credibility of data, the researcher used some strategies. The research methods such as the semi-structured interview guide, that are well established and whose effectiveness have been proven, were used. Participants were given the opportunity to refuse to participate voluntarily so that they participated with a high degree of honest. Thick descriptions of phenomenon under study were done to convey the actual situations that would have been investigated. The study was subjected to peer scrutiny, and feedback offered by colleagues, peers and academics helped the researcher to look at the whole research process in a more informed and objective light and make necessary adjustments.

To ensure transferability of results, the researcher used particular strategies. Criteria to be used for selecting participants was clearly articulated to ensure relevant people are chosen to participate and the number and length of the data collection sessions was well spelt out to ensure enough time is given to data collection. To ensure dependability and confirmability of results, the researcher liberally drew from the interview responses to ensure as much data as possible was captured during the transcription process, and the researcher also kept copies of interview tapes, typed and hand-written transcripts and the final draft of the thesis for any possible verification if needed.

3.8. Data collection procedures

The first phase of data collection was done through the use of the structured questionnaire and this was followed in phase two by the use of a semi-structured face-to-face interview.

3.8.1. Data collection procedures using the structured questionnaire

Preliminary investigations of the number of AMMs in PHEIs showed that almost 90% of AMMs in the 5 PHEIs were located in Gaborone where the head offices are situated while the rest were located in satellite campuses in smaller towns of Botswana namely Francistown, Maun, Lobatse, and Selibe Phikwe. As a result, around 90% of the 162 copies of the structured questionnaires were hand delivered by the researcher to each of the selected participants within the Gaborone area for the first phase of the study (the QUAN phase). This is where the researcher was based. The remaining 10% came from outside Gaborone from satellite campuses of the PHEIs situated in Lobatse, Maun, Francistown and Selibe Phikwe. Since respondents in Gaborone were closer to where the researcher was located, most of questionnaires were hand delivered which guaranteed respondents' reception of the questionnaires.

The researcher also physically followed-up on the uncompleted questionnaires after two weeks of having delivered them to the respondents in Gaborone. For the campuses of the five PHEIs outside Gaborone, the researcher sent the questionnaire by e-mail. E-mail addresses of the participants were collected from the participants upon their granting of informed consent to participate in the study. For questionnaires sent by e-mail, the researcher allowed for one month before making a follow-up on unreturned questionnaires.

3.8.2. Data collection procedures using the semi-structured interview

Just before the interview began, a synopsis of the study was read or presented to the interviewees to ensure that they had a clear understanding of the purpose of the study. Thereafter, each participant to the interview was given the consent form to read, understand and sign before the interview began. Convenient settings, free from noise and other disturbances were chosen for the interview sessions. Each interview session took around 30 minutes, and with the permission of the interviewee, the sessions were audio recorded except for only two sessions where the interviewees preferred not to be audio recorded during the interviews. The purpose of audio recording was to ensure accurate capturing of the interview data. For those who refused to be

audio recorded, accuracy of capturing of data was ensured through paper-recoding what they were saying during the interviews and giving the interviewees to go through the written responses for them to confirm if that was a true reflection of what they had said. For both cases the interviewees agreed that the captured notes were a true reflection of what they had said. A distinct number identifier, for example AMM1, was assigned to each interview transcript for ease of analysis. After each interview, collected data was transcribed within 48 hours to ensure all information was captured when it was still fresh in the mind of the researcher so that the context was not lost.

3.9. Data analysis

Mixed methods data analysis requires knowledge of strategies for analysing QUAN and QUAL data (Creswell & Plano Clark, 2011; Green, 2007; Tashakkori & Teddlie, 2010). Different types of data that can be analysed in research include QUAL, QUAN and mixed methods data. Analysis of quantitative and qualitative data was done in chapter 4 and which was the point when the two sets of data were integrated. This strategy of analysing data together was meant to ensure adequacy and completeness in the presentation and analysis of research findings.

3.9.1. Analysis of QUAL data

QUAL data analysis involves an inductive process in which the researcher works to address research questions, which questions may involve generating new ideas and theories, explaining phenomena, exploring associations between attitudes, behaviours and experiences, developing typologies and classifications, and developing conceptual definitions (Green & Thorogood, 2009). QUAL data analysis is iterative in that there is movement between data collection and data analysis so that analysis may be occurring shortly after data collection (Tashakkori & Teddlie, 2006). Since qualitative data is inherently interpretive (Cohen, Manion and Morrison 2007), common approaches to QUAL data analysis include thematic content analysis, grounded theory, framework analysis, and narrative analysis, with the most commonly used approach being thematic content analysis (Green & Thorogood, 2009).

3.9.1.1. Thematic content analysis

When using this approach, the content of data is analysed to generate and categorise recurring themes (Green & Thorogood, 2009; Creswell & Plano Clark, 2007). In this approach, data is

coded and categorised until themes are identified or emerge. This strategy was used in the current research.

3.9.1.2. Grounded theory

This approach involves a cyclical process in which data are collected and analysed and a coding scheme is developed (Green & Thorogood, 2009). Additional data may be needed until saturation is reached and there are no new constructs emerging. This strategy was not used in the current research.

3.9.1.3. Narrative analysis

Narrative analysis is an approach to qualitative analysis that is conducted to check how respondents in interviews impose order on the flow of experience to make sense of events and actions in their lives (Green & Thorogood, 2009). Narrative or the practice of story-telling, as this approach is sometimes called, is analysed in terms of the linguistic and cultural resources it draws from and how it persuades the listener of authenticity (Green & Thorogood, 2009). This strategy was not used in the current research.

In the current study, and as mentioned above, data from the interviews was transcribed within 48 hours of interviews. The transcribed data was analysed using a number of strategies. Open-coding system and thematic analysis to identify emergent themes and patterns (Kiriakidis & Jenkins-Williams, 2013) was used in the analysis of data. This open-coding system was used to categorise or classify information and ensure that each significant datum was given or assigned a code and all like codes were grouped together to check on converging and/or diverging issues with regards to how AMMs plan and implement curriculum change in PHEIs.

3.9.2. Analysis of QUAN data

Various statistical tools can be used to analyse QUAN data (Tashakkori & Teddlie, 2009; Tashakkori & Teddlie, 2010b). Among such statistical tools was the Statistical Package for Social Sciences (SPSS). These tools were employed in the current study which was used to analyse descriptive and inferential statistics. Descriptive statistics were used to summarise data to allow the researcher to better understand the trends. In this study, descriptive statistics included tables and measures of central tendency and measures of variability used to understand,

interpret and describe the experiences of AMMs in terms of how they planned and implemented curriculum change in PHEIs. Inferential statistics were used typically to test hypotheses and to further examine the descriptive statistics results.

In this study, parametric and non-parametric statistical analyses that were used included t-tests, multiple regression, analysis of variance (ANOVA) and Chi-square. The non-parametric tests of Chi-square were used to test whether there was significant variability in the level of agreement or disagreement on the given statements which described the AMM job requirements. ANOVA and regression analysis were used to test the influence of biographic variables on AMM role in the planning and implementation of curriculum change. The Mann-Whitney U test was used to test and prove normality of the data. The preliminary analyses performed were: skewness and kurtosis of the data to assess the normality of distribution, and correlation analysis to determine the presence of multi-collinearity. The Post HOC analysis that uses Turkey procedures was used to determine which pairs of group means differed. The study also used the General Linear Model (GLM) to analyse the impact of moderators on the independent variables.

3.9.3. Analysis of mixed data

A typology of data analysis strategies for mixed methods research namely: the parallel, sequential, conversion and multilevel data analysis strategies can be used in a study (Tashakkori & Teddlie, 2009).

3.9.3.1. Parallel mixed methods data analysis

This strategy involves QUAN analysis of data using statistical techniques appropriate for the variables and QUAL analysis of data using qualitative analysis approaches appropriate for the data and the research question (Teddlie & Tashakkori, 2009). The two analyses are conducted independent of each other and provide information about the phenomenon through connecting, combining or integrating the findings from the QUAN analysis and from the QUAL analysis (Tashakkori & Teddlie, 2010b). This analysis strategy is used when the researcher is implementing the parallel or concurrent triangulation design. This strategy was therefore applied in the current study.

3.9.3.2. Sequential mixed methods analysis

Sequential mixed methods data analysis is conducted when the QUAL and QUAN phases of the study are implemented in a chronological order, for example, QUAL → QUAN analysis indicates that the QUAN analysis emerges from the QUAL analysis and vice-versa (Creswell, 2013). This strategy of mixed methods data analysis was not used by the researcher in this study since the researcher did not use the explanatory sequential design.

3.9.3.3. Conversion mixed data analysis

In the conversion mixed methods data analysis strategy, data are converted from one form (numeric or narrative) to the other from (narrative or numeric) (Tashakkori & Teddlie, 2006). Converting QUAL data into numeric data is called quantitising and converting QUAN data into narrative is also called qualitising. This strategy was not employed in the current study.

3.9.3.4. Multilevel mixed methods analysis

This strategy involves the use of QUAL and QUAN data analysis at different levels within the study (Creswell, 2011; Tashakkori & Teddlie, 2010). This strategy was not used in the current study as the study did not use the multi-level mixed methods research design.

3.10. Ethical issues

Ethical issues have become the cornerstone for conducting effective and meaningful research (Cohen et al., 2007; Drew, 2007; Paul & Elder, 2006). As a result, every researcher has the responsibility of protecting participants in a research through a number of ethical measures (Drew, 2007; Paul & Elder, 2006). In the current study therefore, the following measures were taken into consideration for ethical purposes to ensure that the study met ethical standards for conducting a research. First permission was sought from the management of the participating AMMs and they were also assured that their names and letters of informed consent would be kept confidential. Ethical clearance from the university where the researcher was studying was obtained before commencement of the study. This step ensured that the university agreed with the manner the research was to be conducted. Participants were also informed of the purpose and procedures of the study as well as their roles in the study so that they could make choices on whether to participate or not. Allowing participants the choice to make decisions about whether to participate or not ensured that only those interested and were commitment were involved. All

participants were informed that confidentiality was going to be maintained during the study to ensure that they felt safe that whatever they said was not going to be exposed or used for any other purposes except for the current research.

As part of ethical issues also, data collected was also to be kept for a reasonable amount of time to allow for verification when necessary. Report writing by the researcher was free of bias towards any group (e.g., age, gender, sexual orientation, institution, race, etc.). Participants were also informed of their right to a copy of the results should they felt a need for it.

3.11. Summary

The purpose of chapter three was to explain and justify the methodology used in the study. Chapter three showed that this study was guided by the pragmatic philosophy and the mixed methods approach which were discussed as the most appropriate approach for the current study. Philosophical assumptions underpinning the pragmatic philosophy that were discussed as relevant to this study were the epistemological, ontological, axiological and methodological assumptions. A structured questionnaire and a semi-structured interview were used as data collection instruments in this study and data collected was analysed using both quantitative and qualitative techniques. As part of validating results, issues of reliability and validity were also discussed in this chapter. Chapter four therefore, presents and analyses both quantitative and qualitative data and marks the point when both sets of data are integrated.

CHAPTER 4: ANALYSIS AND INTEGRATION OF QUANTITATIVE AND QUALITATIVE DATA

4.1 Introduction

This chapter, guided by the objectives of the study and following procedures detailed in the methodology, presents and then analyses data from the questionnaire and the interview guide. The purpose of this study was to investigate the role of the academic middle manager in the planning and implementation of curriculum change in Private Higher Education Institutions (PHEIS) in Botswana. A total of 162 questionnaires were distributed of which 104 were returned ensuring a return rate of 64.2%. A return rate for paper surveys of 50% is considered acceptable (Nulty, 2008). The 50% return rate as acceptable is also confirmed by Fan and Yan (2010) and Millar and Dillman (2011) who assert that depending on how rigorous and long the surveys are, the acceptable response rate ranges from as low as 10% to as high as 65%. Watt, Simpson, MKillop and Nunn (2002) peg the acceptable return rate for paper surveys at 33.3%.

In the context of the current study a response rate of 64.2% is considered very high and will not compromise the study in terms of validity of results. The bulk of the questionnaires came from Gaborone where the PHEIs have their main campuses with the remaining questionnaires coming from satellite campuses in Francistown, Maun, Lobatse and Selibe Phikwe. Some preliminary analyses were performed: Skewness and kurtosis of the data was investigated to assess the normality of data distribution and it was found that data was not normally distributed (See Table 14). Correlation analysis was used to determine the presence of multi-collinearity. Parametric and non-parametric statistical analyses were also used in this study (t-tests, multiple regression and analysis of variance). Since the sample size was more than 30, parametric procedures could be conducted on data that was not normally distributed (Pallant, 2007).

4.1.1. An overview of chapter 4

Section 4.2 presents how data was coded and cleaned for analysis. Section 4.3 reports the statistical conclusion of the study which involved statistical reliability of the instrument and factor analysis of the constructs indicators. Sections 4.4 to 4.6 discuss the descriptive results on: demographics of the respondents, views of AMMs on their role on curriculum review, and the view of AMMs on their role in planning and implementing curriculum change.

Section 4.7 presents inferential statistics. It presents findings in response to the research objective to establish the influence of biographic characteristics on AMM role in the planning and implementation of curriculum change. The first part in this section presents the results of Chi-square test to ascertain variability on the views of AMMs regarding their job requirements and the second part presents the influence of biographic characteristics on various aspects of the AMMs role in effective curriculum planning and implementation based on the research constructs.

Section 4.8 presents structural analysis using multiple regression model (R^2) to determine how well the model fits the hypothesized relationship aimed at developing the research model. The General Linear Model (GLM) was used to establish the effects of moderator variables on the research model. Finally the research model validation using multiple regression and GLM was done.

The following research questions guided the study:

2. How do AMMs view the role they play in leading the planning and implementation of curriculum change in their disciplines?
3. To what extent do biographic characteristics influence the role of AMMs in the planning and implementation of curriculum change in PHEIs?
4. Which strategies do AMMs employ for effective planning and implementation of curriculum change in PHEIs
5. What are the enablers of AMMs role in the planning and implementation of curriculum change in PHEIs?
6. Which model can be developed to improve the planning and implementation of curriculum change by AMMs in private higher education institutions?

4.2. Coding of quantitative data

All the questions in the questionnaire were coded for ease of classification and analysis. Coding involves assigning numbers or other symbols to answers so that responses can be grouped into fewer classes and categories. In the context of this study, numbers were used since data collected using the structured questionnaire was quantitative. The classification of data into fewer categories was necessary for efficient analysis. Coding also assisted the researcher to reduce a

large number of replies into a few categories containing critical information required for analysis. Pre-coding was particularly helpful for data entry because it made the intermediate step of completing a coding sheet unnecessary (Cooper & Schindler, 2003). Data was accessed directly from the questionnaire. The frequencies and minimum and maximum values of the non-continuous variables, age group, gender, education levels, work experience and number of teaching staff in the department as well as all the indicators of the constructs variables were investigated and checked for errors against the code-book in relation to their possible range of scores. All scores were within their expected range and no errors were detected in the data.

4.3. Coding qualitative data

Open-coding system and thematic analysis to identify emergent themes and patterns (Kiriakidis & Jenkins-Williams, 2013) were used in the analysis of qualitative data. This open-coding system was used to categorise or classify information and ensure that each significant datum is given or assigned a code and all similar codes were grouped together to check on converging and/or diverging issues with regards to how AMMs plan and implement curriculum change in PHEIs. Quotes from the interviews respondents were taken verbatim and no attempt was made to correct grammatical inaccuracies that are there.

4.4. Statistical analysis of items /indicators (Instrument Reliability)

4.4.1. Statistical reliability of Items / Indicators

An evaluation of indicators in the study constructs was carried out to analyze their reliability. Reliability is whether particular techniques can be applied repeatedly to the same objects and yield the same results each time. Using SPSS version 16, the study examined all items/indicators for the mean, standard deviation, skewness, Kurtosis and Shapiro – Wilk test statistics and Cronbach' Alpha with the corresponding level of significance. By definition, the mean is the average of the measurements over the sample or the population. The mean, the Skewness and Kurtosis were used purposively to establish the distribution of the indicators under study. Skewness is a measure of symmetry of distribution and Kurtosis is the peakness of the distribution (Canhoto, Spinks & Rose, 2015). A negative skewness indicates that the distribution is skewed to the left and a positive skewness shows the distribution is skewed to the right. The skewness for a normal distribution is zero and any symmetric data should have skewness near zero.

Kurtosis measures the relative peakness of the mean in a distribution. The high kurtosis values are associated with high peak near the mean with a heavy tail in one direction whereas low Kurtosis is associated with a flat top near the mean (Canhoto, Spinks & Rose (2015). Low values of skewness, kurtosis and Shapiro – Wilk test statistics are associated with high probability values indicating a nonnormal distribution for the construct variables in question, which is the case in this study as illustrated on Table 13. For skewness the researcher looked at the values between -3 to +3. From the table, all the items' values were under the Z-scores values. For the Kurtosis the researcher looked at the values between -4 and + 4 as suggested in literature (Joanes and Gill, 1998). Reliability tests for the different research constructs were done (See Table 11 in chapter 3).

Results of the data analysis on Table 4.1 illustrate that study indicators are not normally distributed. This is an indication that the constructs are valued and are appropriate for the study. The results demonstrate three aspects. First, the information contained in each of the constructs indicators which show normality of the distribution are representative of the sampled population and inference could be made about the population parameters. Second, the normality of the distribution facilitated analysis of results without transformation. Third, since the sample size is more than 30, violation of the assumption of normality is not a problem. Parametric procedure could be used when the data is not normally distributed (Pallant, 2007)

Table 4.1: Normality tests

	Mean	Std. Dev.						Kurtosis	Shapiro-Wilk		
	Statistic	Statistic	Statistic	Std. Error	Skewness	Statistic	Std. Error		Statistic	df	Sig.
JR6	2.27	1.416	.744	.237	3.14	-.933	.469	-1.99	.797	102	.000
JR7	2.08	1.126	.894	.238	3.76	-.133	.472	-0.28	.824	102	.000
JR8	2.51	1.154	.218	.238	0.92	-1.168	.472	-2.47	.874	102	.000
JR9	2.87	1.348	.063	.238	0.26	-1.286	.472	-2.72	.890	102	.000
JR10	2.91	1.366	.090	.238	0.38	-1.266	.472	-2.68	.890	102	.000
JR11	3.06	1.341	-.134	.239	-0.56	-1.279	.474	-2.70	.884	102	.000

	Planning curriculum change construct and its indicators										
	Mean	Std. Deviasi	Skewness			Kurtosis			Shapiro-Wilk		Sig.
P19	4.09	1.058	-1.089	.238	-4.58	.383	.472	-6.48	.811	98	.000
P15	4.03	1.170	-.911	.237	-3.84	-.575	.469	-6.53	.808	98	.000
P13	4.01	1.029	-.947	.237	-4.00	.044	.469	-4.67	.866	98	.000
P12	3.89	1.131	-1.101	.237	-4.65	.579	.469	-3.76	.759	98	.000
P25	3.84	1.231	-.775	.240	-3.23	-.512	.476	-2.89	.844	98	.000
P16	3.75	1.095	-.752	.237	-3.17	-.287	.469	-0.15	.882	98	.000
P17	3.66	1.005	-.392	.238	-1.65	-.648	.472	1.22	.854	98	.000
P18	3.63	1.175	-.386	.237	-1.63	-1.100	.469	0.96	.791	98	.000
P20	3.62	1.241	-.596	.237	-2.51	-.703	.469	-6.48	.277	98	.000
P14	3.38	1.353	-.326	.237	-1.38	-1.236	.469	-6.53	.843	98	.000
P22	3.33	1.153	-.400	.237	-1.69	-.945	.469	-4.67	.867	98	.000
P21	2.51	1.407	.396	.237	1.67	-1.287	.469	-3.76	.842	98	.000
P24	2.43	1.180	.399	.237	1.68	-.909	.469	-2.89	.878	98	.000
P23	2.22	1.222	.638	.237	2.69	-.779	.469	-0.15	.823	98	.000
Strategies for effectively implementing and managing curriculum change											
	Mean	Std. Deviasi	Skewness			Kurtosis			Shapir o-Wilk		
S28	4.26	1.009	-1.542	.238	4.28	2.018	.472	-3.41	.206	102	.000
S34	4.10	1.034	-1.555	.238	4.84	2.284	.472	-5.91	.817	102	.000
S29	4.08	1.040	-1.107	.237	1.57	.736	.469	-4.81	.728	102	.000
S27	3.65	.993	-.892	.237	0.49	.229	.469	-4.33	.803	102	.000
S33	3.60	1.057	-.686	.237	-0.39	-.181	.469	-3.82	.847	102	.000
S26	2.88	1.100	-.035	.237	-2.00	-.939	.469	-3.30	.830	102	.000
S32	2.63	1.442	.290	.237	-2.92	-1.368	.469	-2.11	.854	102	.000
S31	2.61	1.471	.227	.237	-3.21	-1.507	.469	0.34	.867	102	.000
S30	2.45	1.328	.384	.237	-2.67	-1.254	.469	0.37	.740	102	.000
Curriculum leadership construct and its indicators											

	Mean	Std. Deviation		Skewness			Kurtosis				
L35	4.34	1.076	-0.61	0.24	-2.56	0.49	0.47	1.04	.630	97	.000
L36	4.12	1.114	-1.41	0.24	-5.91	0.31	0.47	0.66	.741	97	.000
L44	3.88	.921	-0.15	0.24	-0.61	1.28	0.47	0.66	.877	97	.000
L138	3.83	1.058	-0.03	0.24	-0.13	0.54	0.47	2.72	.805	97	.000
L39	3.75	.957	-0.51	0.24	-2.13	0.72	0.47	1.15	.842	97	.000
L43	3.72	.886	-0.78	0.24	-3.30	0.73	0.47	1.53	.847	97	.000
L40	3.45	1.242	-0.50	0.24	-2.11	-0.99	0.47	1.56	.876	97	.000
L41	3.14	1.083	0.18	0.24	0.76	-1.07	0.47	-2.10	.362	97	.000
L37	2.95	1.417	0.09	0.24	0.37	-1.38	0.47	-2.29	.851	97	.000
L42	2.87	3.281	0.41	0.24	1.71	1.64	0.47	-2.92	.776	97	.000
Challenges faced by AMM in the implementation of curriculum change construct and its indicators											
	Mean	Std. Deviation		Skewness			Kurtosis				
C47	4.39	.910	-0.63	0.24	-2.65	1.03	0.47	2.19	.693	87	.000
C45	4.29	1.049	-0.63	0.24	-2.68	1.19	0.47	2.53	.742	87	.000
C57	4.26	1.043	-0.38	0.24	-1.60	1.07	0.47	2.27	.708	87	.000
C46	4.09	1.107	-0.53	0.24	-2.24	0.94	0.47	2.00	.829	87	.000
C49	4.07	1.352	-0.26	0.24	-1.07	0.16	0.47	0.33	.675	87	.000
C51	3.98	1.274	-0.87	0.24	-3.64	-0.63	0.47	-1.33	.834	87	.000
C 58	3.86	1.065	-0.84	0.24	-3.53	-0.14	0.47	-0.29	.753	87	.000
C52	3.83	1.353	-0.93	0.24	-3.92	-0.43	0.47	-0.92	.784	87	.000
C54	3.71	1.432	-0.61	0.24	-2.58	-1.14	0.47	-2.42	.832	87	.000
C50	3.68	1.346	-0.62	0.24	-2.61	-0.87	0.47	-1.86	.789	87	.000
C62	3.63	.904	-0.73	0.24	-3.10	0.01	0.47	0.02	.837	87	.000
C53	3.41	1.196	-0.68	0.24	-2.86	-0.67	0.47	-1.43	.853	87	.000
C63	3.15	1.254	-0.38	0.24	-1.57	-0.93	0.47	-1.97	.703	87	.000
C61	3.02	1.166	-0.08	0.24	-0.32	-0.90	0.47	-1.92	.814	87	.000
C59	2.99	1.206	-0.22	0.24	-0.93	-1.00	0.47	-2.11	.900	87	.000

C65	2.95	1.146	0.23	0.24	0.93	-0.97	0.48	-2.02	.806	87	.000
C56	2.73	1.515	0.25	0.24	1.05	-1.44	0.47	-3.06	.907	87	.000
C48	2.66	1.549	0.39	0.24	1.65	-1.38	0.47	-2.93	.813	87	.000
C64	2.37	1.453	0.57	0.24	2.33	-1.21	0.48	-2.50	.879	87	.000
C55	2.33	1.083	0.53	0.24	2.23	-0.84	0.47	-1.80	.813	87	.000
C60	2.13	1.234	0.71	0.24	3.00	-0.71	0.47	-1.51	.889	87	.000

Enablers of AMM role in curriculum change construct											
	Mean	Std.	Skewness			Kurtosis			Shapiro-Wilk		Sig.
E78	3.85	1.175	-0.53	0.24	-	-1.11	0.47	-2.35	.831	81	.000
E77	3.80	1.092	-0.64	0.24	-	-0.36	0.47	-0.76	.791	81	.000
E71	3.61	.999	-0.45	0.24	-	-0.14	0.47	-0.30	.292	81	.000
E72	3.59	1.212	-0.36	0.24	-	-1.02	0.47	-2.18	.819	81	.000
E70	3.42	.962	-0.54	0.24	-	0.02	0.47	0.04	.867	81	.000
E66	2.77	1.143	0.43	0.24	1.8	-1.06	0.47	-2.26	.892	81	.000
E68	2.68	1.108	0.14	0.24	0.5	-0.72	0.47	-1.54	.845	81	.000
E69	2.51	1.357	0.13	0.24	0.5	-1.54	0.47	-3.26	.843	81	.000
E67	2.51	1.022	0.77	0.24	3.2	0.02	0.47	0.04	.758	81	.000
E75	2.50	.999	0.11	0.24	0.4	-0.29	0.47	-0.61	.884	81	.000
E76	2.43	1.328	0.33	0.24	1.3	-1.33	0.47	-2.83	.819	81	.000
E79	2.37	1.043	0.69	0.24	2.9	-0.23	0.47	-0.48	.872	81	.000
E81	2.35	1.205	0.69	0.24	2.9	-0.44	0.47	-0.93	.784	81	.000
E82	2.28	1.420	0.69	0.26	2.6	-0.79	0.51	-1.54	.827	81	.000
E73	2.25	1.138	0.70	0.24	2.9	0.09	0.47	0.20	.813	81	.000
E80	2.07	1.168	0.72	0.24	3.0	-0.52	0.47	-1.12	.865	81	.000
E74	2.02	1.120	0.63	0.24	2.6	-0.56	0.47	-1.18	.797	81	.000

After examining the data normality, it was found that data was not normally distributed for all indicators as demonstrated on Table 4.1. The study went on to establish the reliability of the constructs that contained several indicators or items. The next section examined demographic characteristics of AMMs in PHEIs in Botswana followed by inferential statistics.

Inferential data analysis can follow two broad statistical procedures, parametric and non-parametric. The choice of the statistical significance procedures to use depends on the scale of measurements represented by data, method of selecting participants, number of groups to be

compared, and number of independent variables. Non-parametric tests are used when data is represented in an ordinal scale or nominal scale, when parametric assumptions have been violated, or when the nature of the distribution is not known (Gay, Millis & Airsian, 2009).

Parametric statistical procedures rely on assumptions of normality of the variables used in the analysis. Non-normally distributed variables (highly skewed or kurtotic variables) or those with substantial outliers can distort relationship and significance tests (violation of the these assumptions may lead to type 1 or type 2 error or over-estimation of the significance or effects size and loss of power, that is, the ability to identify difference when it actual exists (Osborne & Waters, 2002; Stoddard, 2010). The results based on the skewnesss and kurtosis showed that most variables were normally distributed. However, the Shapiro tests showed that data was not normally distributed ($P < 0.005$). This suggests that parametric tests may not be applied and the non-parametric statistical procedures could be taken as an alternative. In this study, non-parametric and parametric statistical procedures were applied. Parametric statistical tests of ANOVA, Multiple regression and General Linear Model were applied in this study. Several reasons have been advanced by statisticians for their application on non-normally distributed data. First, Field (2013) cautions that Shapiro tests are sensitive with large sample size reporting even the smallest deviations. These deviations from normality may be attributed to the presence of outliers. Thus, Shapiro-Wilk tests should be used alongside other tests or ways of testing data for normality such as visual displays using P-plots and histograms or frequency polygons or by converting data to Z-scores.

This study used parametric tests such as ANIOVA and regression analysis when data were not normally distributed owing to the robustness of these tests over non-parametric tests. Use of ANOVA and regression analysis was particularly relevant in this study because the end product of the study was the development of a model to enhance AMMs role in the planning and implementation of curriculum change in PHEIs and parametric tests allow for modeling. Non-parametric tests are viewed in literature as resistant to flexible modeling. T- tests, ANOVA and regression analysis can be used with minimal or small deviations of data from normality (Stoddard, 2010; Hollander, Wolfe & Chicken, 2014). A Small violation of these assumptions does not greatly affect the results of tests of significance as they are more powerful than Non-parametric tests (Gay, Millis & Airsian, 2009). Lorenzen and Anderson (1993) posits that F ratio

used in the analysis of variance is very robust to the departures from normality. In addition Van Belle (2002) states that, “It should be noted that the assumptions of normality deal with the error term of the model, not the original data. Assumptions of normality actually show that the residuals are normally distributed and not the variables themselves. Normality is the least important in tests of hypotheses and more over hypothesis tests that are robust to the assumptions of normality”.

In a parametric test, a sample statistic is obtained to estimate the population parameter. Because this estimation process involves a sample, a sampling distribution and a population, certain parametric assumptions are required to ensure that all components are compatible with each other (Yu, 2008; Corder & Foreman, 2014). In the use of ANOVA test specifically, the following parametric assumptions need to be satisfied first: observations are independent; the sample data is of a normal distribution; and scores in different groups have homogeneous variances. If data does not satisfy these assumptions, some actions need to be taken (Yu, 2008; Cox, 2006). One can ignore the restrictions and go ahead with the analysis since research data has hardly been viewed in past studies as being exactly normal and also since many parametric tests such as ANOVA are not affected by the violation of the parametric assumptions in cases where the sample size ($n > 30$). Alternatively one can use the less robust non-parametric tests. Vickers (2005) also argues in support of the use of parametric tests on non-normal data by stating that while parametric tests require data to be normally distributed, for robustness of analysis, they can be used when data is not normally distributed on condition that $n > 30$.

Studies further show that researchers prefer to use the robust parametric tests over non-parametric tests on nonnormally distributed data based on the fact that if a test is robust, the validity of the test cannot be affected by poorly structured data, that is, such a test is resistant to violations of parametric assumptions (Skovlund & Fenstad, 2001 in Yu, 2008; Foreman, 2009). According to Frost (2015), parametric tests can handle nonnormal data and perform robustly with skewed and nonnormal data based on the following conditions: for 1-sample t-test, $n > 20$; for 2-sample t-test, $n > 15$ for each group; and for One-way-ANOVA, $n > 15$ for 2 to 9 groups, and $n > 20$ for 10 to 12 groups. Non-parametric tests perform robustly with small samples ($n < 30$) and hence it is unwise to use them on larger samples especially where $n > 100$ (Frost, 2015; Field, 2013). Frost (2015) further justifies the use of parametric tests over non-parametric tests when

data is not normally distributed by arguing that when sample sizes become too large such as $n > 100$, the sample means follow the normal distribution even if the respective variable is not normally distributed in the population or is not measured very well.

Literature cites a number of reasons why researchers tend to prefer parametric tests over non-parametric tests (Zimmermann, 2000; Freidlin & Gastwirth, 2000; Yu, 2008; Totton & White, 2011). First, non-parametric tests are unable to estimate the population because being non-parametric, they do not make strong assumptions about the population and the researcher cannot make an inference that the sample statistic is an estimate of the population parameter. Second, non-parametric tests demonstrate loss of precision and according to Edgington (1995) in Yu (2008), when there are more precise tests available, it would be unwise to degrade the precision by transforming data into ranked data as allowed for by non-parametric tests. Third, non-parametric tests have lower statistical power (statistical sensitivity) than parametric tests except for a few occasions where $n < 30$. Fourth, non-parametric tests have been observed to give a false sense of security as they are substantially biased by unequal variances even when the sample sizes in groups are equal. Fifth, non-parametric tests such as Mann-U-Whitney test distributions only, that is, they can only show that two distributions are different but do not show how they differ in mean, variance or shape (Johnson, 1995 in Yu, 2008; van Belle, Fisher, Heagerty, Lumly, 2004).

The above is also confirmed by pro-parametric test authorities Swinscow & Campbell (2001) who argue that researchers are rarely interested in the significance test alone but rather would like to say something about the population from which the sample came and this is only possible with parametric tests. More importantly, it is difficult to do flexible modeling using non-parametric tests, for example, it is difficult to allow for confounding factors using multiple regression (Stoddard, 2010; Swinscow & Campbell, 2001; Totton & White, 2011; Thode, 2002).

4.5. Analysis of demographic data of respondents

4.5.1 Descriptive statistics

The demographic details explored in this study are gender, age, level of education, duration of work experience with current employer and department size. All the biographical data of AMMs are shown on Table 4.2.

Table 4.2: Biographical data (N = 104)

	BIOGRAPHICAL DATA	Actual Numbers	Responses %
1	Age:		
	25-30yrs	6	5.8
	31-35yrs	23	22.1
	36-40yrs	25	24
	41-50yrs	32	30.8
	More than 50yrs	18	17.3
2	Gender:		
	Male	65	62.5
	Female	39	37.5
3	Educational qualifications:		
	Diploma	0	0
	Bachelor's degree	14	13.5
	Master's degree	82	78.8
	Doctoral degree	8	7.7
	Others	0	0
4	Work experience:		
	Less than 5yrs	17	16.4
	5-10yrs	36	34.6
	11-15yrs	12	11.5

	16-20yrs	18	17.3
	More than 20yrs	21	20.2
5	Number of staff in department:		
	Less than 5	32	30.8
	5-10 people	27	25.9
	11-15 people	9	8.7
	16-20 people	17	16.3
	More than 20 people	19	18.3

4.5.1.1. Ages of respondents

Results on Table 4.2 showed that approximately 80% of AMMs in PHEIs were in the age group between 31 and 50 years which indicated that a large proportion of AMMs was in the middle age group.

4.5.1.2. Gender of respondents

Results showed that there was no gender parity in the management level in PHEIs in Botswana as most of the AMMs were male.

4.5.1.3. Educational Qualifications of respondents

Results showed that showed that the majority of AMMs were master's degree holders while very few were doctorate and bachelor's degree holders.

4.5.1.4. Work experience of the respondents

Results showed that almost 50% of the AMMs in PHEIs had more than 10 years of experience in academic management which means that they were fairly, but not adequately experienced to be able to effectively plan and implement curriculum change. The above is confirmed by results of interviews which also showed that 50% of AMMs had 10 or more years of experience while 30%

had between 5 and 10 years of experience and 20% of AMMs who responded to the semi-structured interviews had less than 5 years of experience as AMMs in general and had even less experience in the planning and implementation of curriculum change specifically.

4.5.1.5. Number of staff in the Department

Results showed that slightly more than 50% of the departments had 10 or less staff members which indicated that departments in PHEIs were generally small.

The above section analysed and presented the demographics of the respondents. The next section and subsequent sections present analysis of data on the responses specifically targeting the research objectives. Data was collected using a 5-point Likert scale ranging from 1 to 5. Low value of 1 represented strongly disagree and highest value of 5 represented a strongly agree.

Inferential statistics were used after the description of data at each stage to assist in developing a further understanding of the same issue from different statistical applications. Previously, on a check on normality of data that was done in section 4.4, results showed that data was not normally distributed and hence the researcher conducted inferential statistics to test stated hypothesis using the non-parametric Chi-square test. This was to ascertain whether the independent variables identified had a significant influence on the dependent variable of the study, that is, whether the views of AMMs as demonstrated in the descriptive statistics were the same after applying inferential statistics. In cases where parametric tests such as ANOVA were conducted, independent t- test analysis was conducted to establish whether the assumptions of parametric tests were met.

4.6. AMMs views on their role in leading the planning and implementation of curriculum change

AMMs views with regards to their role in the planning and implementation of curriculum change in PHEIs were directed at the conditions under which they performed their roles such as the challenges they faced and their failure to satisfy AMM job requirements, as well as how these conditions affected their ability to effectively lead the curriculum change process. Respondents were asked to rate statements about how they felt they satisfied the different job descriptions. Responses of Strongly Agree (SA), Agree (A), Neutral (N), Disagree (DA) and Strongly

Disagree (SDA) were weighted as 5, 4, 3, 2, and 1 respectively. The sum of the weights were divided by 5 to get a criterion mean of 3 so that responses with mean scores of less than 3 were not accepted and those with mean scores of 3 to 5 were accepted as representing marginal to very high satisfaction of the different job descriptions and hence marginal to effective planning and implementation of curriculum change in the end.

4.6.1. Impact of AMM job requirements

This section analyses the impact of AMM job requirements on the AMM role in the planning and implementation of curriculum change. Descriptive statistics were used first followed by non-parametric test of Chi-square to test whether there was significant variability in the level of agreement or disagreement on the given statements which describes the AMM job requirements. Hypotheses were tested one after the other according to research study variables. The hypotheses were tested at 1% significance level which was more sensitive than 5% to enhance its power test (1% level of significance indicates less chance of results being due to statistical error when compared to the 5%). Questionnaire items on AMM job requirements sought to establish the understanding and ability of AMM to plan and implement curriculum change.

The hypotheses were postulated and tested on each item of the AMM job requirements as shown from Table 4.3 to Table 4.8. Table 15 shows descriptive statistics on AMM job requirements. As part of analysis, lowest value of 1 indicates that respondents rated the statements in each category showing strongly disagreement while a highest value of 5 showed that respondents were in strong agreement with the statement. A low mean score of 1 therefore indicated a negative perception and a mean value of 5 indicated a high positive perception on the statements.

Table 4.3: AMM Job Requirements

AMM job Requirements statements(ranked mean scores)	Mean	Std. Dev.
Experience in the planning and implementation of curriculum change in PHEIs(JR11)	3.06	1.341
Able to effectively plan and implement curriculum change in PHEIs(JR10)	2.91	1.366
Possess adequate knowledge and skills to effectively plan and implement curriculum change in PHEIs(JR9)	2.87	1.348

Adequate training on the planning and implementation of curriculum at their institutions change(JR8)	2.48	1.136
Given a detailed job description at the start of my role as middle manager: (JR6)	2.27	1.416
Have full authority on the planning and implementation of curriculum change (JR7)	2.04	1.093

Results on Table 4.3 showed that AMMs in PHEIs were fairly well experienced but not experienced enough to be able to inspire confidence that they were able to effectively plan and implement curriculum change as indicated by the means score above 3 but below 4. The 5 out of 6 items whose mean scores were less than 3 showed that AMMs did not possess adequate requisite skills, knowledge and authority to effectively plan and implement curriculum change in PHEIs.

As a way of confirming results on Table 4.3 about AMM job requirements, inferential statistics were used. Non-parametric test of Chi-square was used to test whether there was significant variability in the level of agreement or disagreement on the given statements which described the AMM job requirements. Chi-Square test was used to test similarities between groups of categorical data.

Hypothesis 1: AMMs were given detailed job descriptions at the start of their role as AMM.

Table 4.4: Job Description

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi-Square	Asym p.
I was given a detailed job description at the start of my role as middle manager	10	19	4	27	44	47.058 ^a	.000

The calculated P-Value on Table 4.4 shows that $P < 0.01$ which is statistically significant, hence the hypothesis that AMMs were given detailed job description at the start of their role as middle manager was rejected leading to the retention of the alternative hypothesis that the AMMs were not given detailed job description at the start of their role as middle manager. The frequency of negative responses was greater than that of positive responses showing that many AMMs disagreed that they were given detailed job descriptions before the start of their role as middle

level managers. This result confirmed the earlier result on Table 4.2 which showed that AMMs were not given detailed job descriptions at the start of the roles (item mean score of 2.27 which was very low when compared to a high value of 5). AMMs lacked adequate guidance on what their roles in PHEIs in general and in curriculum issues including curriculum change in particular was at the start of the roles.

Interviews conducted confirmed that most AMMs were not given detailed job descriptions at the beginning of their roles. The few who were given the job descriptions continued to be assigned many other tasks outside the tasks highlighted in the job descriptions. Other AMMs also indicated that they were given verbal job descriptions which tended to be changed regularly to the whims of the owner-managers. Some AMMs also indicated in the interviews that the job descriptions given were not detailed enough especially on issues of curriculum and curriculum change. Among some of the comments given by the AMMs on the issue of job descriptions given were the following:

“I was not given a written job description at my institution at the start of my role as AMM but was just verbally informed of what I was expected to do as a result the tasks I do change almost on a weekly basis without consultation”. (AMM9)

“I was given a job description but I wouldn’t say it was clear on issues of curriculum and curriculum change. I was just given the letter that showed that I was now the AMM for the computer department, I report to the head of division, I should make sure the department runs properly and if there was anything I needed I consult the head of division. As to how I was supposed to ensure the department runs properly I was not told”. (AMM2)

“Yes I was given a detailed job description but my role on curriculum development and change was silent. The job description articulated the general tasks I was to perform as AMM though it fell short on defining my role in curriculum development and change. Perhaps the assumption was that as AMM I was supposed to know that curriculum review was also part of my responsibilities”. (AMM5). A similar comment was given by AMM4.

“Yes I was given a job description but it was not detailed enough. It just spelt out what I was expected to do in the institution in very broad terms. I think they are about five or six broad tasks I am supposed to do. In simple terms the job description is not clear at all and this makes it difficult for me to perform to expected standards. I just try to do what I think the owners want me to do based on my past knowledge and experience as AMM”. (AMM1)

“Of course I was given a job description but you know these private institutions do not always want to make it clear what you must do in terms of role because they want you to do everything and anything. I am not happy with how hazy my job description is. All this makes it difficult to concentrate on my curriculum duties due to many responsibilities I am assigned as the job description has been left open for any possible assignments. I am frustrated to be honest with you”. (AMM7). AMM10 and AMM3 also echoed similar sentiments.

Hypothesis 2: AMMs have full authority on the planning and implementation of curriculum change.

Table 4.5: Full Authority of Planning and Implementing Curriculum Change

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi-Square	Asymp . Sig.
I have full authority on the planning and implementation of curriculum change	3	11	12	38	39	54.23	.000

The calculated P-Value in Table 4.5 shows that $P < 0.01$ is statistically significant, the hypothesis was rejected, and this indicates that AMM did not have full authority on the planning and implementation of curriculum change in PHEIs. This result of hypothesis testing confirms earlier results on Table 4.3 that showed that AMMs believe that they did not have full authority in the planning and implementation of curriculum change in PHEIs (item means score of 2.04 which is very low).

Interview results confirmed this lack of authority on the part of AMMs as due in large part to the fact that internally, PHEIs institutions are highly controlled by their owner-managers who prescribe what needs to be done or changed and when. Externally, the higher education environment was highly regulated with government regulatory authorities setting stringent

regulations on issues of curriculum change and implementation. Among the comments given by the AMMs concerning the extent of their authority on matters of planning and implementation of curriculum change were the following:

“The environment at my institution is too strict and highly controlled by the owner-managers who seem bent on personalizing institutional operations. The owner-managers on many occasions prescribe what needs to be done and how, including issues related to curriculum change. This has left us AMMs with very little, if any, authority over curriculum issues including curriculum change at our institution”. (AMM1).

“Being a private entity, my institution is highly controlled by the owners and this makes it difficult for AMMs to be initiative and innovative on issues of curriculum change. The high centralisation of decision-making at my institution is also another issue that takes authority on curriculum change matters away from us AMMs. We are just powerless and our positions in these institutions seem more ceremonial. We are supposed to be able to drive change and improve learning and teaching at the institution but we cannot because we have close to none in terms of authority”. (AMM5)

“All top management positions at my institution are occupied by family members who make all decisions about almost all school operations including matters which deal with curricula. We hardly get consulted as AMMs but are just told what to do and what curriculum to consider introducing or changing. We just have no authority on anything at all in this institution. The owners of this institution have managed to also create a culture of fear in the institution and people including AMMs like us are even sometimes afraid to contribute suggestions even on curriculum matters fearing victimisation”. (AMM3)

“All our authority on matters of curriculum change has been eroded by the fact that the owner-managers of my institution have centralised all decision making and have set up a very strict and controlled work environment. These owner-managers have a tendency of imposing both new curriculum to be introduced and which curriculum needs to be reviewed. In many cases such impositions which are mostly not backed by adequate research and consultations have had both planning and implementation problems because of lack of both human and material resources”. (AMM10)

“I have no authority over my department business at all at my institution. AMMs at my institution including myself are now used to just waiting to be told what to do because if you initiate anything you may receive a warning for being too forward. Sometimes the top management at my institution can even do the review of your programme without informing you thus showing you that you do not have any authority at all on whatever happens in the institution. I remember one semester I had reviewed a programme and sent it to government curriculum regulators for approval. When the responses from government regulatory authorities came back concerning the review, top management instead of giving the comments to me, they responded to the comments by doing whatever they thought were the wanted corrections and then sent back the edited version of the reviewed programme to the regulators for final approval. I only got to know about this through the executive secretary. Unfortunately in most of these PHEIs that include my institution as well, most of the curriculum work that is tempered with by the top management without consulting the respective AMMs in many cases fails to be approved by regulatory authorities because of poor review quality”. (AMM8)

“At my institution I was informed in no uncertain terms that I must wait to be told first before I introduce anything. The top management made it clear that the institution was theirs and everything no matter how small goes through them or somebody will lose their job. The irony of it all is that if you also go and inform the same top management with justification, that a certain programme needs to be reviewed to meet market needs, you may again be reprimanded for trying to increase costs by reviewing programmes. So what can we do my brother? Some of us now just do our job and wait to be told when it is time for a programme to be reviewed then we do it. I do not want to lose my job”. (AMM4)

Hypothesis 3: AMMs received adequate training on the planning and implementation of curriculum change at the PHEIs where they are currently working.

Table 4.6: Adequate Training

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi-Square	Asymp. Sig.
I received adequate training on the planning and implementation of curriculum change at my institution	23	6	18	24	32	29.476 ^b	.000

As shown on Table 4.6, the P-Value was statistically significant as ($P < 0.01$) level of significance hence the hypothesis that “AMM received adequate training on the planning and implementation of curriculum change their institution” was rejected. The null hypothesis that AMM did not receive adequate training on the planning and implementation of curriculum change was retained.

There was agreement between the quantitative results above and the qualitative results from the interviews with regards to whether AMMs received adequate training on curriculum change at the institution where they are working. Some of the AMMs indicated during the interviews that they had not received and were not receiving any training on curriculum development and change at their institutions and whatever knowledge of curriculum development and change they were using to develop or review curriculum was based on the training they received during their years of formal training as students at universities and colleges. AMMs mentioned that there were no attempts by the top management in PHEIs to introduce training for both AMMs and other staff on curriculum change because, as other AMMs highlighted, owners of the PHEIs see these trainings as unnecessary costs rather than important investments. Among some of the comments given by the AMMs with regards to training at the institutions where they were working were the following:

“To me based on how these institutions operate, PHEIs are businesses which are always looking at the bottom line rather than seeking to improve student learning through periodic curriculum change. As a result, such institutions which include where I am working are always suspicious of and not ready to introduce changes in their operations including changes in the curriculum as they feel such changes increase costs. Top management therefore does not feel trainings in curriculum change are important. So yes, I am not aware of any training that has been

conducted by my institution on curriculum change. On my part though I feel training on curriculum change is very critical in ensuring that all staff including AMMs like us are capacitated on matters of curriculum change especially when taking into consideration the fact that my institution and also most of the other PHEIs are always involved in the development and review of curriculum”. (AMM3)

“I have not heard of or participated in any training on curriculum in general and on curriculum change in particular at my institution. I think by not providing opportunities for training on curriculum change to its members, my institution believes that anybody can successfully plan and implement curriculum change in PHEIs, which is wrong. People need to be regularly updated on the skills of planning and implementing curriculum change in PHEIs. Fortunately myself I received training on curriculum development including curriculum change during my years at university when I was doing a post graduate diploma in education. As a result I am able to plan and implement curriculum change. Even with the training I received I still feel that participating in refresher trainings on curriculum change is important for all AMMs as curriculum leaders”. (AMM10)

“Though I have a cumulative total of 20 years of experience as AMM when also considering where I have worked before, I have only been here at my current institution for the last seven years and have never participated in or seen any training or workshop being hosted on curriculum change. As a result of this lack of training, most staff lack capacity to effectively participate in curriculum reviews leaving only the AMM with the responsibility for doing most of the work with regards to the planning and implementation of curriculum change leading to role overload. I am just using my own past knowledge from my previous trainings and experience on curriculum development and change to perform duties at my current institution”. (AMM8).

Hypothesis 4: AMMs possess adequate knowledge and skills to effectively plan and implement curriculum change

Table 4.7: Adequate Knowledge and Skills

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Chi-Square	Asymp. Sig.
I possess adequate knowledge and skills to effectively	13	31	12	19	28	13. ⁶	.006

The calculated P-value on Table 4.7 is less than the 0.05 ($P < 0.01$), indicating that this was statistically significant hence the hypothesis that the AMMs possessed adequate knowledge and skills in the planning and implementation of curriculum change was rejected and the null hypothesis that AMMs did not possess adequate knowledge and skills to effectively plan and implement curriculum change was retained.

Results from interviews conducted with AMMs also confirmed that there was convergence between the quantitative results (Table 4.7) and the qualitative results with regards to the fact that AMMs did not possess adequate knowledge of curriculum change. Most of the AMMs (6 out of 10) indicated that they did not possess adequate knowledge of curriculum change while those who said they possessed adequate knowledge based their arguments on the curriculum change knowledge they acquired during their years of formal training as students at universities and colleges. AMMs indicated that most of them will certainly benefit from in-house training on curriculum development and change, if opportunities for these trainings were made available at their institutions.

Among the comments from AMMs interviewed with regards to whether AMMs possess adequate knowledge and skills to effectively plan and implement curriculum change in PHEIs or not, were the following:

"I want to confess, I do not have adequate knowledge of curriculum change because I have never had the chance to go through some formal training on how to plan and implement curriculum change. I am still trying to learn ever since I was appointed an AMM in my

department. I have one or two fellow AMMs who are always ready to assist me when they have time”. (AMM4)

“I was just appointed into the position of AMM in 2014 and have only one year working in this position. Before I joined the PHEI where I am currently working as AMM, I was working as a secondary school teacher for the past thirteen years until I got my master’s degree in business management and then moved to my current employment at a PHEI. I have never been trained in curriculum change or even led the curriculum change process hence my knowledge on this issue is very limited. I hope to start leading the curriculum change process this year since top management informed me that there are some programmes that need to be reviewed. This will be an opportunity to gain an understanding of what really curriculum change entails. I call this learning by doing”. (AMM7)

“The little knowledge I have on curriculum change, I have acquired it through my years of experience as an AMM. I therefore feel that I still need more training especially on the planning of curriculum change for me to have enough knowledge and confidence to effectively plan and implement curriculum change. I really feel that my knowledge of the planning and implementation of curriculum change is still very low. My ability to plan and implement curriculum change cannot only be as a result of experience rather than training if I am to be a competent AMM in curriculum change.” (AMM5)

“I joined the PHEI where I am working 2 years ago. Before I came to this institution I was an information technology (IT) technician in industry for fifteen years. Currently I am AMM in the department of computer studies at my institution because I managed to do an MSc in Computers. As a technician I was never, as you can imagine, been involved in curriculum development or change. My knowledge of curriculum change up to now is very low despite my attempts to learn as I play my role in the planning and implementation of curriculum change in my current department. My colleagues in the department who work under me are very helpful on issues of curriculum change as we help each other during the process of the planning and implementation of curriculum change. I definitely will benefit from in-house or even an external training on curriculum development and change if my institution can organise”. (AMM3)

“I have been an AMM for the past 11 years. In terms of my knowledge in curriculum change, I have never received any formal training. What I know very well is the subject matter of my discipline as a result of my university education up to post graduate. In terms of having the requisite knowledge of the planning and implementation of curriculum change, no, I have no formal training on this. All of us in the department are just learning as we go. I am just using my 5 years of experience to help me succeed in the planning and implementation of curriculum change. There is a standard document at my institution about curriculum development and training which we are supposed to follow. Unfortunately nobody attempted to train us on how to use the document so we are learning as we go. It is experimentation really. I personally think that AMMs in PHEIs need to be appointed on the basis of their training on curriculum development and change because these institutions are developing many programmes these days yet most of us AMMs have very little knowledge of the process of developing and reviewing programmes. Unfortunately in PHEIs sometimes you are just appointed on the basis of other qualities rather than your specific knowledge and you cannot say no because you will automatically be fired”. (AMM6)

Other AMMs (4 out of 10) indicated that they had adequate knowledge of curriculum change. They indicated that they gained this knowledge from their years of formal training at colleges and universities as well as through experience. Some of their comments with regards to their possession of adequate knowledge of the planning and implementation of curriculum change were as follows:

“I trained on issues of curriculum first as teacher at a teachers’ college then went to university to further my studies where I also got schooled on curriculum development and implementation. This marked the important phases when my knowledge of curriculum development, implementation and change was developed. I also worked as a school headmaster and an HOD for 15 years in secondary schools and colleges with one of my responsibilities being leading curriculum change. I have worked for a publishing house before where I was in charge of book publishing with one of my tasks in the process being to coordinate with the national curriculum development unit in checking textbooks to be published were in line with the stipulated curriculum and syllabus requirements. All the above experiences enhanced and enriched my knowledge and understanding of curriculum issues in general and curriculum change in particular”. (AMM1)

“I have received formal training on curriculum in general which included curriculum development, implementation and change during my studies on the post graduate diploma in higher education at a university in South Africa. This qualification gave me a good grounding on curriculum development and particularly curriculum change. This knowledge is currently helping me as AMM to lead curriculum change in my department. I feel that if I had not undergone the training on curriculum issues I would be having difficulties effectively planning and implementing curriculum change at my institution. I am therefore of the opinion that leading curriculum change in a department without having received the requisite training is not good for an AMM”. (AMM9)

“My knowledge of curriculum change is mostly based on my eight years of experience as AMM. During all these years I also received training from Human Resources Development Council (HRDC) which is a national curriculum regulatory body on issues of curriculum development and review and then used the knowledge acquired to review curriculum from other PHEIs on behalf of HRDC as well as to review programmes in my own department at my institution. Currently, I would say I have adequate knowledge on the planning and implementing of curriculum change at my institution”. (AMM2)

“I have more than 20 years of experience as AMM in HE and most of this experience was devoted to developing and reviewing curricula. I am now aware of the different pitfalls as well as success points in the curriculum change process. Over and above this I have done extensive studies on curriculum development, implementation and change, that is, in most curriculum related issues. I can tell you confidently that I am very capable of planning and implementing curriculum change in Higher Education Institutions (HEIs). Almost all the programmes that I review get the approval of national regulators” (AMM8)

Hypothesis 5: AMMs are able to effectively plan and implement curriculum change in PHEIs

Table 4.8: Effectively Plan and Implement Curriculum Change

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Chi-Square	Asymp. Sig.
I am able to effectively plan and implement curriculum change in PHEIs	16	14	17	36	20	15.30 ^b	.004

The findings on Table 4.8 show that the calculated $P < 0.01$, was statistically significant thus the null hypothesis that AMMs were not able to effectively plan and implement curriculum change in PHEIs was accepted and the alternate hypothesis that AMMs were able to effectively plan and implement curriculum change was rejected. These results indicated that AMMs had difficulties in carrying out their responsibility of planning and implementing curriculum change in PHEIs due to issues such as among others, lack of knowledge caused by lack of training.

Quantitative results on Table 4.8 were confirmed by qualitative results from the interviews with AMMs which showed that AMMs were not able to effectively plan and implement curriculum change in PHEIs. This was apparent from the fact that most of the AMMs (6 out of 10) indicated that because they had not received formal training on the planning and implementation of curriculum change they faced challenges planning and implementing curriculum change at their institutions. Some AMMs indicated that they were working in industry before and hence had very little to none, knowledge and experience of curriculum change that could assist them to effectively plan and implement curriculum change at their institutions.

Among the comments made by AMMs during the interviews highlighting that AMMs were not able to effectively plan and implement curriculum change in PHEIs were the following:

“I have been working at my institution as AMM since 2008 and I only have managed to successfully review only one programme out of three programmes. The problem is that lack of training and hence lack of knowledge on curriculum planning and implementation that is affecting the way we play our role in curriculum change as AMMs”. (AMM6)

“No I am not able to confidently say I can effectively plan and implement curriculum change in my department. I need knowledge and skills to do this my brother. Other AMMs and I at my institution need training but we are not getting this training on curriculum issues at my institution. Let me tell you, it is not an easy process to review a curriculum from my experience and people like us are facing real challenges when planning and implementing curriculum change in our institutions. As a result not many of our reviewed programmes are approved by the national regulators. It is very demoralizing when your reviewed programmes are always returned by the regulators because of certain omissions or commissions. We ask for training to

acquire the skills and our top management do not seem interested. It is frustrating I tell you”, (AMM5)

“Certainly not. I cannot stand in front of people and confidently say I am able to effectively plan and implement curriculum change. I am just doing what I can and with regards to my reviewed programmes, some are approved and some are not. What I can tell you is that we are still learning and this process of being able to effectively plan and implement curriculum change as far as I am concerned is still work in progress among most of my fellow AMMs. This situation is made even difficult by the fact that we receive very little support from the top management when we are reviewing and implementing curriculum change”. (AMM7)

“Look my friend, you can only be able to effectively plan and implement curriculum change if you knew what the whole process of curriculum change is all about but I am just from industry and this is my second year in a higher education institution as manager. Even as top managers suggest that I learn from others, I need training. I have no training at all on curriculum development or review”. (AMM3)

“I and other AMMs at my institution have been involved in the review of programmes ever since our institution moved from franchised programmes in 2008 to current but I cannot say we are able because we lack adequate knowledge of planning and implementing curriculum change. Many of the programmes we reviewed and sent to the national regulatory agencies are always sent back for corrections because certain procedures or steps have not been followed”. (AMM2)

Some of the AMMs however indicated that they were able to effectively plan and implement curriculum change in their departments. Among some of the comments they gave were the following:

“I have been reviewing programmes at my institution since 2007 and my ability to successfully review programmes led to me being selected by the national programme regulatory agency called the Human Resources Development Council (HRDC) in Botswana to help in the review of programmes from other institutions. I have been contracted by HRDC to do programme review for the last 5 years. So Yes, I believe I am able to successfully review curricula”. (AMM9)

“Planning and implementing curriculum change in HEIs including PHEIs has been one of my many roles over the past 20 years. I have reviewed many programmes which have been approved by regulatory authorities and which are in use in different colleges and universities where I have worked before. So definitely I am very able to effectively plan and implement curriculum change in my department”. (AMM8)

“My many years of experience in the planning and implementation of curriculum change have really assisted me in understanding the process of planning and implementing curriculum change in PHEIs besides having received formal training on curriculum issues. The formal training on curriculum development I received also helped me a lot. I am therefore confident to tell you that even with the formal curriculum development training I received coupled with many years of reviewing curricula at my institution, I can successfully plan and implement curriculum change in my department” (AMM2)

“Having been a headmaster and also head of department in secondary schools and in universities respectively for a combined period of 15 years gave me of both the practical and theoretical grounding of the planning and implementing of curriculum. I can challenge anybody to give me a curriculum in my area of specialisation and I will successfully review it and get the review approved by the regulatory authorities. I am therefore very effective in the planning and implementation of curriculum change” (AMM1)

Hypothesis 6: AMM have adequate experience in the planning and implementation of curriculum change in PHEIs

Table 4.9: AMM have Experience in the planning and implementation of curriculum change

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi-Square	Asymp. Sig.
Experience in the planning and implementation of curriculum change in PHEIs	16	25	13	33	15	13.882 ^c	.008

The calculated value of P as shown on Table 4.9 is greater than the level of significance i.e., $p < 0.01$, ($P = .008$). Thus the hypothesis that AMMs had adequate experience in the planning and

implementation of curriculum change was rejected. It was therefore concluded that AMMs did not have enough experience in the planning and implementation of curriculum change in PHEIs. These results confirmed earlier results (item with mean score of 3.06) that AMMs had a fair level of experience but not adequate enough to be able to effectively plan and implement curriculum change in PHEIs.

The above quantitative results were also confirmed by comments from AMMs during interviews. AMMs indicated that while they had been AMMs for periods ranging from 5 to 20 years, most of them only led the planning and implementation of curriculum for periods of up to 5 years. Such a short period would certainly not give the AMMs enough knowledge and skills to effectively lead curriculum change. The involvement of most of the AMMs with curriculum change was mostly during the period when their institutions began transforming their curricula from franchised curriculum which was expensive and in many cases did not address local needs to local curriculum. Some of the AMMs also indicated that they just got appointed into their AMM positions without any relevant experience and were still learning the art of planning and implementing curriculum change. Among some of the comments the AMMs gave with regards to their years of experience in the planning and implementation of curriculum change were the following:

“My participation in curriculum change spans over a period of 3 years despite being an AMM for 7 years. I got involved in leading curriculum change when we reviewed our first programme in 2011. I would say I am still a bit raw with regards to being able to plan and implement curriculum change”. (AMM5)

“I want to be honest with you, I have been an AMM at my institution for the past 5 years and I have reviewed only one programme ever since I started working there. It seems like top management at my institution is afraid to review programmes because of possible costs involved. Every year the top management tells us that we are going to review some more of our programmes but nothing happens. So in terms of experience in curriculum change, I have only one year”. (AMM4)

“I joined my institution two years ago and was promoted into the position of AMM a year later. I therefore have one year planning and implementing curriculum change. I have never held the position of AMM in HE before but was a supervisor in industry. My quick promotion at the PHEIs where I am currently working was as a result of the fact that I was the only person in a department of 10 members that had a master’s degree. So I have only 2 years of experience in the planning and implementation of curriculum change”. (AMM3)

“I have been an AMM over the last 20 years in PHEIs. In this role I was mostly involved in curriculum change and development. I can confidently tell you that with these many years of experience, I consider myself very good and effective in the planning and implementation of curriculum change in PHEIs”. (AMM 8)

“This is my first year in leading curriculum change since I was promoted to AMM last year. Due to this short period, many things in the planning and implementation of curriculum change are still new. I am always working with members of my department to ensure that we assist each other in coming up with curriculum changes in our department programmes since my university is also moving away from franchised programmes to locally developed programmes”. (AMM7)

“I have 7 years of experience as AMM doing curriculum change. I have been at my institution for the past 12 years but curriculum change in earnest began in mid-2008 when all PHEIs started moving from out-sourced programmes to programmes that were revised or developed by the institutions themselves. I feel that overall I am capable of playing my role in the planning and implementation of curriculum change”. (AMM9)

“Out of my 6 years of experience as AMM, I have approximately 4 years of experience in the planning and implementation of curriculum change. I therefore feel that I still lack enough experience especially in the planning of curriculum change. I am confident that with a few more years I will be able to handle the whole curriculum change process”. (AMM4)

“I have 15 years of experience as AMM. During all these 15 years, I led curriculum change. In fact I started leading curriculum change as AMM when I was headmaster in secondary schools

up to the time I moved to colleges and universities including where I am currently working”.
(AMM1)

4.6.2. Planning curriculum change

Table 4.10: Planning curriculum change

Planning curriculum change statements(Ranked means scores)	Mean	Std. Dev.
Articulate to department staff the benefits of curriculum change for students (P19).	4.09	1.058
Seek the views of industry about the need to review the department	4.03	1.170
Assess together with department staff, skills the department wants all learners to develop and whether these skills can be developed adequately through the current or a revised curriculum (P13).	4.01	1.029
Evaluate together with department staff, the current curriculum to identify its strengths and weaknesses so as to note which curricula component(s) require (s) change (P12).	3.89	1.131
Set up clear and effective communication procedures to ensure smooth flow of information during curriculum change (P25).	3.84	1.231
Seek the views of staff about the impact curriculum changes will have on them in terms of the expertise needed of them to plan and implement the curriculum change effectively (P16).	3.75	1.1
Evaluate whether additional resources might be needed to support curriculum change and whether meeting these resource needs will not negatively impact other key department areas and if so how this will be	3.66	1.0
Appoint a department team to take responsibility for coordinating the planning of curriculum change (P18).	3.63	1.2
Ensure that all department staff are always involved in decisions about curriculum change (P20).	3.62	1.2
Seek the views of academics from comparable institutions about the need to review the department curriculum (P14).	3.38	1.4
Set realistic deadlines for the planning of curriculum change (P22).	3.33	1.2
Inform learners about the curriculum change by explaining the rationale for any changes, and also reporting progress and successes to them once	2.51	1.4
Cost the demands on resources realistically (P24).	2.43	1.2

Come up with a budget dedicated to staff development on curriculum	2.22	1.2
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From Table 4.10 it can be seen that out of the 13 attributes of effective curriculum planning, AMMs believed that they demonstrated ability to effectively plan curriculum change in only 3 attributes which had mean scores above 4. In the 8 attributes on the effective planning of curriculum change which had mean scores above 3 but less than 4, AMMs showed that they were fairly able to perform these activities during the planning of curriculum change. AMMs also showed that they were weak in the planning curriculum change in 3 items that had mean scores of less than 3. The overall picture depicted by the above results was that the AMMs were overall fairly able to plan curriculum change and there was need for them to improve.

Results on Table 4.10 also showed that the deviation on the mean scores of all the items showed little variability as it hovered slightly above 1. This showed that there was general agreement among AMMs on how they viewed their role in the planning of curriculum change in PHEIs.

The above results of the quantitative phase of the study showed agreement with the qualitative results from interviews with 10 AMMs. With regards to the planning of curriculum change, most of the AMMs interviewed indicated that overall they needed to improve the way they planned curriculum change. During the interviews, AMMs also indicated that as part of curriculum planning they set up clear structures and communication procedures to ensure that the whole process of curriculum change moved smoothly. AMMs raised a number of issues with regards to how they plan curriculum change. Some of the comments given by AMMs on how they planned of curriculum change were as follows:

“At my institution, the starting point of the planning of curriculum change is always a needs analysis to locate any gaps in the current curriculum with regards to how the curriculum answers to the prevailing needs of society. Once gaps are identified and a curriculum committee is established, we begin the process of interacting with industry, benchmarking with comparable institutions and researching to ensure that we come up with the right curriculum changes”.
(AMM3)

“We have been engaged in curriculum change for the past 5 years at my institution. The most important step we take to ensure the effectiveness of curriculum change is to consult with industry to ensure that curriculum changes we come up with enable our graduates to be employable”. (AMM1)

“Communication is an important aspect of the effective planning of curriculum change. I feel that every AMM should set up clear communication strategies to ensure smooth information flow to all people involved in the planning of curriculum change as well as to top management so that they are kept in the loop for them to be able to support AMM initiated curriculum change efforts”. (AMM7)

“One major challenge that affects our efforts to effectively plan curriculum change at our institution is that we are not assured of adequacy of resources as issues of budgets and costing of curriculum change requirements are the preserve of top management. We are just informed that our department budget for a particular year is this or that without any consultation and we have to work within that budget for all anticipated curriculum changes”. (AMM5)

“When planning curriculum change there are factors which I consider of primary importance, and which AMMs should take into consideration when planning curriculum change. These factors include the issue of capacity, that, checking whether the department has capacity in terms of human and material resources to be able to implement the planned changes, the issue of bench marking with comparable institution to ensure standards of the programme are comparable and maintained, interacting with industry to ensure that curriculum changes meet the needs of industry, and finally the issue of ensuring effective communication during both the planning and implementation of curriculum changes. I feel if AMMs take note of these issues curriculum planning will not only be successful but implementable too”. (AMM6)

4.6.3. Curriculum leadership

Table 4.11: curriculum Leadership

curriculum leadership statements (ranked mean scores)	Mean	Std. Dev
Providing a clear vision to the department and communicating it in a clear and inspirational way to all department staff members(L35)	4.34	1.1

Explaining what curriculum change means for department staff and, most importantly, for learners, in positive terms (L36)	4.12	1.1
Ensuring that the senior management is continually updated about the progress in the planning and implementation of curriculum change to ensure continued top management support(L44)	3.88	.90
Having a clear rationale for change that is grounded on detailed facts and accurate research about curriculum change in the department(L38)	3.83	1.1
Motivating individual department staff member to contribute to the curriculum change process(L39)	3.75	.96
Being clear and firm about what is negotiable and what is fixed, so that energies are maximised, conflict is reduced and the direction is clear during	3.72	.89
Having a clear communication plan at the outset and keeping to it during both the planning and implementation of curriculum change(L40)	3.45	1.2
Creating opportunities to talk to individuals, teams and the whole department about the curriculum change and its progress during both the planning and	3.14	1.1
Arranging regular department meetings as a means of updating all department staff on the progress of curriculum change(L37)	2.95	1.4
Mentoring and coaching department members during both the planning and implementation stages of curriculum change(L42)	2.58	1.3

From Table 4.11 AMMs believed that in the roles indicated by the two items which scored means higher than 4, they performed very effectively in leading the planning and implementation of curriculum change in PHEIs. Table 4.11 also showed that AMMs believed that in the roles indicated by the six items that scored means of more than 3 but less than 4, the AMMs performed these roles satisfactorily when leading the planning and implementation of curriculum change in PHEIs. Results also showed that AMMs believed that they did not perform effectively in leading the planning and implementation in the two items whose mean scores were less than 3. Results also showed that the deviation from the mean scores of all the items showed little variability in the way the AMMs responded as the standard deviations hovered slightly above 1, meaning that there was general agreement on how AMMs viewed their role in leading the planning and implementation of curriculum change in PHEIs.

Results from interviews also confirmed earlier results from the quantitative phase. Interview results showed that AMMs were overall able to lead curriculum change in their departments. The AMMs acknowledged that in both quantitative and qualitative results that the centralised nature

of management in PHEIs where some decisions on curriculum and curriculum change were just imposed by the top management, and where AMMs had no authority but had to seek permission on even minor operational issues concerning curriculum change, made it difficult for the AMMs to effectively lead curriculum change. Despite these setbacks, AMMs who were interviewed were of the opinion that using leadership styles that promoted teamwork and that guaranteed department members an opportunity to maximally participate in curriculum change was a sure guarantee for the success of the curriculum change process. Among some of the AMMs interview comments that highlighted the need for an-all-involving leadership style in departments during both the planning and implementation of curriculum change were the following:

“As part of leading curriculum change in my department, I motivate department members as well as ensure that they all get the opportunity to effectively participate in the curriculum change process. At the same time I also at times show firmness to ensure that there is no slackening in terms of effort required during the curriculum change process”. (AMM1)

“To effectively lead curriculum change, I distribute roles so that the curriculum change process is seen as everyone’s responsibility in the department. I believe that most curriculum changes that fail are due to AMMs as curriculum leaders who always want to do everything by themselves instead of distributing leadership to subordinates to ensure that the skills and knowledge of every member of the department are utilized. However I should also point out that the success of most of the curriculum leadership efforts we use as AMMs at our institutions are affected by the fact that the work environment is highly controlled and strict but we try our best at department level”. (AMM6)

“Promoting teamwork and always motivating and inspiring subordinates too me are the best ways of leading and guaranteeing successful curriculum change. This is what I do in my department. I think AMMs should also start moving away from the hero mentality where all recognition for the success of the curriculum change process is for the AMM. This mentality where AMMs think they know it all and they can do everything alone is a recipe for curriculum change failure as department members will fold up their arms and let the AMM do it alone. I always try to use a leadership style that promotes collaboration in my department as I feel this is

critical for curriculum changes to succeed. I feel that gone are the days when AMMs feel that they can just command their way to successful planning and implementation of curriculum change. I feel that despite the fact that there is no culture of collaboration at institution level at my institution, AMMs like me should try to ensure that all members work together at department level for the planning and implementation of curriculum change to succeed". (AMM10)

"I think as AMMs we are trying our best to ensure effective leadership of curriculum change in our departments. However, most of our efforts count to almost zero because of the harsh environment in which we work at our institutions. At my institution particularly, it is very difficult to show one's leadership qualities because decision making is centralised and every time an AMM has to seek permission from top management to even get a room to hold a curriculum change meeting with department members. Everything we do is monitored at my institution. One day we were chased out of a room where we were holding a department meeting like small children by institution security guards because they felt we had not sought permission yet we had done that but somebody held on to the request along the reporting line. This is one of the many example of how highly controlled the work environment in the owner-managed PHEIs is". (AMM8)

4.6.4. Challenges faced by AMM in the planning and implementation of curriculum change

Table 4.12: Challenges faced by AMMs

Challenges faced by AMMs in the implementation of curriculum change statements(Ranked mean scores)	Mean	Std. Dev
Role strain (C47)	4.39	.9
A highly strict and controlled work environment at my institution(C45)	4.29	1.0
High workloads as academic middle managers have to teach and also do other administrative work in the department(C57)	4.26	1.0
Role conflict (Pressure to perform in two or more incompatible roles) (C46)	4.09	1.1
Lack of autonomy (C49)	4.07	1.3
A highly regulated higher education environment that slows down the pace of curriculum change in PHEIs(C51)	3.98	1.3
Pressure to perform many other institution-wide administrative functions	3.86	1.1

outside department responsibilities(C58)		
Institutional culture that does not foster collaboration and is characterised by a silo approach to performing responsibilities (C52)	3.83	1.3
Lack of institutional opportunities for on-going and relevant professional training and development for staff on the planning and implementation of curriculum change(C54)	3.71	1.4
Role ambiguity (C50)	3.68	1.3
Lack of adequate time allowed for by the institutional management for AMMs to effectively plan and implement curriculum change(C62)	3.63	.90
Lack of adequate resources to effectively support the planning and implementation of curriculum change(C53)	3.41	1.2
Having to satisfy at the same time the curriculum change demands of two competing groups namely top management (C63)	3.15	1.3
Top management of the institution resist curriculum change because of status quo comfort.(C61)	3.02	1.2
Lack of support of academic middle managers from top management during curriculum change(C59)	2.99	1.2
Staff shortage in the department that increases staff workloads(C65)	2.95	1.1
Negative attitudes and lack of commitment towards curriculum change by department staff(C56)	2.73	1.5
Role mismatch(C48)	2.66	1.5
Poor team spirit in the department(C64)	2.37	1.5
Lack of knowledge of how to plan and implement curriculum change (C55)	2.33	1.1
I lack effective leadership skills to effectively drive curriculum change(C60)	2.13	1.2

From Table 4.12, it is apparent that AMMs faced many challenges during their planning and implementation curriculum change in PHEIs. Five items with mean scores higher than 4 indicated the major challenges and major hindrances to the effectiveness of AMMs in their roles in curriculum change. Table 4.12 also showed that AMMs perceived nine challenges with mean scores less than 4 but greater than 3 as posing moderate challenges in the way AMMs perform

their role in the planning and implementation of curriculum change. Only 7 out of a total of 21 challenges were viewed by AMMs as minor challenges and hence less severe to seriously affect their role in the planning and implementation of curriculum change. Overall, results above showed that AMMs faced many challenges (moderately major to major challenges) during their planning and implementation of curriculum change in PHEIs. The deviation from the mean scores of all the items also showed little variability in responses as it hovered slightly above 1 which meant that there was general agreement in the way all the AMMs felt about the challenges they face during the planning and implementation of curriculum change in PHEIs.

Results of the qualitative component of this study also confirmed results of the quantitative component (Table 4.12) which showed that AMMs faced many challenges during the planning and implementation of curriculum changes in PHEIs. All AMMs that participated in the interviews indicated that their roles in the planning and implementation of curriculum change were made difficult and tenuous by the challenges which they faced in PHEIs such as a highly controlled and strict work environment where all decisions are made by the owner-managers, lack of a culture of collaboration in the PHEIs, high workloads, lack of capacity to plan and implement curriculum change as some AMMs did not receive formal training on curriculum, a spirit of fear and mistrust in the PHEIs, prescription of curriculum changes by top management, organisational structure that is too tall and rigid and stifled effective communication between AMMs and top management, unclear role definition for AMMs in the job descriptions, lack of top management support, unavailability of opportunities for training (workshops) on curriculum change, and a spirit of competition between departments. Among some of the comments which were made by the interviewed AMMs with regards to the challenges they faced in PHEIs during the planning and implementation of curriculum change in PHEIs were the following:

“The issue of training on curriculum change at my institution is seriously lacking and is a major challenge to effective planning and implementation of curriculum change by AMMs. This is more so because at my institution, there are a number of new and inexperienced AMMs who are directly involved in curriculum change, and such trainings will be important in capacitating such new AMMs as well as in providing experienced AMMs with the most current knowledge and skills in curriculum change through refresher courses”. (AMM6)

“Lack of top management support is a serious problem affecting our ability as AMMs to effectively plan and implement curriculum change at my institution. In terms of support during the planning and implementation of curriculum change at my institution, the level of support I have been getting all along from top management has not been adequate and encouraging to say the least. On many occasions when I request for changes to the curriculum, these requests are turned down on the basis of cost cutting. It is always about cost cutting in these institutions every time an AMM comes up with an innovation to improve student learning”. (AMM2)

“The major challenge to my role in the planning and implementation of curriculum change at my institution is the work environment. The work environment at my institution is too strict and highly controlled by the owner managers who have centralised all decision making and who prescribe what needs to be done, when and how”. (AMM1)

“I have never before worked at an institution that is so highly controlled as mine and with so much heavy workloads. It is like the owners do not want employees to even think or rest but to just do what they are told. This really is affecting my role in the planning and implementation of curriculum change as I and my colleagues always leave in fear that we may propose curriculum changes that the owners do not like and get victimised. Everybody leaves in fear and prefer to suggest less and keep quiet”. (AMM8)

“High workloads, harsh working conditions and unclear job descriptions are major challenges for us AMMs at our institution. There are so many lessons to teach and so many other tasks to perform that by the end of the day one is so tired that you just want to rest. At my institution we work six days a week from Monday to Saturday and each day from 0800h to 1700h except on Saturday when we work from 0800h to 1300h. Also as AMMs we are made to do many other different tasks some well outside the scope articulated in our job descriptions that in the end it is not clear what our job really is in the departments. All these high workloads leave little room for us AMMs to effectively engage in the process of curriculum change as this process requires research and interaction with a number of stakeholders” (AMM3). A similar point was also raised by AMM4 and AMM9

“In this institution I do not know whether people are here to compete or what because there is always that apparent desire to outdo each other and this is leading to lack of collaboration

between departments and between individual employees making it difficult for knowledge sharing on issues of curriculum change. We hardly collaborate as AMMs at my institution”. (AMM7)

4.7. Strategies for effectively implementing and managing curriculum change

Table 4.13: Strategies for implementing and managing curriculum change

	Mean	Std
Strategies for implementing curriculum change		.
Promoting teamwork in my department as a means of ensuring collaboration during the implementation of curriculum change(S30)	4.26	1.0
Making sure that there are effective channels of communication between senior management and my department through meetings and other communication strategies during the implementing curriculum change(S31)	4.10	1.0
Disseminating evidence of good practice to all department staff during curriculum change so that all members can learn from best practices and	4.08	1.0
identifying the strengths, talents, experience and abilities of staff in order to be able to effectively deploy them into positions to effectively implement	3.65	1.0
channeling department resources to where they are most needed during the implementation of curriculum change (S33)	3.60	1.1
making curriculum change a high priority by placing curriculum change issues at the top of the agenda in meetings, and by making curriculum change a standing item in all department discussions(S27)	3.37	5.2
Holding regular department meetings to ensure all department staff, not just those directly involved in implementing or managing the implementation of curriculum change, are kept informed of any relevant developments on	2.63	1.4
Selecting a senior member of staff in the department to be visibly available to advise and lead department staff during the implementation of curriculum	2.61	1.5
Providing on-going in-service training to meet the professional development needs of the staff during the implementation of curriculum change(S28)	2.45	1.3

Table 4.13 showed that 3 items scored means above 4. This showed that AMMs felt that they were able to effectively perform the roles articulated by the 3 items. The AMMs rated as

satisfactory their effectiveness on performing the roles in 3 items which scored means of more than 3 but less than 4. Results further showed that AMMs believed that they were not effective in performing activities shown by items which scored means of less than 3. With the exception of item S27, the deviation on the mean scores of all the items showed little variability on how AMMs responded with regards to how they viewed the strategies they used in the implementation of curriculum change as the standard deviation hovered slightly above 1. This showed a general agreement among AMMs with regards to how they viewed the strategies they used for implementing curriculum change.

There was also general agreement between results of the quantitative phase above and the results of the qualitative phase on the strategies AMMs used to implement and manage curriculum change. Results of the qualitative phase showed that all the AMMs were effective in using curriculum implementation strategies that required their personal effort and initiative such as promoting team work, sharing good practice about curriculum change with department staff, and setting up effective communication procedures in their departments. Results of the study also showed that AMMs were not effective in using strategies which are moderated by forces outside their sphere of influence, for example where there was centralised decision making in the institution which made it difficult for AMMs to effectively implement some of their strategies in curriculum change. The above issues were confirmed in some of the comments below which were made by AMMs during the interviews:

“As an AMM, there are a number of strategies I deploy in my implementation and management of curriculum change. In some of the strategies I am not as successful as I would want to because of circumstances beyond my control such as a highly controlled work environment, high workloads and centralisation of decision-making at my institution. Despite these factors however I mostly ensure that all members in my department work as a team by ensuring that I respect every department member’s opinions and also I ask every member to contribute and to respect the contributions of others during the implementation of curriculum change. I also organise once in a while meetings where, together with all department members, we take stock of our efforts in the implementation of curriculum change so that we note where we will all be doing well and/or where we need to improve”. (AMM9)

“I believe in teamwork. I believe that if we all pull together during the implementation of curriculum change then we will succeed. Unfortunately there are two strategies which I have been trying to use to ensure effective implementation of curriculum change in my department but failing. These relate to providing regular on-going training to my staff on curriculum issues as well as holding regular meetings to update each other in the department about our progress on the implementation of curriculum change. The timetables at the institution are designed without consulting AMMs and hence when other people are free in the department, others are teaching and this has been like this for the past five years. There is no time set aside for departments to have meetings or trainings. In the end, we are only able to meet briefly at break times and this is not enough. There is just too much work mostly due to staff shortage which is causing staff to be always engaged as top managers resist hiring more staff to save costs”. (AMM7)

“My efforts for effectively implementing curriculum change are hampered by high workloads. We hardly have time to engage as a department on how the implementation is progressing due to tight schedules. There is just no time for training members in curriculum change or curriculum development again due to tight schedules. On many occasions we discuss progress on the implementation of curriculum change in our departments informally when we meet in corridors but these discussions are not adequate and also need to be documented for records”. (AMM1)

“When implementing and managing curriculum change, I use the following strategies: setting up communication strategies for all department members to follow, asking all department members to contribute ideas and effort to the implementation process, and selecting a senior member to act as my deputy to chair meetings and also follow up on how members in the department are implementing curriculum change and report to me the AMM on a regular basis”. (AMM2)

“To me successful curriculum change is leadership-driven. Effective leadership that promotes teamwork is important for the success of the implementation of curriculum change. I believe that if I allow every member to be involved in both the discussion and direct participation in the implementation process of curriculum change, there will be higher chances of the implementation succeeding. I also communicate with members of my department regularly though mostly informally or through emails as it is difficult to have regular meetings at my institution due to high workloads and shortage of time”. (AMM4)

4.8. Enablers of AMMs role in curriculum change

Table 4.14: Enablers of AMMs role in curriculum change

Enablers of AMM role in curriculum change(Ranked mean Scores)	Mean	Std. Dev.
As a way of motivating department staff, I regularly provide them with positive feedback that recognises and acknowledges progress in the planning and implementation of curriculum change(E78)	3.85	1.2
I ensure access by all department staff to critical curriculum change information when needed (E77)	3.80	1.1
Staff demonstrate professional attitude and interest to curriculum change (E71)	3.78	2.2
Department staff and I have adequate professional knowledge on issues of curriculum change (E72)	3.61	.999
I demonstrate professional adequacy in my role (E70)	3.42	.962
School ethos at the institution are conducive for effective AMM role in curriculum change (E66)	2.97	3.263
The institution has adequate equipment, facilities and general resources (E68)	2.77	1.143
The institution provides adequate professional support (E69)	2.51	1.357
Adequate time is provided by top management for curriculum change (E67)	2.51	1.022
history of successful curriculum change in my department which acts as a stepping stone for future successes in curriculum change (E75)	2.50	.999
The institution provides opportunities for on-going and relevant professional training and development of department staff by curriculum specialists to ensure any curriculum change in the institution is carried out successfully(E76)	2.43	1.328
I am always provided with necessary and required resources by the institution during the planning and implementation of curriculum change(E79)	2.37	1.043

The working climate at my institution enables me to ensure a high degree of formal and informal interaction to build trust between AMMs as curriculum leaders and department members for effective curriculum change (E81)	2.35	1.205
There is a culture of collaboration in the institution in general (E82)	2.28	1.420
There is smooth and effective communication between top management and departments in the institution that promotes effective information flow during curriculum change (E73)	2.25	1.138
The working climate at my institution allows for the development of a culture of collaboration in the department to ensure all department members work as a team during curriculum change (E80)	2.07	1.168
Department members are given incentives by the institution for successfully planning and implementing curriculum change (E74)	2.02	1.120

The views of AMMs regarding the factors that enable the effectiveness of their role in curriculum change are shown on Table 4.14. Most responses had mean scores between 2.02 (minor enablers) to a mean score 3.85 (fairly major enablers). There were no factors that more distinctly enabled AMMs to effectively plan and implement curriculum change as there was no response whose mean score was 4 or above. Of the fairly major enablers (Mean score from 3 but less than 4), only 5 out of 17 were indicated as moderate enablers. The rest (12 out of 17) were minor enablers whose contribution to AMMs role in the planning and implementation of curriculum change was negligible. This indicated that the perceived factors that more effectively aided AMMs in their role in curriculum change were very few in PHEIs with the rest only contributing slightly. Table 4.14 also shows that the deviation on the mean scores of all the items showed little variability in responses as it hovered slightly above 1 which meant that there was general agreement in the way the AMMs felt about the factors that acted as enablers to how effectively they played their role during the planning and implementation of curriculum change in PHEIs.

As a result of the many challenges AMMs faced in their role in the planning and implementation of curriculum change in PHEIs as shown in quantitative results and confirmed by qualitative

results, there were very few conditions in PHEIs that acted as visible enablers for effective AMM role in the planning and implementation of curriculum change. Qualitative results based on interviews with 10 AMMs confirmed the absence of major conditions that enable effective AMM role in the planning and implementation of curriculum in PHEIs.

While AMMs' interviews pointed to enabling conditions such as some PHEIs being highly technological, the sponsoring of staff to do higher degrees, the sponsoring of staff in research, the current attempts of recruiting senior and highly qualified staff in the PHEIs, AMMs being sometimes allowed to prescribe courseware for modules in their departments, AMMs indicated that these enablers were dwarfed into insignificance by the number of challenges the AMMs faced during curriculum change in PHEIs. To highlight the immensity of the challenges AMMs faced in PHEIs during the planning and implementation of curriculum change in their departments, AMMs were able to identify very few conditions that acted as enablers in their role in curriculum change during the interviews. AMMs made the following comments:

“My institution is well resourced in terms of technology and fairly senior and qualified staff. I feel technology such as internet helps AMMs to search for current curriculum issues on the web while senior staff are important for their experience in curriculum and curriculum change”. (AMM6)

“My institution sponsors staff for higher degree qualifications and also sponsors them to engage in research. This then means that there is an opportunity for staff to improve on their knowledge in their area of specialization. With this superior knowledge they will then be in a position to proposed well informed curriculum changes in their specialisation areas”. (AMM3)

“At my institution, AMMs are given authority to prescribe textbooks for use in the different curriculum areas under their supervision. This is the only authority that AMMs are given at my institution. This then means that AMMs can change textbooks and hence content of the curriculum as they see fit, that is, in line with knowledge changes and demands of society. This according to me is as far as AMM authority can go in curriculum change in our highly controlled institution”. (AMM10)

The use of external reviewers on proposed curriculum changes at my institution is an important enabling factor in ensuring that the eventual changes proposed by AMMs meet the expected standards of quality for a particular level of learning”. (AMM7)

The previous sections presented descriptive statistics which responded to the research objective which sought to establish AMMs’ views on their role in the planning and implementing of curriculum change in PHEIs in Botswana. Various views on the challenges to curriculum change as well as the AMMs role in providing or creating an enabling environment for effective curriculum change were discussed. The main findings of the previous sections were that AMMs were not very effective in the planning of curriculum change as out of 13 core activities of planning curriculum change AMMs were only effective in 4 of them. In terms of strategies for implementing curriculum change, it was shown that AMMs believe that they were only effective in implementing 3 out of 9 strategies while in terms of leading curriculum change AMMs were only effective in 2 out of 10 core activities of leading curriculum change. Other major findings of this section were that AMMs face many challenges during the planning and implementation of curriculum change and also that there were very few conditions that acted as enablers for AMMs role in the planning and implementation of curriculum change in PHEIs.

The next section presents inferential statistics based on research study objectives to establish how individual AMM Biographic factors influenced their role in the planning and implementing of curriculum change.

4.9. The influence of Biographic Characteristics on AMM role in curriculum change in PHEIs

The next section presents the inferential statistics testing hypothesis for the demographic data of the AMMs and the other constructs to establish whether demographic variables had an influence on effective planning and implementation of curriculum change by AMMs in PHEIs in Botswana. On a normality of data check done in section 4.3, results showed that data was normally distributed and hence the researcher could conduct inferential statistics to test stated hypothesis and ascertain whether the independent variables identified had a significant influence on the dependent variable of the study. Before conducting parametric data such as ANOVA, independent t-test analysis was conducted to establish whether the assumptions of parametric

tests were met. The following demographic characteristics were investigated: age group, gender, educational level, years of experience, and number of staff in the department (department size).

4.9.1. Demographic factor 1: Age group

Chi-square was used to examine whether age group had an influence on AMM role in curriculum change in PHEIs. The independent test had five different age-groups. The dependent variable was planning and implementing curriculum change which was calculated and transformed by adding the entire indicators to form one construct. Before using One-way ANOVA, a test of Homogeneity of Variance and test of Normality were conducted (Table 4.15). An alpha significance level of 0.05 was used in the analysis. The test of Homogeneity of variance was not significant on differences between the five variances as $Levene = P > 0.05$. The results also showed that data for the two variables was not normally distributed. The following hypothesis was tested:

H_0 : There is no significant statistical difference between means of all age groups of AMMs in the planning and implementation of curriculum change in PHEIs that is $(\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ where $\mu_1, \mu_2, \mu_3, \mu_4$ and μ_5 are mean scores of the five age – groups)

H_1 : At least one mean of all the age groups of AMMs is significantly different from others in the effective planning and implementation of curriculum change in PHEIs.

Table 4.15: Test of Normality-Age versus Planning and Implementation of Curriculum Change

	Age (in years):	Shapiro-Wilk		
		Statistic	df	Sig.
Planning curriculum change	25 – 30	.873	6	.239
	31 - 35	.873	23	.007
	36 – 40	.881	23	.011
	41- 50	.947	30	.142
	More than 50	.946	17	.391

Table 4.16: Chi-square test of age groups versus Planning and Implementation of Curriculum Change

Ranks			
	D1	N	Mean Rank
Cur.pla84	25 – 30	6	41.83
	31 - 35	23	37.11
	36 – 40	23	44.76
	41- 50	30	42.30
	Total	82	

Test Statistics^{a,b}

	Cur.pla84
Chi-Square	1.256
df	3
Asymp. Sig.	.740

a. Kruskal Wallis Test

b. Grouping Variable: D1

The results on Table 4.16 showed that the tests were not statistically significant as p-values were more than the level of significance $\chi^2 (3) = 1.256$, $p = 0.74$) with a mean rank of 41.83 for age-group 25 - 30 years, 37.11 for age group 31 - 35 years, 44.76 for age group 36 - 40 years, and 42.30 for age - group 41- 50 years. The results therefore showed that age - group did not lead to differences in the planning and implementation of curriculum change, hence the null hypothesis was accepted leading to the conclusion that age-group did not have a significant difference in the median scores of various age - groups. Thus, age did not influence the role of AMMs in the planning and implementation of curriculum change in PHEIs. The above results were also confirmed in the interviews where most of the respondents believed that age had no significant influence on how AMMs plan and implement curriculum change in PHEIs while few AMMs felt that age had an influence. Among some of the responses of the interviewees who felt age had no influence in the way AMMs planned and implemented curriculum change were the following:

“I feel age has no impact on how AMMs perform their roles in curriculum change. One can perform their role well in the planning and implementation of curriculum change no matter the age. What is required is knowledge of the curriculum area”. (AMM10)

“I do not think age has an influence on AMM role in the planning and implementation of curriculum changes because on its own without being accompanied by experience in curriculum change, age has no impact”. (AMM7)

“My view is that age has no impact on an AMM’s performance in curriculum change. Young or old, I feel if an AMM has passion for their role in the planning and implementation of curriculum change then they can all effectively perform this role”. (AMM2)

“If age is taken together with experience then it has an influence on how AMMs plan and implement curriculum change but alone, I am of the thinking that it has no influence on the AMMs’ role”. (AMM5)

“Definitely age has no influence on how AMMs plan and implement curriculum change. What I feel is needed is knowledge and relevant experience for an AMM to effectively perform their role in curriculum change”. (AMM8)

“I think age is not a factor on how AMMs plan and implement curriculum change as any young and old AMM can effectively perform their role in curriculum change if they have enough knowledge of their subject area”. (AMM4)

The few AMMs who felt that age influenced how AMMs plan and implement curriculum change had the following responses:

“Age plays a role in the way AMMs plan and implement curriculum change because AMMs need to be mature as they deal with confidential issues during curriculum change”. (AMM6)

“Yes age has an influence on AMM role on curriculum change because the old you are the more experienced you become in your role. This then means that older AMMs will have better skills to know how to handle certain issues such as communication and leadership to be able to effectively drive curriculum change”. (AMM1)

“Age has an influence on how AMMs plan and implement curriculum change in PHEIs. This is so because age and experience go hand in hand and hence older people will perform better their role in curriculum change”. (AMM3)

“It is critical that an AMM is someone who is mature enough because managers such as AMMs handle sensitive issues and critical organisational information which younger managers may not understand and could put the institution at a disadvantage with competitors should such sensitive information falls in the hands of competitors. So yes age is an important factor in curriculum change”. (AMM9)

4.9.2. Demographic factor 2: Gender

Table 4.17: Test of Normality

	gender :	Shapiro-Wilk		
		statistic	df	sig.
planning curriculum change	male	.975	53	.332
	female	.813	36	.000

Data collected on the independent variable of gender and the dependent variable planning and implementation of curriculum change was assessed for normality before the parametric independent t-test was conducted (Table 4.17). Shapiro-Wilk table showed that data collected from female AMMs was not normally distributed for $P = 0.000$ and Male data $P = .332$ was normally distributed as ($P > .05$).

Owing to these discrepancies The Mann Whitney test was used to test the Hypothesis. The Mann Whitney test is non- parametric test which overcomes the underlying assumption of normality in parametric tests. It is used to test whether two independent samples of observations are drawn from the same or identical distributions.

H_1 : There is no significant difference between the medians of male and female AMMs with regards to their effectiveness in planning and implementing curriculum change i.e., $M_1 = M_2$ or $M_1 - M_2 = 0$, where M_1 represents the mean for male and M_2 represents the mean for females.

H_0 : At least one median of all male AMMs is significantly different from the medians of female AMMs with regards to their effectiveness in the planning and implementation of curriculum change in PHEIs.

Table 4.18: Mann-Whitney U test

	PLANNING AND IMPLEMENTATION OF CURRICULUM CHANGE
Mann-Whitney U	590.000
Wilcoxon W	2021.000
Z	-3.049
Asymp. Sig. (2-tailed)	.002
a. Grouping Variable: Gender:	

Analysis of results on Table 4.18 revealed that the test results were statistically significant ($P < .05$) thus the null hypothesis that there was no difference between gender in the planning and implementation of curriculum change was rejected and it was concluded that the planning and implementation of curriculum change does differ between male and female AMMs in the PHEIs. The hypothesis that gender has a significant influence on the planning and implementation of curriculum change by AMMs was therefore retained. The Mann-Whitney U test (Table 4.18) was used to test and prove normality of the above data. The above results were also confirmed during interviews where most of the interviewees felt that the gender of an AMM had an influence on the way AMMs plan and implement curriculum change in PHEIs as compared to few who believed that gender had no effect.

Among the comments that were made during the interviews by the majority of participating AMMs who felt that gender had an influence on AMM role in the planning and implementation of curriculum change were the following:

“Gender to me has an impact on the way AMMs plan and implement curriculum change. I feel males are more robust in the way they plan and implement curriculum change, that is, males are able to force their way than females especially in highly controlled environments such as PHEIs in Botswana”. (AMM1)

“I feel gender has an impact on how AMMs perform their roles in curriculum change in their institutions as females have a tendency of not easily being ready to engage in new things when compared to male AMMs. They are always afraid to introduce new things until they are really sure of the possible outcomes, that is, they are afraid to take risks. Unfortunately curriculum change is a risk-taking exercise where sometimes you review a curriculum and it is not widely

accepted when compared to the initial curriculum. So yes in this regard gender has an impact as male AMMs are not afraid of taking risks by introducing curriculum changes”. (AMM4)

“My honest opinion is that male AMMs and female AMMs plan and implement curriculum change differently. I feel the way female interact with their subordinates in the departments is more motherly and accommodating hence more effective than how male AMMs do. I think female AMMs are able to rally members around a common goal during the planning and implementation of curriculum change better than male AMMs who just want to command and force things”. (AMM2)

“To me female AMMs are more effective in the planning and implementation of curriculum change than male AMMs. I say so because these people (female AMMs) know how to work well with members. Female AMMs are more people-oriented than male AMMs hence I think they can lead curriculum change better than male AMMs” (AMM6)

“I feel that the gender of an AMM has an impact on the performance of AMMs during curriculum change. I feel that women can more effectively plan and implement curriculum change than males if necessary conditions to do so are in place”. (AMM10)

“I think gender plays a part in one’s capacity to effectively plan and implement curriculum change in PHEIs. My view is that males are more effective in engaging subordinates than female AMMs during both the planning and implementation of curriculum change. I really feel male AMMs are able to involve subordinates better than female AMM”. (AMM5)

“My feeling is that female AMMs are a bit timid to face to the high handedness of top management in PHEIs. I do not think they can cope with the pressure like what male AMMs do. Besides, female AMMs do not show a lot of confidence in their work. My interaction with them shows that they would always want a male AMM to represent them where they feel that the case is difficult or chances of losing in an argument with top management is high”. (AMM9)

Of the few AMMs who were of the feeling that gender had no influence in the way AMMs planned and implemented curriculum change, the following were some of their comments during interviews:

“I do not think that the gender of an AMM has an impact on the way AMMs play their role in curriculum change. I believe in equality hence as far as the planning and implementation of curriculum change is concerned, gender of AMMs to me does not matter. So I definitely disagree that the gender of an AMM is influential on how AMMs in PHEIs plan and implement curriculum change. Gender is certainly not a factor”. (AMM7)

“As far as I am concerned, anyone, whether male or female, can effectively plan and implement curriculum change in their institution and department. So, no. Gender is not a factor in curriculum change”. (AMM3)

“Definitely no, the gender of an AMM has no part to play on how AMMs plan and implement curriculum change in their institutions. I believe that AMMs, whether males or females, can equally and effectively plan and implement curriculum change if given the opportunity to do so”. (AMM8)

4.9.3. Demographic factor 3: Education level

H_0 : There is no significant statistical difference between means of all education levels in effective planning and implementation of curriculum change in PHEIs, that is, ($\mu_1 = \mu_2 = \mu_3 = \mu_4$ where μ_1, μ_2, μ_3 and μ_4 are mean scores of the four education levels)

H_1 : At least one mean of all the educational levels of AMMs is significantly different from others in the effective planning and implementation of curriculum change in PHEIs.

Table 4.19: ANOVA: Educational Level versus Planning and Implementation of Curriculum Change

ANOVA					
PLANNING AND IMPEM OF CURRIC CHANGE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	936.507	2	468.254	3.795	.026
Within Groups	11350.819	92	123.378		
Total	12287.326	94			

Table 4.19 shows that the results were statistically significant as $F(2,92) > 3.8 = 0.026$, i.e., ($P < .05$) thus, there was a difference in the planning and implementation of curriculum change

between the different education levels. Post HOC analysis using Turkey procedures was also used to determine which pairs of the three group means differed.

Table 4.20: Post HOC Analysis

PLANNING AND IMPLEMENTATION OF CURRICULUM CHANGE			
Turkey HSD			
Highest Level of Education:	N	Subset for alpha = 0.05	
		1	2
Master's Degree	73	47.8767	
Bachelor's Degree	14	48.4286	
Doctoral Degree	8		59.2500
Sig.		.990	1.000

Data on Table 4.20 shows that Doctoral degree holders scored significantly higher (59.2500) on the mean scores than the Masters and Bachelor degree holders. Thus, higher level of education had significant influence on AMM role in the planning and implementation of curriculum change. These quantitative results were confirmed by interview results which showed that most of the AMMs believed that academic qualifications play a role in AMMs' planning and implementation of curriculum change in their institutions. Few of the interviewed AMMs believed that higher academic qualifications had no influence in the way AMMs plan and implement curriculum change.

Among some of the comments by the interviewed AMMs who believed that higher educational levels (academic qualifications) had an influence on how AMMs planned and implemented curriculum change were the following:

“Yes academic qualifications have an influence on how AMMs plan and implement curriculum change if such qualifications are relevant. We do not want a situation where someone with an MBA is AMMs in the faculty of education as happened at one of the PHEIs at some point as in such a case higher academic qualifications have no influence”. (AMM2)

“Yes academic qualifications have an effect on how AMMs perform their roles in curriculum change. Having a relevant masters or PhD qualification gives an AMM confidence and also

inspires subordinates during curriculum change as people always want to be led by someone they consider qualified and competent. Such a situation where AMMs have higher academic qualifications is a good recipe for successful curriculum change in PHEIs”. (AMM8)

“Yes a well-qualified AMM with for example a PhD in a related curriculum area has a better understanding of curriculum issues in his/her area and hence stands a better chance of successfully planning and implementing curriculum change in his/her department. As a result, I advocate that only people with relevant higher qualifications should be appointed to head departments and to lead curriculum change in PHEIs”. (AMM10)

“Yes, academic qualifications are central to the successful planning and implementation of curriculum change by AMMs in PHEIs. I feel that this is so because higher academic qualifications literally and logically give an AMM a good command of the curriculum content in their area of specialization and hence a fair chance of successfully planning and implementing curriculum change. I believe that AMMs with such higher academic qualifications also are quick to identify what needs or does not need to be changed in the curriculum because they no their curriculum well”. (AMM1)

“Certainly, academic qualifications play a big role in the success of curriculum change by AMM. This is so because higher academic qualifications give AMMs superior knowledge of the curriculum in their area of specialization than lower academic qualifications. I feel that this is true because if a person is highly qualified, it means that they have enough depth and breadth of the curriculum in their area of specialization to be able to be in a position to effectively carry out curriculum reviews in their departments”. (AMM6)

“I agree that academic qualifications play an important role in aiding AMMs to successfully plan and implement curriculum change. However, such academic qualifications need to be relevant in the curriculum area requiring change”. (AMM5)

“Yes academic qualifications are influential in the way AMMs plan and implement curriculum change. To be able to effectively and successfully implement curriculum change, AMMs need to be well trained in their curriculum areas”. (AMM3)

“Like I said before, curriculum development and curriculum change are critical in any institution and hence require AMMs who are adequately schooled in their curriculum areas. So certainly academic qualifications are therefore very influential in the capacity of AMMs to effectively plan and implement curriculum change in PHEIs”. (AMM9)

Only one AMM of the ten AMMs interviewed on whether academic qualification influence the way AMMs plan and implement curriculum change in their institutions believed that academic qualifications do not play an influential role to play on how AMMs plan and implement curriculum change in PHEIs. The comment of the AMM was as follows:

“I feel academic qualifications are not necessarily influential in the way an AMM performs his/her duties in the planning and implementation of curriculum change. I believe that if an AMM has the passion for his/her job, he/she should be successful in the way he/she plans and implements curriculum change in PHEIs”. (AMM7)

4.9.4. Demographic factor 4: Work experience

Hypotheses tested on the demographic characteristic of work experience were as follows:

H₀: There is no significant statistical difference between means of the number of years of work experience of AMMs in the effective planning and implementation of curriculum change in PHEIs, that is, ($\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$) where μ_1 , μ_2 , μ_3 , μ_4 , and μ_5 are mean scores of the five categories of the number of years of work experience)

H₁: At least one mean of the number of the number of years of work experience of AMMs is significantly different from others in the effective planning and implementation of curriculum change in PHEIs.

Table 4.21: ANOVA: Work Experience versus Planning and Implementation of Curriculum Change

ANOVA					
PLANNING AND IMPLEMENTATION OF CURRICULUM CHANGE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1101.611	4	275.403	4.817	.001
Within Groups	5431.779	95	57.177		
Total	6533.390	99			

Table 4.22: Turkey HSD Test

PLANNING AND IMPEM OF CURR CHANGE			
Turkey HSD			
Work Experience(in years	N	Subset for alpha = 0.05	
		1	2
Less than 5	14	25.7143	
11 – 15	12	28.3333	
5 - 10	36	29.6111	29.6111
16 - 20	18	32.1667	32.1667
More than 20 years	20		36.2000
Sig.		.096	.085
Means for groups in homogeneous subsets are displayed.			

ANOVA test (Table 4.21) showed that $F(4,95) > 8.817 = 0.001$ hence the analysis was statistically significant as ($P < 0.05$), thus the hypothesis was retained. It was therefore, concluded that the difference in effective planning and implementation of curriculum change was attributable to the number of years of experience of AMMs. The Turkey HSD test results on Table 4.22 also showed that years of experience significantly influenced how AMMs planned and implemented curriculum change since, as the number of years worked increased, the mean scores also overall increased. The above results of the quantitative component of the study (Table 4.21) were also confirmed by results of interviews. All AMMs who participated in the interview indicated that years of experience had a significant impact on how AMMs planned and implemented curriculum change in PHEIs. Among some of the comments from AMMs who participated in the interviews with regards to the influence of years of experience on the role of AMMs in the planning and implementation of curriculum change were the following:

“Experience, if it is relevant, is certainly influential in the way AMM plan and implement curriculum change in PHEIs”. (AMM1)

“I believe years of work experience have an impact on how AMMs plan and implement curriculum change. Somebody who has experience in curriculum change understands the dos and don'ts of curriculum change and this tacit knowledge helps the AMM to successfully plan and implement curriculum change when compared to an AMM who lacks experience”. (AMM2)

“Experience certainly gives an AMM an edge in the planning and implementation of curriculum change when compared to an AMM who is a novice. This is so because learning from the past is considered the best teacher”. (AMM5)

“Yes, years of experience are central to the effectiveness of AMMs in the planning and implementation of curriculum change in PHEIs as exposure is important”. (AMM9)

“I am of the view that years of experience help the AMM to have a good understanding of what to do and what not to for the successful planning and implementation of curriculum change. Years of experience help AMMs to learn from past curriculum change events and to use this knowledge to perfect the art of planning and implementing successful curriculum change in their institutions”. (AMM3)

“Certainly, years of experience which relate to past experiences with issues of curriculum change are important in helping AMMs to use their past efforts in curriculum change to effectively plan and implement curriculum change”. (AMM10)

“I agree that years of experience have an influence on the ability of AMMs to plan and implement curriculum change in their institutions. They help AMMs to do better by using their past experience on curriculum change”. (AMM4)

“Yes, past work on curriculum change helps AMMs with a better understanding of both the pitfalls to avoid and the enabling factors to take advantage of for effective planning and implementation of curriculum change”. (AMM7)

Experience counts a lot. As people gain experience, they begin to perfect their ways of doing things and the same is true for AMMs during the planning and implementation of curriculum change”. (AMM6)

“Most certainly, our past work on curriculum in general and in curriculum change in particular helps us as AMMs to improve the way we approach curriculum change”. (AMM8)

4.9.5. Demographic factor 5: Number of staff in the department (size of department)

H_0 : There is no significant statistical difference between means of the number of staff in departments in PHEIs in the effective planning and implementation of curriculum change, that is, ($\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$) where $\mu_1, \mu_2, \mu_3, \mu_4$, and μ_5 are mean scores of the five categories of number of staff in departments)

H_1 : At least one mean of the number of staff in the departments is significantly different from others in the effective planning and implementation of curriculum change in PHEIs.

Table 4.23: ANOVA and POST HOC tests: Staff in Department versus Planning and Implementation of Curriculum

Change					
ANOVA					
PLANNING CURRICULUM CHANGE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	573.283	4	143.321	1.121	.351
Within Groups	11887.217	93	127.820		
Total	12460.500	97			
planning curriculum change					
Turkey HSD					
Number of staff Members	N	Subset for alpha = 0.05			
		1			
More than 25 staff members	19	45.7368			
21 - 25	17	47.4118			
16 -20	9	52.4444			
11- 15	23	47.0870			
At most 10	30	51.2333			
Sig.		.430			

Table 4.23 shows that $F(4,93) > 1.121 = 0.351$ hence the calculated $P = .351$ was more than 5%, i.e., $p > 0.05$ level of significance, and this indicates that the result was not statistically significant and therefore the null hypothesis was retained. It was concluded that the number of staff in departments (size of departments) in PHEIs did not have a significant influence on the effective planning and implementation of curriculum change by AMMs. These results were also confirmed by the findings of the qualitative phase which showed that the size of the department in PHEIs had no influence in the way AMMs planned and implemented curriculum change in PHEIs. Most of the AMMs who participated in the interviews did not believe that the size of the

department had an impact on how AMMs planned and implemented curriculum change in their institutions. From biographical data obtained on the sizes of departments it was shown that most of the departments in PHEIs were small hence could not pose problems in the way AMMs planned and implemented curriculum change. Few AMMs felt that the size of the department had an impact.

Among some of the comments given by most of the participating AMMs in the interviews who believed that the size of the department had no influence on how AMMs planned and implemented curriculum change were the following:

“I do not think the size of the department is influential to successful planning and implementation of curriculum change by AMMs. I say so because if the department culture promotes collaboration and if the department structure is clear in terms of who reports to whom and who does what, I think given these facts, whether the department is large or small, the AMMs should be able to effectively and successfully plan and implement curriculum change in their departments”. (AMM4)

“No I do not think so. I think what is important is for the AMM to effectively develop a climate of effective communication and teamwork in the department. Once all department members feel that they are adequately involved in the curriculum change process, I am of the opinion that they will be motivated to support the process leading to successful curriculum change in the department. So certainly department size according to me has no effect on the way AMMs plan and implement curriculum change. AMMs just need to show effective leadership”. (AMM9)

“In my opinion, the size of the department has no influence on how AMMs plan and implement curriculum change in PHEIs. I think what counts is for the AMMs to create an enabling environment where all department members are free to contribute to curriculum change without fear and where the AMMs is always ready to consider the views of others in the department”. (AMM5)

“Certainly department size has no influence on AMM role in curriculum change. My feeling is that AMMs just need to ensure teamwork and effective communication and everything will fall into place with regards to effective planning and implementation of curriculum change. Such an

approach according to me will ensure that a critical mass of department members supports and actively participates in the curriculum change process”. (AMM3)

“I am inclined to believe that it is not about size but is about whether department members including the AMMs have knowledge of the curriculum change process and that they all cherish the belief that teamwork can contribute towards the success of curriculum change efforts. I think it is all about teamwork and knowledge rather than size of the department that can cause the curriculum change process to either fail or succeed. So definitely no, the size of the department has no influence on how AMMs plan and implement curriculum change in PHEIs”. (AMM8)

“I do not agree that the size of the department influences how AMMs plan and implement curriculum change in PHEIs. This is so because whether the size of a department is too large or too small, what is important is the work climate in the department. If the AMM works well with members and treats them fairly in terms of respect their contributions, then the planning and implementation of curriculum change will occur successfully”. (AMM1)

The few AMMs who participated in the interviews and who felt that the size of the department had an influence on how AMMs planned and implemented curriculum change made the following comments:

“Yes, the size of the department has an impact on how AMMs plan and implement curriculum change. This is based on the fact that when a department is large, it leads the AMM to concentrate more on managing human and material resources instead of leading curriculum change. So in this case the size of the department has a negative impact on AMM role in curriculum change”. (AMM10)

“Yes the size of the department influences how AMMs plan and implement curriculum change in their institutions. If a department is too large, it becomes more demanding especially on the management rather than the instructional context. Such a case leaves the AMMs with little time to adequately deal with issues of curriculum and curriculum change”. (AMM2)

“If the size of the department is too large, the AMM may not be able to interact with all department lecturers and this has a potential of making the AMMs miss out on some of the useful

curriculum ideas which might contribute to successful curriculum change. In my opinion therefore, a department should not be too small as this might lead to work overload, or too large as not all staff may have the opportunity to effectively assist the AMM in the planning and implementation of curriculum change”. (AMM7)

“Too large a department will draw on the time of the AMMs to effectively lead curriculum change to performing more of administrative work and this will affect the quality of curriculum changes”. (AMM6)

The previous section analysed and reported the findings related to the influence of demographic variables on the AMM role on the planning and implementation of curriculum change. The main findings of this section were that biographic factors that included age and number of staff in the department (size of department) had no significant influence in the way the AMM plans and implements curriculum change while the following demographic factors namely gender, years of work experience and levels of education (academic qualifications) had an influence on the role of AMMs in the planning and implementation of curriculum change. The next section focuses on developing the model on responses to the research question which sought to develop a research model for effective planning and implementation of curriculum change in PHEIs in Botswana.

4.10. Development of a Model for planning and implementing curriculum change

All the research hypotheses related to the research constructs were statistically tested below and the results presented in this section. Regression model was applied to test the extent to which personal demographic data influence AMMs’ effective planning of curriculum change. The next section presents findings of regression analysis.

4.10.1 The effect of moderating variables on the model for the Planning and Implementation of curriculum change in PHEIs

Table 4.24: Multi-collinearity among independent variables

Correlations							
		Age	Gender:	Highest Level of Education:	Work Experience	Number of staff Members	Planning and implementation of curriculum change
Age (in years):	Pearson	1	-.153	.222*	.671**	.399**	-.002

	Correlation						
	Sig. (2-tailed)		.144	.027	.000	.000	.981
Gender:	Pearson Correlation		1	-.385**	-.160	-.251*	.336**
	Sig. (2-tailed)			.000	.130	.016	.001
Highest Level of Education:	Pearson Correlation			1	.344**	.276**	.174
	Sig. (2-tailed)				.001	.006	.092
Work Experience(in years	Pearson Correlation				1	.315**	.210*
	Sig. (2-tailed)					.002	.040
Number of staff Members	Pearson Correlation					1	-.149
	Sig. (2-tailed)						.143
PLANNING AND IMPLEMENTAION OF CURRICULUM CHANGE	Pearson Correlation						1
	Sig. (2-tailed)						
*. Correlation is significant at the 0.05 level (2-tailed).							

Table 4.25: ANOVA of moderating variables

Model Summary						
Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.291 ^a	.085	.025	11.46362		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	926.021	5	185.204	1.409	.231 ^a
	Residual	9987.503	76	131.415		
	Total	10913.524	81			
b. Dependent Variable: Curriculum Planning and Implementation strategies						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized	t	Sig.

				Coefficients		
		B	Std. Error	Beta		
1	(Constant)	51.291	11.369		4.512	.000
	Gender:	.278	2.793	.012	.099	.921
	Highest Level of Education:	-.425	3.070	-.018	-.139	.890
	Work Experience(in years	3.442	1.357	.395	2.535	.013
	Age (in years):	-2.255	1.540	-.229	-1.464	.147
	Number of staff Members	-.263	.946	-.034	-.278	.781
a. Dependent Variable: Curriculum Planning and Implementation strategies						

As shown in Table 4.24, the coefficient of determination (R^2) is the measure of proportion of the variance of dependent variable about its mean that is explained by the independent or predictor variables. Higher value of R^2 represents greater explanatory power of the regression equation. The adjusted R^2 is .085 which meant that the study variables contributing to the effective planning of curriculum change in the PHEs is 8.5% and remaining 91.5% is attributed to other extraneous factors which are not part of this construct. ANOVA analysis on Table 38 sought to determine how much of the variance in the dependent variables was accounted for by the manipulation of independent variables and assessed at the level of significance (0.05) of the model. The results showed that the model is significant ($F(5, 76) = 1.4$, $p > .231$). It was concluded that personal demographic information did not influence effective planning and implementation of curriculum change.

On Table 4.25, the coefficient showed the beta value of each of the construct indicators. The Beta value is a measure of how strong each of the indicators influences the criterion variable. The beta regression coefficient allowed for comparison of the independent variables and assessment of the strength of the relationship between the predictor variables and to the criterion variables. The beta value is measured in the units of standard deviation. The higher the beta value the greater the influence of the predictor variable on the criterion variable. In this study, it was observed that all demographic variables except work experience did not have any influence on the planning of curriculum change and implementation strategies.

The study used the General Linear Model (GLM) data to analyse the impact of moderators on the independent variables. The (GLM) tests results are shown on Table 4.26. From Table 4.26 it can

be observed that none of the variables moderated the independent variables influence on the planning and implementation of curriculum change.

Table 4.26: GLM of Between-Subjects Effects

Dependent Variable: Curriculum Planning and Implementation strategies					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9095.441 ^a	59	154.160	1.865	.054
Intercept	92093.321	1	92093.321	1.114E3	.000
D1	760.450	4	190.112	2.300	.091
D2	2.454	1	2.454	.030	.865
D3	93.197	2	46.599	.564	.577
D4	316.003	4	79.001	.956	.451
D5	518.576	4	129.644	1.569	.218
D1 * D2	483.333	2	241.667	2.924	.075
D1 * D3	8.333	1	8.333	.101	.754
D1 * D4	196.000	1	196.000	2.372	.138
D1 * D5	222.876	4	55.719	.674	.617
D2 * D3	.000	0	.	.	.
D2 * D4	.000	0	.	.	.
D2 * D5	.023	2	.011	.000	1.000
D3 * D4	.000	0	.	.	.
D3 * D5	.000	0	.	.	.
D4 * D5	97.173	2	48.587	.588	.564
D1 * D2 * D3	.000	0	.	.	.
D1 * D2 * D4	.000	0	.	.	.
D1 * D2 * D5	.000	0	.	.	.
D1 * D3 * D4	.000	0	.	.	.
D1 * D3 * D5	.000	0	.	.	.
D1 * D4 * D5	.000	0	.	.	.
D2 * D3 * D4	.000	0	.	.	.
D2 * D3 * D5	.000	0	.	.	.
D2 * D4 * D5	.000	0	.	.	.
D3 * D4 * D5	.000	0	.	.	.
D1 * D2 * D3 * D4	.000	0	.	.	.
D1 * D2 * D3 * D5	.000	0	.	.	.
D1 * D2 * D4 * D5	.000	0	.	.	.
D1 * D3 * D4 * D5	.000	0	.	.	.

D2 * D3 * D4 * D5	.000	0	.	.	.
D1 * D2 * D3 * D4 * D5	.000	0	.	.	.
Error	1818.083	22	82.640		
Total	214815.000	82			
Corrected Total	10913.524	81			
a. R Squared = .833 (Adjusted R Squared = .387)					

4.10.2 The effect of leadership on model for the planning and Implementation of curriculum change

Table 4.27: Model summary of curriculum leadership effect on curriculum change

Model Summary						
Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.801 ^a	.641	.637	7.00901		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8508.173	1	8508.173	173.190	.000 ^a
	Residual	4765.241	97	49.126		
	Total	13273.414	98			
a. Predictors: (Constant),curriculum Leadership						
b. Dependent Variable: Curriculum Planning and Implementation strategies						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.752	1.875		14.803	.000
	Leadership	.916	.070	.801	13.160	.000
a. Dependent Variable: Curriculum Planning and Implementation strategies						

According to Table 4.27, the hypothesis that states that curriculum leadership has no influence on curriculum planning and implementation in PHEs was tested at 0.05 significance level. The model summary shows that R^2 is 0.637 which means that the curriculum leadership can explain 63.7% of the variation in effective planning and implementation of curriculum change. From the ANOVA on Table 4.27, it was established that the calculated $P < 0.05$ which was statistically significant. Thus the model is significant in predicting the variation in effective curriculum planning and Implementation.

GLM test (Table 4.28) was used to investigate the interaction between the moderator variables and Leadership. As shown on Table 4.28, all demographic variables except number of staff in the department contributed significantly to the difference in curriculum planning and implementation.

Table 4.28: GLM on interaction between moderator variables and leadership

Tests of Between-Subjects Effects					
Dependent Variable:q111					
Source	Type III	df	Mean	F	Sig.
Corrected	10898.024 ^a	68	160.265	134.416	.000
Intercept	123024.486	1	123024.486	103181.82	.000
D1 * q114	10.792	2	5.396	4.526	.032
D2 * q114	18.000	1	18.000	15.097	.002
D3 * q114	6.000	1	6.000	5.032	.043
D4 * q114	15.238	4	3.810	3.195	.049
D5 * q114	6.750	2	3.375	2.831	.095
Error	15.500	13	1.192		
Total	214815.000	82			
Corrected	10913.524	81			
a. R Squared = .999 (Adjusted R Squared = .991)					

4.10.3 The effect of challenges on the model for planning and Implementation curriculum change

Table 4.29: ANOVA test on effect of challenges on curriculum change

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.281 ^a	.079	.068	11.44081

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	910.114	1	910.114	6.953	.010 ^a
	Residual	10602.271	81	130.892		
	Total	11512.386	82			
a. Predictors: (Constant), CHALLENGES FACED BY AMM IN THE IMPLEMENTATION OF CURRICULUM CHANGE						
b. Dependent Variable: Curriculum change Planning and Implementation strategies						

Coefficients ^a				
Model	Unstandardized	Standardized	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	67.647	6.647		10.176	.000
	CHALLENGES FACED BY AMM	-.238	.090	-.281	-2.637	.010
a. Dependent Variable: Curriculum Planning and Implementation strategies						

Table 4.30: GLM test of Between-Subjects Effects

Dependent Variable: Curriculum Planning and Implementation strategies					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	10150.486 ^a	61	166.401	599.045	.000
Intercept	154725.166	1	154725.166	5.570E5	.000
D1 * Cha87	.000	0	.	.	.
D2 * Cha87	.000	0	.	.	.
D3 * Cha87	.000	0	.	.	.
D4 * Cha87	.000	0	.	.	.
D5 * Cha87	.000	0	.	.	.
q114 * Cha87	.000	0	.	.	.
Jobreq83 * Cha87	.000	0	.	.	.
Jobreq83 * q114 * Cha87	.000	0	.	.	.
Error	2.500	9	.278		
Total	187553.000	71			
Corrected Total	10152.986	70			
a. R Squared = 1.000 (Adjusted R Squared = .998)					

The model summary on Table 4.29 shows that the construct of challenges explains 7.9 % of the variances in effective planning of curriculum change in PHEs. The model is significant ($P < 0.05$). The construct significantly contributes to the model. ANOVA (Table 4.29) shows that $F(21, 62) = 6.953$, $P = 0.010$. This shows that the results are statistically significant, thus the construct may be a good predictor of the curriculum planning and implementation which is a response variable of the study. Thus, it is concluded that challenges faced by AMMs in the implementation of curriculum negatively influence effective planning for curriculum change and implementation strategies. GLM test (Table 4.30) was used to investigate the interaction between the moderator variables and Leadership. As shown on Table 4.30 all demographic variables contributed significantly to the difference in curriculum planning and implementation.

4.10.4 The effect of enablers on the model for the planning and Implementation of curriculum change

Table 4.31: Enablers and Planning and implementation of curriculum change and GLM moderators test

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.652 ^a	.425	.418	8.79394		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4292.693	1	4292.693	55.509	.000 ^a
	Residual	5800.008	75	77.333		
	Total	10092.701	76			
a. Predictors: (Constant), ENABLERS OF AMM ROLE IN CURRICLUM CHANGE						
b. Dependent Variable: Curriculum Planning and Implementation strategies						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.664	4.640		3.592	.001
	ENABLERS OF AMM ROLE IN CURRICLUM CHANGE	.708	.095	.652	7.450	.000
a. Dependent Variable: Curriculum Planning and Implementation strategies						

Table 4. 32 GLM Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8783.934 ^a	54	162.665	.	.
Intercept	142196.920	1	142196.920	.	.
D1 * Ena88	.000	0	.	.	.
D2 * Ena88	.000	0	.	.	.
D3 * Ena88	.000	0	.	.	.
D4 * Ena88	.000	0	.	.	.
D5 * Ena88	.000	0	.	.	.
Cha87 * Ena88	.000	1	.000	.	.
Jobreq83 * Ena88	.000	0	.	.	.
Jobreq83 * Cha87 * Ena88	.000	0	.	.	.

q114 * Ena88	.000	0	.	.	.
Error	.000	6	.000		
Total	161084.000	61			
Corrected Total	8783.934	60			
a. R Squared = 1.000 (Adjusted R Squared = 1.000)					

The model summary on Table 4.31 indicates that the construct curriculum enablers can explain 42.5% of the variation in planning curriculum and implementation strategies. Furthermore, from ANOVA analysis the model is statistically significant in explaining the variation in effective planning of the curriculum and implementation strategies ($P < 0.05$). Hence the construct can be used as a predictor in the research model. Enablers of AMM role have a strong significant influence (Beta = .708). GLM test (Table 4.32) was used to investigate the interaction between the moderator variables and enablers. As shown on Table 4.32, all demographic variables contributed significantly to the difference in curriculum planning and implementation.

Based on the analysis in section 4.10 a model to show the construct indicators and their predictive power on the dependent variable was developed.

4.10.5 Model for research constructs and their predictive power on dependent variable

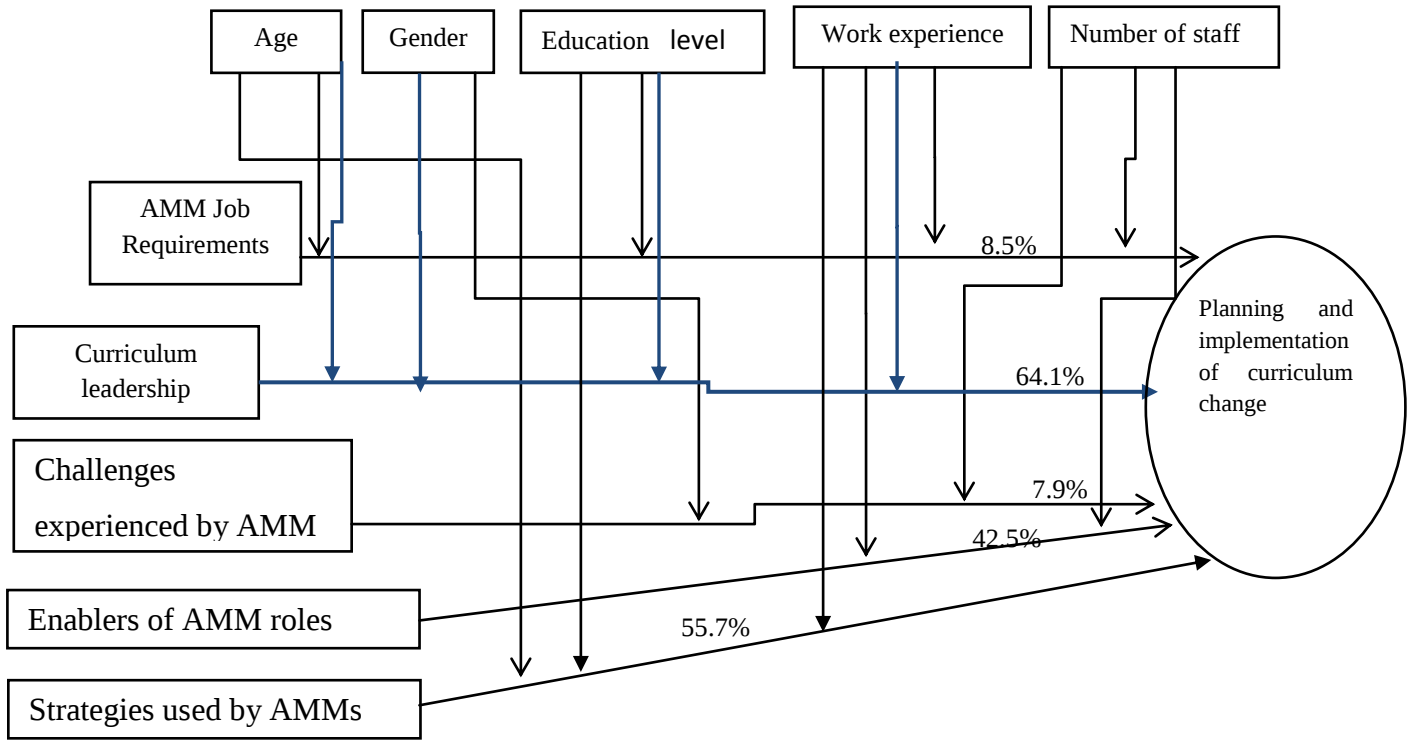


Figure 4.1: Moderators and predictive power model

In designing the model in Figure 4.1, two kinds of analysis were used. First, the study tested the influence of the construct variables on the dependent variables (Planning and implementing curriculum change), analysed the influence of the moderator variables and then presented the results variable by variable in the section 4.9. The research model comprised of six independent variables: demographic characteristics, AMM job requirements, strategies for implementing and managing curriculum change, curriculum leadership, challenges faced by AMM, and enablers of AMMs role in curriculum change. The independent variables, also referred to as latent variables were expected to influence effective planning of curriculum change. The research models independent variables were moderated by the demographic characteristics: Age, gender, education level, work experience and number of staff in the departments

To completely analyse a model, there is need to carry out an examination of goodness of fit using the R – squared criteria, the Adjusted R – squared and factor loadings. The goodness of fit values

(R^2 and Adjusted R^2) measure how well the model parameters estimated are able to predict the model performance. Factor loadings and goodness of fit were used to evaluate the entire model.

4.10.6 The model for planning and implementing curriculum change

This section answers sub-research question 1.5.5. Based on the results of factor analysis presented on Table 3.8 and construct by construct regression analysis and the GLM test of moderator variables, the major research construct was decomposed into sub-constructs based on their internal consistency. After iterative factor analysis the construct was left with significant indicators with internal consistence of more than .7. The research model was validated using the results from the above discussed analysis. The dependent variable resulted in two sub-constructs namely the planning and implementation of curriculum change. The influence of the moderator and independent variables was tested on the two. The results of the regression analysis are presented below.

Table 4.33 shows the beta value of each types of variable. The beta value is a measure of how strong each of the predictor variables influences the criterion variable. The beta regression coefficient allows for comparison of the independent variables and assessment of the strength of the relationship between the predictor variables and to the criterion variables. The beta is measured in the units of standard deviation. The higher the beta value the greater the influence of the predictor variable on the criterion variable. In this study the curriculum planning and implementation which is the dependent variable was regressed against, AMM job requirements, curriculum leadership, challenges experienced by AMM and enablers of AMM role in curriculum planning and implementation. The results are presented on Table 4.33.

Table 4.33: Regression and GLM Test Results

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.919 ^a	.845	.817	5.17173		
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7419.850	9	824.428	30.823	.000 ^a
	Residual	1364.084	51	26.747		

	Total	8783.934	60			
a. predictors: (constant), enablers of AMM role in curriculum change, age (in years);, gender: , challenges faced by AMM in the implementation of curriculum change, number of staff members, highest level of education; AMM job requirements, curriculum leadership, work experience(in years						
b. Dependent Variable: Planning and Implementation Curriculum Change						
Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.768	8.656		1.128	.264
	Age (in years):	-.293	.834	-.029	-.352	.727
	Gender:	-.2949	1.675	-.118	-1.761	.084
	Highest Level of Education	.591	1.641	.026	.360	.720
	Work Experience(in years	.342	.745	.039	.459	.648
	Number of staff Members	-.426	.537	-.052	-.793	.432
	AMM job requirements	.275	.141	.141	1.955	.056
	curriculum leadership	.1330	.133	.748	9.983	.000
	challenges faced by AMM in the implementation of curriculum change	-.169	.050	-.204	-3.395	.001
	enablers of AMM role in curriculum change	.112	.107	.089	1.047	.300
a. Dependent Variable: Planning and Implementing Curriculum Change						

Table 4.33 led to the development of a linear equation model for effective planning and implementation of curriculum change formulated as follows:

$Y = \beta_0 + b_1p_1 + b_2p_2 + b_3p_3 + b_4p_4 + b_5p_5 + b_6p_6 + b_7p_7 + b_8p_8 + b_9p_9$ and the Beta values in the Table 45 where:

Y = Planning and Implementation of curriculum change

p_1 = Age (in years)

p_2 = Gender

p_3 = Highest Level of Education

p_4 = Work Experience (in years)

p_5 = Number of staff Members in the department

p_6 = AMM job requirements

p_7 = Curriculum leadership

p_8 = Challenges faced by AMM in the implementation of curriculum change

p_9 = Enablers of AMM role in curriculum change

Substituting using the results in Table 4.33 finally gives the following model equation:

$$Y = 9.768 + -.293p_1 + -.295p_2 + .591p_3 + .342p_4 + -.426p_5 + .275p_6 + .1330p_7 + -.169p_8 + .112p_9.$$

From the model summary R^2 value on Table 4.33, the results showed that the independent variables explained 81.7% of the variation in the dependent variables effective planning and implementation curriculum change. The model shows contributions of the independent and moderator variables to the dependent variables: highest level of education (59.1%), work experience (34.2%), AMM job requirements (27.5%), number of staff in the department contributed (- 42.6%), leadership (13.3%), challenges (-16.9%) and age group (-29.3%), and enablers (11.2%).

4.11. Summary

Chapter four presented and analysed the research findings in line with the research questions presented. Quantitative and qualitative tools were used to analyse the findings. With regards to quantitative data, both parametric and non-parametric measures were used to analyse the findings. With regards to qualitative data, thematic content analysis was used as a tool for analysing data. It was in chapter four that quantitative and qualitative data were integrated. At the end of the analysis, a model was developed that AMMs can use to enhance their planning and implementation of curriculum change in their institutions. The next chapter discusses the research findings.

CHAPTER 5: DISCUSSION OF FINDINGS

5.1. Introduction

Chapter 4 presented and analysed data based on results from structured questionnaires and in-depth semi-structured interviews. Bringing together the different types of evidence from the survey and interviews allowed the researcher to establish a detailed and comprehensive picture of the role of AMMs in the planning and implementation of curriculum change in PHEIs. Chapter 5 therefore, provides the interpretation of the findings. It interprets the findings with reference to the research questions formulated in chapter one, the literature reviewed in chapter two and the results analysed in chapter four. The discussion of findings which culminates in the development of a model for the effective planning and implementation of curriculum change, is based on four broad themes namely:

- Views of the academic middle managers concerning their role in leading the planning and implementation of curriculum change in their different disciplines.
- The influence of biographic characteristics on AMMs' role in the planning and implementation of curriculum change in private higher education institutions.
- Strategies AMMs employ during the planning and implementation of curriculum change in PHEIs.
- The enablers of academic middle managers role in the planning and implementation of curriculum change in private higher education institutions.

5.2. AMMs' views on their role in leading curriculum change

AMMs indicated that they operated under restrictive conditions in PHEIs and had to devise strategies for ensuring that their efforts in leading curriculum change succeeded. In this section therefore views about the effectiveness of AMMs leadership role, challenges AMMs faced, their ability to plan curriculum change as well as whether they felt they were able to satisfy their job requirements with regards to the planning and implementation of curriculum change are discussed.

It was established in the study that AMMs faced difficulties in leading curriculum change in PHEIs due to the restrictive nature of the working conditions that affected their ability to take

initiative and be innovative. Out of the 10 leadership activities AMMs performed during the planning and implementation of curriculum change, results showed that AMMs were only effective in 20% of the activities which was a clear indication that AMMs were not effective in their leadership role in curriculum change in PHEIs despite the fact that leadership, which is about influencing and motivating others to perform certain tasks for the achievement of set goals, was viewed in literature as critical for the success of educational change such as curriculum change. The only two curriculum leadership activities in which AMMs were effective were providing department members with a clear vision for curriculum change and communicating it in a clear and inspirational manner to all department staff, as well as explaining in a positive manner to staff what curriculum change means for them and most importantly for students.

It was established that where curriculum change variables were within their control, such as providing a vision and also clearly explaining the purpose for curriculum change, AMMs felt that they performed their leadership role successfully. However, in variables outside their control such as decision making especially, AMMs had very little, if any, authority to make decisions on processes in their departments and this affected their leadership styles. AMMs mostly relied on variables outside their control such as the authority of top management to get things done and this affected the performance of their role in effectively leading curriculum change.

The importance of effective curriculum leadership was demonstrated by the reconceptualisation of the AMM's role from a management role to a leadership role (Thrash, 2012; Bush & Middlewood, 2005). Effective leadership according to Griffiths (2011) entails a number of things chief of which are having authority to create a strong department culture and to establish a flatter and effective department structure to ensure effective communication and team work. The departmental culture is pivotal to department members' willingness to participate in curriculum change.

According to Griffiths (2011), flatter department structure ensures that the line of authority in the department is clear enough from the middle manager to the lowest rank in the department; there is clarity on the duties, responsibilities and authority of all department members as well as the extent to which authority is able to be delegated in the department; and also that the department structure is receptive and/or flexible to adopting change. The above is also supported by Thrash

(2012) who argued that a flatter departmental structure allows for effective coordination and distribution of authority among members. A flatter department structure also ensures that communication during the change process is effective and multi-directional, that is, that it flows downward, upward and horizontally in the department to allow high participation of department members in the departmental communication and decision making (Goodman, 2001). If people feel that they are involved in decisions concerning the change process, Griffiths (2011) asserts that they become energized to participate more effectively in the change process.

Drawing from the distributed leadership theory, the role of leadership during a change process such as curriculum change is further viewed as of critical importance. Effective curriculum change leadership according to Luiz (2006) embodies visionary leadership where the AMM as curriculum change leader, is viewed by subordinates as being able to communicate effectively and be guided by educational philosophy based on sound research, personal experience and education; provides leadership in keeping with the department's vision and mission; meaningfully engages the whole department in identifying and addressing areas of curricula improvement; ensures planning, decision-making and curriculum change implementation plans are based on a shared vision and an understanding of the departmental culture. Such visionary leadership by AMMs during curriculum change, as previously discussed by Griffiths (2011) and also confirmed by French & Raven (2005), should facilitate change and promote innovative ideas consistent with the departmental needs; analyse a wide range of curricula data to determine progress towards effective curricula change; and also communicate and celebrate departmental achievements on curricula change to inspire continuous motivation and growth.

The challenge faced by AMMs as curriculum leaders in PHEIs is to be able to establish a balance between leadership and management roles in order to provide both vision and direction while also ensuring effective and efficient implementation and monitoring of pre-determined curriculum change policies and procedures (Humphreys, 2010).

5.2.1. AMMs views on their ability to plan curriculum change in PHEIs

AMMs indicated that they were not very effective in the planning of curriculum change in PHEIs yet the planning of curriculum change is perhaps the most important stage of the curriculum change process since poor planning leads to implementation challenges such as shortage of

human and material resources, facilities, time and many other enablers of effective curriculum change. Such a situation could be attributed among other things to inadequate experience by most of the AMMs as interviews showed that most of the AMMs possessed around 5 years of experience in curriculum change despite many of them having up to 20 years of experience as AMMs. Failing to effectively plan curriculum changes is certainly a stumbling block on the efforts of AMMs to effect curriculum changes in their institutions.

Another reason for failure by AMMs to effectively plan curriculum change could be that of lack of formal training as most AMMs indicated during interviews that they lacked formal training in curriculum development in general and in curriculum change in particular. Literature showed that to ensure effective planning of curriculum change AMMs as curriculum leaders needed to take account of the following requirements: knowledge and skills of staff and themselves with regards to issues of curriculum change; availability of relevant materials; collaboration with department members; in-service training; as well as interaction with both industry and academics from comparable institutions during the planning stage (BOTA, 2005; Choy, 2001; Soares, 2010; van Deuren, 2013).

While overall AMMs indicated that they were not very effective in the planning of curriculum change, results of this study also showed that AMMs regarded themselves as effective in the following three curriculum planning activities: articulating to department staff the benefits of curriculum change for students in order to gain the support of the staff; assessing, together with department members which components of the curriculum required review as well as consulting with industry on issues of curriculum change. Literature also showed that by clearly articulating the benefits of curriculum change, AMMs set a positive platform for successful change in departments. Drawing from the five dimensions model developed by Victor and Franckeiss (2002), it was shown that clarifying department curriculum change processes, policies and procedures ensured that change was effectively implemented and the change goals were achieved in a consistent manner. According to Victor & Franckeiss (2002), communicating the appropriate approaches and demonstrating the desired behaviours to department members during the curriculum change process should never be underestimated in terms of importance.

With regards to assessing the curriculum components requiring review, in collaboration with department members as part of the curriculum planning process, AMMs believed that they were successfully carrying these curriculum change planning tasks. The importance of working together with department members is observed by Wiggins & McTighe (2010) who asserts that ensuring that curriculum change planning activities are carried out through teamwork ensures and enhances acceptance of the need for curriculum change by all department members and guarantees the success of the curriculum change effort. The above is further confirmed by Ndou (2008) who argues that curriculum change will only be successful if the identified need for change was shared and accepted by all stakeholders.

It emerged in the study that AMMs performed fairly well on the task of interacting with industry during the process of the planning of curriculum change. Seeking views of industry during the planning of curriculum change is viewed as very critical in ensuring that curriculum changes are relevant to the needs of industry. Literature showed that universities and industry needed to collaborate more on issues of curriculum development and change to avoid a skills gap when graduates complete their education and seek employment in industry. This is observed by Rasiah (2009) and also by Lee et al (2011) who argues that cooperation between HEIs and industry is important in reducing and even eliminating the industry-university perceptual gap with regards to what skills and knowledge industry wanted from graduates and what HEIs offered. Benvenuti (2011) also argued that encouraging interaction between industry and HEIs during curriculum development and curriculum change is an effective way of managing the tension between industry demands and good academic practice in terms of the quality and relevance of curriculum in HEIs.

It was established by the study that AMMs believed that they demonstrated average performance on a number of other key curriculum change planning activities which included evaluating strengths and weaknesses of the current curriculum, setting up clear communication procedures in their departments, establishing the impact of curriculum change on department staff and on resource requirements, benchmarking curriculum changes as well as setting realistic deadlines for the curriculum change process. This lukewarm performance of AMMs on the planning of curriculum change could also be attributed to the fact that AMMs operated in a highly controlled environment and had very little control of events and activities in the departments. This was

confirmed from the interviews with the AMMs which indicated that PHEIs were highly controlled and restrictive and that most major decisions in these institutions including on curriculum reviews were made by the owner-managers of the institutions.

It also emerged in the study that AMMs believed that they were unable to perform the following curriculum change planning activities which included resource costing and coming up with a budget for curriculum change because issues of finances were a closely guarded secret in the PHEIs. Institutional finances and financial decisions were a preserve of top managers who are the owner-managers of the institutions. Best practice however, indicates that it should be AMMs as the planners and implementers of curriculum change who have knowledge of the resource requirements of the change process, should come up with the budget estimates. Unfortunately in the owner-managed PHEIs in Botswana, this was not the case and the situation where curriculum change budgets were designed by the top management disregarding views of the curriculum change implementers seriously affected the efforts of AMMs to effectively implement their curriculum change plans.

5.2.2. AMMs views on challenges faced in planning and implementation of curriculum change

AMMs were of the view that there were many challenges they face during the planning and implementation of curriculum change with the major challenges being a highly controlled and strict work environment, heavy workloads, role strain (role pressure), role ambiguity, and lack of role autonomy.

The work environments of PHEIs as mentioned above, are highly controlled and strict according to interview results and this was due to the fact that PHEIs were owner-managed and were managed more as family entities where the owners just do as they please instead of being professional in approach. Another reason why the PHEIs were highly controlled and strict was the culture of managerialism in these institutions. Kolsaker (2008) argues that AMMs in HEIs (which include PHEIs) were now constrained by the nature of the work environments at their institutions due to the fact that managerialism had crept into the HEIs and had resulted in a tyranny of bureaucracy which translated into disempowerment of AMMs. This then resulted in a culture of conformance over collegiality, a culture of command and control over distributed decision making, all at the cost of innovation and experimentation (Davis et al, 2014).

The above situation according to Kolsaker (2008) has led to the operational environment of AMMs in HEIs being mostly characterised by command and control from top management. Such an environment limited AMMs creativity in their approach to the planning and implementation of curriculum change. Also by disempowering AMMs, highly controlled PHEIs left these managers with little authority to direct their members to take a particular direction during curriculum change, something the AMMs indicated during interviews as highly demoralising. What made the role of the AMMs in PHEIs even more tenuous in the highly controlled PHEIs was that top management made all major decisions and imposed those decisions on the AMMs including the organisation and monitoring the implementation of those decisions through the use of elaborate planning, budgeting and control systems (Davis, van Rensburg & Venter, 2014).

With regards to role strain as one of the major challenges AMMs viewed as affecting their role during the planning and implementation of curriculum change in PHEIs, literature showed that role strain, also called role pressure, occurs when an AMM has difficulty in fulfilling multiple role obligations while wearing *one hat* (Tang & Chang, 2010; Hyde et al, 2013). In the context of PHEIs, AMMs, as already alluded to above, were constrained by a litany of costly administrative burdens which took much of AMMs time from their core academic work. The above was also confirmed by Graham and Benoit (2004) who argued that the role of AMM required individuals to fulfill diverse and sometimes divergent responsibilities which required different sets of skills. Playing all these multiple roles meant AMMs were being forced to satisfy competing demands of different stakeholders (Long-Crowell, 2012) in the PHEIs which led to a state of burnout and eventually to poor performance by AMMs in their major curriculum tasks in PHEIs.

One major reason why AMMs indicated that they were inundated with so much work in PHEIs as also observed by Bennett et al (2007) was that, while on one hand top management demanded that middle managers take a whole-school approach to managing educational policies and strategies, on the other hand, the operational core (department members) also demanded that middle managers represented their needs at the top management. Such a situation, as explained by Cragg (2011), left AMMs spending most of their time mediating tensions between two competing interests, that is, top management and lower level employees instead of concentrating on their curriculum responsibilities.

Literature also showed that top management assign to AMMs what normally would be their (top management) work thus adding to the litany of tasks to the already over-burdened AMMs and leaving no room for the AMMs to effectively perform their academic work. The above is confirmed by the fact that much of the high workloads were as a result of tasks considered managerial rather than those tasks related to improving teaching and learning (Fitzgerald, 2009; Hipkins & Hodgen, 2004). With these heavy workloads, AMMs in PHEIs were therefore, left with little to no time to effectively plan and implement curriculum changes in their departments. This resonates with Ingvarson et al.'s (2005) assertion that heavy workloads left AMMs with less time to manage change in their departments.

Results of the study also showed that role conflict was one of the major challenges facing AMMs in curriculum change in PHEIs. As a result of performing many responsibilities outside what was stipulated in their job descriptions, AMMs indicated during interviews, that they were faced with a situation of not knowing which tasks to prioritise between their academic work and managerial functions, that is, between expectations of their departments and those of top management. Macionis and Linda (2010) argue that role conflict is experienced when a person finds him/herself pulled in various directions as he/she tries to respond to the many he/she they hold, creating what Tang and Chang (2010) called barriers to meeting role demands.

The final major challenge that faced AMMs during the planning and implementation of curriculum change was lack of role autonomy. This was viewed in the study as one of the biggest challenges affecting AMMs in their role in curriculum change. In their study of AMM role in a change process in HEIs, Davis et al (2014) found that AMMs were disempowered as they were not given room to make any decisions even on matters affecting their departments or units. By indicating during interviews that even for minor departmental issues, they had to consult top management, AMMs confirmed that they did not have authority to plan and implement any changes in their departments, something which was not only disempowering but also frustrating. AMMs in PHEIs indicated during interviews that with adequate role autonomy, they could produce creative curriculum changes as the autonomy would give them room to experiment and innovate.

Literature indicates that role autonomy helps AMMs to modify and/or reconstruct their existing psychological states (Rousseau, 2001) resulting in both them and their department staff developing more flexible and creative attitudes (Morgeson et al., 2005) that stretched boundaries of mere compliance with rules and the fulfillment of formal orders (Hornung & Rousseau, 2007). Unfortunately, results show that AMMs did not have such autonomy in PHEIs and as suggested by Morgeson et al. (2005), tended to follow a path of least resistance, refraining from the use of personal initiative and extra effort to avoid potential punishment. Such a situation potentially affected the effectiveness of the planning and implementation of curriculum change in PHEIs by AMMs.

5.2.3. AMMs views on the influence of AMM job requirements on their role in curriculum change

AMMs viewed their failure to effectively plan and implement curriculum change as stemming from their inability to satisfy AMM job requirements due to a number of factors. Literature shows that there are a number of requirements that an AMM is expected to satisfy in order to demonstrate fitness for his/her role. Such job requirements include experience in the planning and implementation of curriculum change, ability to effectively plan and implement curriculum change, possession of adequate knowledge and skills to effectively plan and implement curriculum change, having adequate training on planning and implementation, being given detailed job description, and having full authority on the planning and implementation of curriculum change. These AMM job requirements act as guides on how AMMs enact their role in the effective planning and implementation of planning of curriculum change.

5.2.3.1. AMMs have having inadequate experience in the planning and implementation of curriculum change

The study showed that AMMs did not have adequate experience in the planning and implementation of curriculum change in PHEIs. Most of the AMMs indicated that, while they had many years of experience as AMMs, their experience in planning and implementing curriculum change, was 5 or less years which was inadequate. The above results therefore showed that PHEIs either hired or promoted inexperienced AMMs to perform the duties of planning and implementing curriculum change despite literature and previous studies highlighting the importance of experience in a manager's role in managing change. Such a situation led to poor quality curriculum changes as these inexperienced AMMs faced challenges in both the planning and implementation of curriculum change. This was particularly true when

taking into consideration the fact that the curriculum change process is a complex process and requires experienced people to manage it. The above was consistent with the views of a number of authorities in curriculum change who argued that experience was very important for a manager in the management of change as experienced teachers and managers tended to operate from a deeper and more sophisticated knowledge base than the less experienced ones during a period of change (Fullan, 2003; Feldman; 2006; Sergiovanni, 2002).

5.2.3.2. AMMs are able to effectively plan and implement curriculum change

The key finding on the ability of AMM to plan and implement curriculum change was that AMMs were not effective in the planning and implementing curriculum change in PHEIs. This could be as a result of either lack of formal training in curriculum development and curriculum change or lack of experience in the planning and implementation of curriculum change or both as confirmed in earlier results. Literature attests to the importance of training and experience in the effectiveness of a manager's performance. According to Victor & Franckeiss (2002), a successful curriculum change process requires a continuous and consistent programme of training and development to capacitate department staff to deal with new curriculum implementation. Also according to Wiesrsema and Bantel (1992) in Mayer et al., (2011), the level of a manager's education and training has overall been viewed as contributory to the way managers perceive and participate in curriculum change because the level of education reflects an individual's cognitive ability and skills to effectively lead a change process such as curriculum change. On the importance of training in enhancing a manager's performance during curriculum change studies have found that experienced teachers and managers operate from a deeper and more sophisticated knowledge base than the less experienced ones (Feldman; 2006; Fullan, 2003; Sergiovanni, 2002), and that years of experience enable a manager to develop a deep and sound knowledge of his/her discipline leading to ability to effectively plan and implement curriculum changes (Fullan, 2003). Fullan (2003) further argues that long years of service provides managers with a good knowledge of how students behave in a learning situation and with the skills of managing their behaviours during curriculum change when compared to the less experienced managers.

Both quantitative and qualitative results indicated that most AMMs in PHEIs lacked both formal training and adequate experience in the planning and implementation of curriculum change.

Some AMMs indicated that they were coming straight from industry when they were appointed to be AMMs while others indicated that they had 1 or 2 years of experience as AMMs and hence lacked the basic understanding of the rudimentary skills of planning and implementing of curriculum change.

Effective planning and implementation of curriculum change was specifically viewed as very critical in PHEIs because these institutions have since the late 2008 been migrating their curricula from franchised programmes to locally developed programmes. This required AMMs' ability to effectively plan and implement curriculum changes in PHEIs effectively. More so, the changing societal needs fuelled by the advent of technology among others, required that AMMs be able to effectively plan and implement curriculum change so as to be able to align curricula in their departments with these changes. The influence of the advent of technology in education in general and in higher education in particular has been well documented. According to Ornstein and Hunkins (2009), technology has redefined how we communicate and hence how we educate our students and these two features of technology have had a profound effect on curriculum reforms of modern times.

The importance of effective planning and implementation of curriculum changes was also highlighted in literature. Literature showed that effective planning and implementation of curriculum change helped AMM to more effectively address local, national and global issues and trends that need to be considered during curriculum change (French & Raven, 2005; Luiz, 2006). Effective planning of curriculum change was seen as enabling AMMs to successfully assess and respond to unique and diverse curriculum needs of the community within the context of the department's vision and mission (Northern gateway Public Schools Administration Manual, 2009).

5.2.3.3. AMMs possess adequate knowledge and skills to effectively plan and implement curriculum change

Having adequate knowledge and skills to effectively plan and implement curriculum change is viewed as perhaps one of the core requirements of an AMM role (Anderson (1977) in Salleh et al., 2011). In a study on socio-cognitive factors that mediate the relationship between work and job performance, Dokko, Wilk and Rothbard (2009) found that there is a positive correlation between prior related task knowledge and performance. Mullins (1992) cited in Salleh et al

(2011) also argues that knowledge is factor that mediate manager performance. The study showed that AMMs did not possess adequate knowledge and skills to effectively plan and implement curriculum change in PHEIs. This was a serious setback for PHEIs which are currently involved in the process of changing their curricula from franchised to locally developed ones. Given the changing nature of societal needs and expectations, and also the competitive nature of higher education at the moment, it was viewed as important that for PHEIs to remain competitive, they needed to ensure that they had staff (AMMs) with adequate knowledge of curriculum development and change who are be able to successfully develop and review curricula in line with societal needs and expectations. This was so because the curriculum change process required that AMMs to perform higher order activities such as championing curriculum change alternatives, synthesising curriculum change information, facilitating adaptability during the curriculum change process and also building a community of practice (Floyd & Wooldridge, 2000).

A number of studies show why adequate knowledge and skills in the planning and implementation of curriculum change by AMMs is important for the success of their role in the planning and implementation of curriculum change. In their study of the influence of educational qualifications on a manager's ability to implement change, Salleh, Yaakub and Dzulkifli (2011) found that a person who possessed high levels of knowledge and skills tended to succeed because of high levels of job knowledge (unique skills, intelligence and work methods) than a person with less or no knowledge. Kimberley and Evanisko (1981) cited in Mayer et al (2011) also found that high levels of knowledge and skill had consistently been associated with receptivity to innovation and change and that managers with such skill and knowledge were more aware of and receptive to, the need for change than managers with less knowledge and skill.

5.2.3.4. AMMs possess adequate training on the planning and implementation of curriculum change

Training is regarded as one of the most critical interventions in capacitating employees for improved performance in organisations and should be viewed as an investment rather than a cost. It emerged from results that AMMs were not receiving adequate training on curriculum change at the PHEIs where they were working. During the interviews, some of the AMMs indicated that whatever knowledge they had on curriculum development including curriculum change, they

received it during their years at colleges and universities as students and was the knowledge they were using to help them plan and implement curriculum change at their current work.

There is no doubt that training is very important for improved AMMs performance and this was also made clear by the AMMs themselves during interviews when they expressed surprise and disappointment that their institutions were not providing any training opportunities on curriculum issues such as curriculum development, implementation and change. Literature showed that having adequate training in an area of specialisation gave a manager confidence to effectively carry out his/her duties in HEIs (Fullan, 2005; Hargreaves & Fink, 2006). In their discussion of professional adequacy, Hargreaves and Fink (2006) argue that training developed ability and confidence in AMMs to effectively implement curriculum change in HEIs.

A number of AMMs interviewees confessed that ever since they were employed at the institutions, they never participated in any training on curriculum development in general and in curriculum change in particular. This situation showed that top management in these institutions did not seem to take staff training and development seriously despite its importance in capacitating both staff and AMMs with the much needed knowledge and skills for effective planning and implementing curriculum change. According to interview results, top management in the PHEIs viewed training as a cost and a waste of time rather than an investment, hence their seemingly negative attitude towards training.

5.2.3.5. AMMs were not given detailed job descriptions at start of their roles

The study found that the AMMs were not given detailed job description at the start of their roles as middle managers in PHEIs. This was indeed a big setback as a job description is meant to clarify what exactly an AMM is supposed to do in curriculum department in general, and in curriculum change in particular. A clearly articulated job description delineates tasks for AMMs and helps AMMs to effectively plan and prioritise their activities to ensure they are successful. Without a job description that is clear on what an AMM is supposed to do as was the case with AMMs in PHEIs, most of the AMM activity time was then used for doing mundane non-academic work instead of concentrating their efforts on academic activities such as planning and implementing curriculum changes among others.

The above argument was confirmed by both quantitative and qualitative results. According to Magpie Consulting (2013) detailed job descriptions make work more efficient and give managers a chance to sort out roles and responsibilities, to specify who does what, to eliminate overlaps and to make sure nothing is falling through the cracks. The above statement means that for AMMs in PHEIs to be able to function effectively and perform their roles in the planning and implementation of curriculum change more effectively, they should be given clear and adequate direction through job descriptions. From interviews conducted with the AMMs, results showed that those who were able to receive job descriptions, their job descriptions were not clear or detailed enough to be able to guide them on what exactly their role in the PHEIs was. By failing to provide AMMs with detailed job descriptions, top management failed in their role to clarify what each AMM was responsible for and what was expected of the AMMs.

Literature showed that if AMMs are put into situations where what they were supposed to do was not clearly defined, issues such as role ambiguity, role strain, role conflict and role overload occur (Macionis & Linda 2010; Madden, 2013; Ram et al 2011; Safaria, bin Othman & Wahab, 2011; Vanishree, 2014). Smith and Erwin (2005) further extended the above argument by asserting that a lack of clear job description puts AMMs in a position where role conception (what an AMM actually thinks his/her role is), role perception (what others in the organisation think the role of the AMM should be) and role behaviour (what the AMM actually does) were not reconciled and role ambiguity arises with the net effect being confusion about what AMMs are expected to do. Symptoms of role ambiguity in the departments include concern over who does what, blaming others for not getting the job done, ineffective communication, questions over who makes what decisions, as well as the creation of and attention to, non-essential work to fill time (Smith & Erwin, 2005). When AMMs are put in this situation where they are either not given job descriptions or are given job descriptions that fall short on detail, they would lack focus as well as ability to effectively prioritise their tasks during a change process (Harvard Business School, 2002) as happened to AMMs in PHEIs.

5.2.3.6. AMMs have no full authority on the planning and implementation of curriculum change.

Results of the study showed that AMMs in PHEIs did not have authority over activities in their department owing to the centralised nature of decision making in PHEIs. It was established in the study that AMMs in PHEIs exhibited an external locus of control over their roles as they had no

authority over what they did in the institutions in general and in curriculum change in particular. Different studies show that having a clear locus of control (internal or external locus of control) over one's duties is critical to the successful performance of the duties. This line of argument is articulated in the works of French & Raven (2005) and Luiz (2006) who argue that having an internal locus of control means that middle managers believe that events affecting what they do are solely a result of their own behaviour and actions whereas middle managers that exhibited an external locus of control believed that events in their activities or roles were primarily determined by fate, chance or other people.

Interviews with AMMs showed that owner-managers of PHEIs centralised and controlled virtually everything from information flow to who did what and when. The interviews showed that it was very difficult for AMMs in these institutions to initiate anything in their departments, no matter how small without taking time to consult with the owner-managers. In many instances the AMMs indicated during interviews that as a result of lack of authority, they felt that they were reduced to just conveyors of top management views with very little in terms of contributions being allowed from them. The AMMs also felt that this was one of the major challenges in PHEIs which was making the performance of their roles in curriculum change very difficult.

5.3. The influence of biographical characteristics on AMM role in curriculum Change

The study undertook to establish whether biographic characteristics had an influence on how AMMs performed their role in the planning and implementation of curriculum change in PHEIs. This was in line with the research question which sought to investigate the role of AMMs in the planning and implementation of curriculum change in PHEIs. Results of the study showed that biographic characteristics had an influence on how AMMs performed their role in the planning and implementation of curriculum change in PHEIs. These results confirmed studies by a number of authorities who found that biographic factors such as age, gender, educational levels, years of experience and size of the department an AMM managed influenced, in their own unique ways, how individual AMMS interpreted and participated in a change process (Mason, Aihara-Sasaki & Grace, 2013; Otanga & Mange, 2014). A number of studies have revealed that

biographic factors such as years of work experience, gender and educational levels have a significant bearing on an individual's perception and participation in change (Capella et al., 2009; Deem, 2003a, 2003b; Smith, 2005).

5.3.1. The influence of educational level on AMM role in curriculum change

It was established in the study that educational levels had an influence on the way AMMs performed their duties in the planning and implementation of curriculum change in PHEIs. The influence of educational level is considered as having a moderating effect on how managers perform their roles. As an example, Wierssema and Bantel (1992) in Mayer et al., (2011) argue that the way managers perceive and participate in curriculum change depends on the level of education and is reflected by their individual cognitive ability and skills to effectively lead a change process such as curriculum change. In their study on the influence of educational qualifications, Salleh, Yaakub and Dzulkifli (2011) found that a person who possesses high levels of education and skill tends to succeed because of high levels of job knowledge (unique skills, intelligence and work methods) than a person with less or without. Results showed that AMMs viewed having higher academic and professional qualifications as influential in ensuring that AMMs had adequate knowledge of their curriculum area and with this adequate knowledge in a curriculum area, the AMMs were in a position to effectively plan and implement curriculum changes in their areas of specialisation. In the context of the current research, it was shown that AMMs with PhD qualifications tended to perform better than those with lower qualifications when it came to the planning and implementation of curriculum change. These results therefore showed that there was a strong appreciation by AMMs in PHEIs of the fact that it was important to be adequately schooled in one's area of specialisation because a strong understanding of one's area of specialisation was important in helping AMMs to more effectively understand and implement curriculum change in their curricula areas of specialisation.

Literature on the role of AMM in HEIs also confirmed that differences in educational levels tended to lead to differences in performances by AMMs. In their study on the effect of levels of education on AMM role during a change process, Wiersema and Bantel (1992) cited in Mayer et al (2011) found that higher educational levels were associated with high capacity for information processing and ability to discriminate among a variety of alternative change choices by managers. In their study, Dollinger (1984) in Mayer et al (2011) found that highly educated

individuals were more likely to engage in boundary spanning change activities, tolerate ambiguity and show ability for integrative complexity during a period of change.

In their earlier studies on the effect of levels of education on manager participation in a change process, Mason et al. (2013) and Otanga and Mange (2014) found that AMMs who possessed higher educational levels such as master's and doctoral degrees perform better than those with lower educational levels during the planning and implementation of curriculum change.

Other studies however, have shown that educational levels do not contribute to the way people perceived and participated in a change process. In a study conducted by Awofala, Ola-Oluwa & Fatade (2012), it was discovered that academic qualifications had no influence on how teachers and managers perceived a new curriculum after a change. Awofala et al. (2012) also showed from a study on the influence of biographical characteristics on the role of managers that academic qualifications had no influence on how managers perceived a new curriculum after a change effort. Similarly, Kurga (2014) in his study on the influence of gender, age and level of training on a manager's performance during a change process, found that level of training (education) had no significant influence on how people perceived a change process. In the current study, only one out of ten AMM indicated that levels of education had no influence on how AMMs plan and implement curriculum change in their institutions which is confirmation that the general view is that levels of education has an influence on how managers participate in a change process.

5.3.2. The influence of years of experience on AMM role in curriculum change

Results of this study showed that the number of years of work experience had a significant effect on the ability of AMMs to effectively plan and implement curriculum change in PHEIs. Both quantitative and qualitative results confirmed that years of experience were important in helping AMMs effectively plan and implement curriculum change. This is in line with the old saying that experience is the best teacher. The above findings also confirm earlier findings in different studies and literature about the role of experience in a change process.

Previous studies on the influence of experience on a manager's role found that experience had a significant influence on how managers perceived and participated in a change process such as

curriculum change. Experienced teachers and managers operate from a deeper and more sophisticated knowledge base than the less experienced ones, hence tended to manage change better (Feldman, 2006; Fullan, 2003; Hudson, 2006; Sergiovanni, 2002). Fullan (2003) goes further to support the influence of experience on AMM role in curriculum change by providing seven types of knowledge which give experienced managers advantage over the less experienced ones in the planning and implementation of curriculum change. These seven types of knowledge by Fullan (2003) are content knowledge, pedagogical content knowledge, general pedagogical knowledge, curriculum knowledge, knowledge of educational context, knowledge of learners and their contexts, and knowledge of educational aims, values, their philosophical and historical backgrounds. These seven types of knowledge demonstrate that years of experience in working with different curricula helped AMMs in perfecting their ability to plan and implement curriculum change.

In his study on factors affecting the implementation of curriculum change in Business Education, West (2000) found that there was a strong positive correlation between years of experience and ability to plan and implement curriculum change. A study conducted by Ibukun, Oyenole and Abe (2011) also shows that more experienced leaders perform better than less experienced ones. The above was confirmed by further studies on the positive influence of years of experience on how a managers plan and implement a change process (Mason et al., 2013; Otanga & Mange, 2014).

Other authorities however, dispute the assertion that years of experience have an effect on how AMMs performed their roles in curriculum change. Brown (2004), in their study on the influence of experience on a manager's role in the management of change found that the ability to plan and implement a change process was not influenced by a manager's years of experience.

5.3.3. The influence of age on AMM role in curriculum change

The study showed that age had no significant influence on how AMMs planned and implemented curriculum change in PHEIs. Both quantitative and qualitative results confirmed that age had no influence on the way AMMs planned and implemented curriculum change in PHEIs. Results showed that both younger and older AMMs can equally plan and implement curriculum change given the right conditions to do so. The fact that age had no influence in the way AMMs manage

change is corroborated by studies (Ibukun, 2011). In his study on whether age influenced the way a manager performs his/her duties in HE, Kurga (2014) found that age had no influence at all. Glasscock (1991) also conducted a study on the role of age on leadership effectiveness among managers in HEIs and found that age did not contribute to how managers led the process of change HE.

Other studies however, showed that age had a direct influence on how managers perceived and participated in a change process. According to Hitt and Tyler (1991) as cited in Otanga and Mange (2014), an individual's age has an influence on strategic decision making perspectives and choices during a change process. In their research on the influence of demographic variables on manager performance, Hitt and Tyler (1991) as cited in Otanga and Mange (2014) also found that a manager's age had an influence on their strategic evaluation of choices especially during a change process. The same research further showed that as people get older, they become less flexible, more rigid and more resistant to change than younger managers who tend to be more risk-oriented in their change decisions thus disputing the fact that the older a managers is, the better he/she is in the planning and implementation of curriculum change.

5.3.4. The influence of gender on AMM role in curriculum change

It was established in the study that gender had a significant effect on the planning and implementation of curriculum change by AMM in PHEIs. Both quantitative and qualitative results confirmed the results. This means that the way the planning and implementation of curriculum change was done differed between male and female AMMs in PHEIs. When one also looked at the situation in PHEIs in Botswana, it was observed from demographic data results of this study that there were more male than female AMMs in PHEIs which could be a pointer to the thinking that top management in these institutions may be holding the assumption that male AMMs performed better in leading change in higher education when compared to female AMMs.

That male AMMs performed better than female AMMs in the management of change seemed to be corroborated by previous studies conducted by a number of authorities. A study by Wiles, Hare, Grobman and Hiries (1996) found that men performed slightly better than women in their management of change especially with regards to ensuring more participation of subordinates.

Adigwu (2004) confirmed the above findings by his study which showed that men were slightly above women in the management of performance during a change process.

Other studies though also showed that the leadership style of female managers gave them advantage over their male counterparts during a period of change. In their study on women and leadership, McKinsey and Company (2009) found that female managers' leadership style was people-based, included role modeling and showed clear expectations and rewards and also helped them in getting the confidence and trust of their subordinates, which was very critical during periods of change. In his study, Folkman (2012) also found that female managers were more competent than male managers in practicing self-development, using transformational and collaborative leadership style as well as in driving results. A study on gender differences in leadership by Trinidad and Normore (2005) also found that female AMMs tended to use transformative (motivating others by transforming their self-interest into goals of the team), empowering and collaborative leadership styles during a change process while male leaders tended to be directive and authoritarian. By using interactive team approach leadership styles that encourage participation, sharing of power and authority, female managers were viewed as being more effective in leading change than their male counterparts (Rosener, 1990; Bass, Avolio & Atwater, 1996).

Still other studies however showed that there were no gender differences in the way male and female AMMs participated in a change process. This argument explained the position of AMMs who indicated that gender had no effect on the way AMMs planned and implemented curriculum change. In their studies of gender influences on the leadership of a change process, Barter (2001) found that men and women perform equally. These findings are also confirmed by Kurga (2014) who found that gender had no influence on teachers' and managers' perception of and participation in a change process. In their study on how male and female managers perceive and participate in a change process, Awofala et al (2012) also found that there was no difference between how male and female managers perceived and participated in a change process.

5.3.5. The influence of size of department on AMM role in curriculum change

Size of department in this study was measured by the number of staff in the department. Results of this study showed that the size of the department had no effect on how AMMs planned and

implemented curriculum change in PHEIs. The above could be so because biographic results on the size of departments showed that departments in PHEIs were small, that is, had few members mostly around 10 and hence could not pose management problems to AMMs during the planning and implementation of curriculum change. Previous studies also confirm the relative ease with which middle managers can lead smaller departments compared to larger ones. In their study on the influence of the size of a department on how managers enacted their role in curriculum change, Deem (2003) found that there was no influence.

Other studies show that the size of the department has an effect on the way AMMs planned and implemented change in HE. A large department according to Capella et al (2009) created a burdensome workload for the AMM and in the end limited the chances of the AMM providing subordinates with the much needed professional support especially for effective involvement in a change process. Capella et al (2009) further argues that large department sizes limit the ability of AMMs to introduce more creative ways of leading curriculum change due to high supervision loads thereby affecting the planning and implementation of curriculum change. CHE (2009) and OECD (2010) also argue that department size is a problem to AMM role in the management of change due to challenges of managing many resources (human and material).

In their study on the influence of institutional and department size on a manager's role in the management of change, Wiersema and Bantel (1992) cited in Mayer et al (2011) found that an increase in the size of departments added complexity with its attendant increases in structural elaboration and formalized systems for planning, control and resource allocation. Another study conducted by Tushman and Romanelli (1985) as cited in Otanga and Mange (2014) found that large department sizes created progressively stronger resistance to fundamental change as information failed to get to all department members on time and with the same intent or meaning causing some members to feel ignored or isolated from the communication web and eventually eliciting negative attitude and resistance towards the change.

5.4. Strategies for implementing and managing curriculum change

Results showed that due to many challenges during the planning and implementation of curriculum change, chief of which was a highly regulated work environment, there were very few curriculum change strategies which they could effectively apply in their departments. The

above was despite the fact that literature showed that there were a number of strategies which AMMs could use to plan and implement curriculum change in HE. These strategies also called operational strategies according to the five dimensions model developed by Victor & Franckeiss (2002), included the reward strategy (rewarding of the department staff as a way of recognising their role in the implementation of curriculum change), resourcing strategy (ensuring availability of adequate curriculum change resources in the department), performance management strategy (ensuring department staff's strengths, weaknesses and plans for improvement are factored into the curriculum change process), and communication strategy (ensuring that communication to both department staff and other stakeholders is clear and timely).

It was established in the study that AMMs were highly effective in ensuring a spirit of teamwork as a strategy in their departments during curriculum change. This was a clear indication that AMMs understood the benefits of working as a team in the achievement of set curriculum change objectives. A culture of teamwork according to Griffin (2011) prepares members to work together to achieve a given task or assignment. Floyd and Wooldridge (2000) also draw attention to the fact that building a culture of teamwork in a department is critical for raising the level of commitment of all departmental members which in turn is important for productive performance. A strong team culture if well managed, can come in very handy in promoting team learning and in assisting, particularly newly promoted novice AMMs, to effectively manage curriculum change (Cragg, 2011). If not well managed however, it can inhibit team learning and also undermine efforts to implement curriculum change (Ruding, 2000; de Lucia, 2008). Curee (2010) also argues that for a curriculum change effort to be successful, it must be owned by the implementing staff through their direct involvement as team members, right from the beginning.

Making sure that there were effective channels of communication between senior management and the department through meetings and other communication strategies during both the planning and implementation of curriculum change was another strategy which AMMs effectively implemented during curriculum change. The study further established that AMMs were effective in activities in which they had control of the variables, and communication was one of those activities. Effective communication by AMMs in departments ensured that no members were left behind in terms of knowing the progress of the change effort and that every voice in the department was heard. Communication is the lifeblood of all activities in life. With

poor communication, nothing moves as people will not know what needs to be done, when, how and by whom.

The importance of effective communication as a strategy especially during periods of change is highlighted by Goodman (2001) who argues that communication needed to be multidirectional (downward to subordinates, horizontal to share information with other AMMs, and upward to ensure top management is always upraised of the progress or challenges encountered in the change process). Goodman (2001) further points to the fact that effective communication during the change period should allow for high levels of participation of department members in departmental communication as this ensures ownership of all change decisions by all department members.

Another strategy which AMMs in PHEIs effectively used to ensure the success of curriculum change in their departments was disseminating evidence of good practice to all department staff so that all members could learn from best practices and improve. The above meant that there was a clear realization by AMMs that people could improve their performance by learning from others' experiences. This strategy is supported by Victor and Franckeiss (2002) in their five dimensions model when they argue that the importance of demonstrating the desired behaviours as encompassed within the values statements and the competence frameworks should never be underestimated. Jones and Duckett (2006) also support the dissemination of good practice as a strategy for enhancing the success of educational change by arguing that sharing evidence of past success and how it was achieved helps to show members that curriculum change is a project that could be done successful.

The above generates confidence and enthusiasm in members. Curee (2010) also argues that having an effective mechanism to disseminate good practice across the departments so others could learn from it is very important for the success of a change effort. Drawing from literature, (Curee (2010) further states that AMMs can improve the implementation of curriculum change by disseminating best practices in the following ways: Organising team teaching sessions, using teaching mentors to disseminate, and providing in-service training days where staff share experiences in a structured manner.

The study found that AMMs performed satisfactorily in the use of the following curriculum implementation strategies: identifying the strengths, talents, experience and abilities of staff in order to be able to effectively deploy them into positions to effectively implement curriculum change; channeling department resources to where they are most needed during the implementation of curriculum change; making curriculum change a high priority by placing curriculum change issues at the top of the agenda in meetings; and making curriculum change a standing item in all department discussions.

With regards to the strategy of identifying strengths, talents, experience and abilities of staff in order to be able to effectively deploy them into positions to effectively implement curriculum change, AMMs demonstrated an important realization and understanding that people work better and more effectively when they are put into positions where demands of the role fit with their skills and knowledge. This idea is supported by Jones and Duckett (2006) who argue that for the success of a change process, the AMM should always field the best team to perform in the best positions. Jones and Duckett (2006) make their point clearer about aligning roles and abilities for the success of curriculum change. This can be done by suggesting that AMMs identify the strengths, talents and abilities of the departmental team thorough a skills and experiences audit and then deploy them into the most fitting positions during curriculum change in their departments.

According to Jones and Duckett (2006) just because a member of staff in a department has been recruited to undertake a specific role for example in curriculum change, does not mean that such a member has all the requisite strengths, talents and abilities to effectively contribute to the effective implementation of curriculum change in his/her department hence the relevance of the skill-role fit strategy.

Deployment of resources where they are needed most is a strategy which AMMs in PHEIs used for effective planning and implementation of curriculum change. Results showed that AMMs were fairly effective on using this strategy. One reason for average performance on the use of this strategy could be that resource acquisition and allocation in PHEIs is overall the preserve of the owner-managers as indicated in the interviews with the AMMs. With the acquisition and

allocation of resources being centralised, results showed that it became difficult for the AMMs to get and deploy department resources as required thereby rendering this strategy difficult.

Results of this study showed that AMMs in PHEIs also fairly effectively used the strategy of making curriculum change a high priority process during curriculum change. This was testimony enough that despite a highly restrictive work environment, these AMMs believed that making curriculum change a high priority was important for driving curriculum change. According to Jones and Duckett (2006), making curriculum changes a high priority process in departments helps to motivate members and to create a sense of urgency amongst department members. It was argued in literature that if department staff sees that their managers are dedicated and enthusiastic about making curriculum change successful, they (staff) will also show the same level of enthusiasm and commitment to the change (Curee, 2010; Mace, 2001).

It has also emerged from the study that AMMs performed very poorly in their use of the following strategies in the implementation of curriculum change: holding regular department meetings to ensure all department staff are updated on the progress of the curriculum change process; selecting a senior member of staff in the department to be visibly available to advise and lead department staff during the implementation of curriculum change; and providing on-going in-service training to meet the professional development needs of the staff during the implementation of curriculum change. As mentioned above, AMMs operated in a highly regulated and centralised work environment where they had very little if any, control over what they were assigned to do. By not having control and decision-making in most of the daily routines in their departments (results from interviews), AMMs in PHEIs had little leverage to perform their roles in curriculum change effectively.

The issue of high workloads which left AMMs with very little time to engage in core academic activities was also confirmed in literature. Fitzgerald (2009) observes that middle managers in higher education face workload pressures during the conduct of their roles. According to Ingvarson et al (2005), such high workloads result in middle managers having less time to effectively lead and manage curriculum change. What is most unfortunate according to Cragg (2011) is that most of the AMMs' time for doing core academic activities in HEIs is taken away

by non-core administrative activities which top management and faculty administrators should be doing in the first place.

5.5. Enablers of AMM role in curriculum change

The fact that there were no major enabling conditions on the role of AMMs in the planning and implementation of curriculum change further amplified the issue that the Private Higher Education (PHE) environment presented more challenges than enablers to AMMs during curriculum change especially because it was highly regulated. A total of five factors out of eight which acted as moderate enablers were identified as having an influence with the rest heaving negligible influence on how AMM planned and implemented curriculum change in PHEIs. This was despite the fact that studies show that all of the following factors: adequacy of resources, availability of time, school ethos, professional support, professional adequacy, professional knowledge, professional attitude and interest, and participative leadership have a critical enabling role in the effective planning and implementation of curriculum change and hence need to be satisfied (Fullan, 2005; Hargreaves & Fink, 2006). Studies further show that failure to satisfy any of the above factors puts a dent on the performance of managers during a change process (Fullan, 2005). The above five enablers which had a moderate influence on the role of AMMs in the planning and implementation of curriculum change included: regularly providing department members positive feedback that recognises and acknowledges progress in the planning and implementation of curriculum change; ensuring access by all department staff to critical curriculum change information when needed; showing a professional attitude and interest to the curriculum change process; demonstrating professional knowledge; and demonstrating professional adequacy or competency to perform their role in curriculum change.

All the above factors which moderately enabled AMMs role in curriculum change are variables within the control of the AMMs with any other variables outside the domain of the AMMs control, acting more as challenges than enablers to AMM role in curriculum change. The above was despite the fact that studies show that institutional variables which are beyond the control of AMMs which include professional support, school ethos, provision of adequate time, among other factors, are important enablers of effective and successful curriculum change (Gianoutsos and Monk, 2011; Finger and Houguet, 2006). It was established that AMMs could only motivate their members through personal attributes rather than through other means such as time off,

awarding of bonuses, promotion, reduction of workloads as all these and more were within the control of top management with AMMs having neither say nor authority over them.

As mentioned above, creating an enabling environment for the effective planning and implementation of curriculum change in PHEIs was important for AMMs as they needed the support of each and every member of their departments to get the job done. Literature showed that such support normally came from people who were motivated and who felt involved and valued (Fullan, 2005). In further supporting the importance enabling conditions, Gianoutsos and Monk (2011) assert that in order to produce successful change, institutions must practice, as part of creating enabling conditions, the “7 to 1” rule which states that for every one hour of participation in professional activities, teachers need seven hours of in-school institutional support.

One of the enabling conditions that AMMs also identified as a moderate enabler of their role in curriculum change was the use of feedback in order to recognise and acknowledge progress in the planning and implementation of curriculum change in PHEIs. Literature shows that effective and timely communication is very important for a successful change process. This is confirmed by Ramani and Krackov (2012) who intimates that feedback works better if it is specific, positive and timely as this allows any necessary adjustments to be made on time. According to the five dimensions model developed by Victor and Franckeiss (2002), ensuring that feedback about the progress of a change effort is clear to both department staff and other stakeholders is important for the success of both the planning and implementation of change. Hamid and Mahmood (2010) also posit that feedback is important as a means of identifying areas of need and for providing suggestions for improvement, while Centre for Learning and Teaching (2003) also posits that feedback is important for increasing self-awareness, offering options and encouraging the development of those involved in a change effort. However, as mentioned by Hamid and Mahmood (2010), for feedback to be effective, it should be well timed, expected and more importantly, deal with specific change issues rather than generalisations.

AMMs also indicated that they ensure that all department staff access critical department information regarding curriculum change when such information was needed. This was important because having only certain members accessing the information creates a feeling of

favouritism and disharmony among department members and is further viewed as highly demotivating. All department members needed to be treated equally if they were to expend equal amounts of effort in the change effort. According to Curee (2010), once members feel isolated, the tendency is to withdraw and not participate in a given activity and this has detrimental effects on the success of the planning and implementation of curriculum change in PHEIs. It was therefore, important to note that AMMs in the PHEIs were making commendable attempts at ensuring that all members of their departments had equal access to important departmental information including that related to the planning and implementation of curriculum change.

It has also emerged from the study that to some extent, AMMs demonstrated requisite professional attitude and interest to the planning and implementation of curriculum change in PHEIs. Showing a positive attitude and interest in one's work was viewed by AMMs as very important especially for AMMs as curriculum leaders because it translated to leading by example and was an important predictor of success of a change effort. If a leader had a negative attitude and had no interest in his/her work, this normally had a ripple effect of cascading down to the subordinates thereby affecting the achievement of curriculum change goals set. Literature shows that a negative attitude to a change process generally brings more problems to the change effort than solutions (Lewthwaite & Fisher, 2004; Sade & Coll, 2003). According to Finger and Houguet (2006), having a positive attitude and interest is important in motivating members to want to be involved more in the change effort.

Having adequate professional knowledge was also viewed by AMM in the study as a factor with moderate influence on AMM role in the planning and implementation of curriculum change in PHEIs. Results showed acceptance by AMMs that for one to function effectively as an AMM general, and in curriculum change in particular, he/she should have sound knowledge of his/her curriculum area. According to Finger and Houguet (2006), having adequate professional knowledge implies having good background knowledge of the curriculum area in terms of the content and its pedagogical issues. Other authorities also view adequate professional knowledge as requisite to a sound understanding of the curricula area one was leading (Sade & Coll, 2003; Steins, Ginns & McRobbie, 2001). Lewthwaite and Fisher (2004) also argue that having adequate professional knowledge is about having received formal training in the curriculum area requiring change. Being adequately trained has also been viewed as a tool for boosting

subordinates confidence in the leaders since people always want to be led somebody they believed had knowledge and knew what they were doing.

Finally AMMs viewed professional adequacy as another factor that moderately enabled AMMs role in the planning and implementation of curriculum change in PHEIs. While its impact, like the other four above, was moderate, AMMs believed that this enabler played an important part in making their role effective in the planning and implementation of curriculum change in their institutions. The role of professional adequacy as an enabler was also confirmed in literature. According to Finger and Houguet (2006), professional adequacy relates to the level of confidence people have in their ability to perform an activity and was closely associated to one's level of knowledge and understanding of the curriculum area requiring change. Lewthwaite (2006) views professional adequacy as one of the intrinsic factors that influences how managers involved themselves in a change effort. Lewthwaite and Fisher (2004) also argue that professional adequacy was directly associated with one's ability to plan and implement a change effort.

5.6. Summary

Chapter 5 interpreted the research findings within the five broad themes. The findings show that with regards to the views of AMMs on how they led curriculum change in PHEIs, their role was constrained by the many challenges they faced, disabling them to satisfy requirements of their roles. The centralised nature of management in PHEIs made it difficult for AMMs to effectively lead curriculum change. With regards to the influence of biographical characteristics of AMMs, overall results showed that age and department size had no influence on AMMs' role in curriculum change while educational level, years of experience, and gender had a significant influence in the way AMMs plan and implement curriculum change in PHEIs. With regards to the influence of AMM requirements on AMM role in the planning and implementation of curriculum change, results indicated that AMMs lacked in many aspects of the job requirements which negatively affected the way they enacted their role in the planning and implementation of curriculum change. With regards to the strategies AMMs used to ensure successful planning and implementation of curriculum change, the findings showed that AMMs effectively used only 3 out of 9 strategies effectively which showed a weakness in terms of how the AMMs played their role in curriculum change.

The discussion of findings also showed that AMMs faced many challenges due to the restrictiveness of their work environments hence they were not effective in leading curriculum change. Discussion of findings also showed that due to many challenges AMMs faced in their institutions, there were very few conditions that acted as enablers of their role in the planning and implementation of curriculum change.

CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

This chapter summarises the study by drawing conclusions about the role of AMMs in the planning and implementation of curriculum change in PHEIs in line with the research findings. The chapter further makes recommendations to enhance the planning and implementation of curriculum change in PHEIs, and for further study. Firstly, the study has been divided into six chapters namely chapter one which is the introduction, chapter two literature review, chapter three methodology, chapter four analysis of findings, chapter five discussion and interpretation of findings and chapter six summary of the study, conclusions and recommendations. This study has shown that while the role of the AMMs is critical for the success of the planning and implementation of curriculum change, the success of AMMs in this role was affected by the general working conditions in the PHEIs, lack of formal training as well as lack of adequate experience in the planning and implementation of curriculum change. A synopsis of each chapter is presented followed by a summary of findings, the conclusions and recommendations of the study and for future research.

6.1.1. Summary of study chapters

6.1.1.1. Chapter 1: Introduction

Chapter one introduced the study by setting the context in which AMMs operated when planning and implementing curriculum change in PHEIs. It showed that the role of academic middle managers was still a grey area in research despite the fact that there was now growing recognition of the key role AMMs played in institutional improvement in general and curriculum change in particular. Chapter one also showed that AMMs operated in a highly regulated private higher education environment. Having given this context, chapter one also provided the main aim and research objectives of the study with the major purpose being the development of model for enhancing the AMMs' role in the planning and implementation of curriculum change. The main aim of the study was to investigate how effectively AMMs plan and implement curriculum change in PHEIs (see chapter1 section 1.6). Research questions were also given to guide the study (see chapter 1 section 1.5).

6.1.1.2. Chapter 2: Literature Review

Chapter two provided the conceptual and theoretical framework of the study in which the role of AMMs in the planning and implementation of curriculum change in PHEIs was discussed in greater detail. As part of literature review, the concept of curriculum change was discussed highlighting the fact that curriculum change was often a problematic process for academic middle managers because it was political, complex, contradictory and occasionally symbolic. As a result of this complexity, curriculum change could not therefore, be viewed as purely a planned technocratic reform to improve the productivity of the educational system but rather as a socio-political measure that reshapes relationships between individuals and institutions through the selection and organisation of school knowledge. The above conception of curriculum change not only as a technical process but also as a socio-political process necessitated the discussion of the dimensions of curriculum change which include the technical, political and cultural dimensions. To further enhance understanding of curriculum change, the curriculum change process was discussed in detail showing that the curriculum change cycle begins with needs analysis and ends with institutionalisation of the curriculum changes.

The concept of role with regards to what AMMs do in PHEIs was also discussed in chapter two with special attention being paid to the fact that the role of the AMM in Higher Education Institutions (HEIs) was no longer constituted solely by the number and scope of managerial responsibilities AMMs performed, but also by the institutionalised meaning of management in a particular society or context. Literature further showed that this redefinition of the role of AMMs as indicated above arose as a result of the apparent shift away from collegialism to managerialism which resulted in AMMs assuming more administrative responsibilities than academic ones. Challenges which AMMs faced, as well as strategies they deployed to deal with the challenges in the planning and implementation of curriculum change were also discussed. Conditions necessary for successful planning and implementation of curriculum change, were also discussed and so were the barriers to successful curriculum change. At the end of chapter two, the distributed leadership theory was identified as the theoretical framework that informed the study. Based on the literature review and the theoretical framework, a research model was proposed to guide the study.

6.1.1.3. Chapter 3: Methodology

Chapter three delineated the methodology for the study. The pragmatic philosophy was chosen to guide the study. The choice of the pragmatic paradigm was informed by the fact that it was the only paradigm that emphasised coming up with practical findings that worked in solving problems of a particular time and context. This was in line with the purpose of the study that was to come up with a model for enhancing the planning and implementation of curriculum change in PHEIs. The research design selected for this study was the concurrent triangulation design in which both qualitative and quantitative data were mixed using the mixed methods approach. Such a design was viewed in literature as important in coming up with more valid, practical and holistic findings that could be used to improve the planning and implementation of curriculum change by AMMs in PHEIs.

Units of analysis for the study were the AMMs, the people responsible for the planning and implementation of curriculum change in PHEIs. With regards to instrumentation, a structured questionnaire and a semi-structured interview guide were used for data collection.

Descriptive, parametric and non-parametric statistics were used for the analysis of quantitative data while thematic content analysis was used for the analysis of qualitative data in chapter four. To ensure that data collected was reliable and valid, tests of reliability and validity of the research instruments were conducted. Ethical considerations that included informing respondents of their rights during the research process were applied.

6.1.1.4. Chapter 4: Analysis of results

Chapter four presented and analysed both qualitative and quantitative data. The chapter marked the point when qualitative and quantitative data were integrated. Analysed data showed that there was convergence between quantitative and qualitative results with regards to how AMMs planned and implemented curriculum change in PHEIs. Quantitative results presented in chapter four were analysed using parametric, non-parametric and descriptive statistics while qualitative results were analysed using thematic content analysis.

6.1.1.5. Chapter 5: discussion of findings

Chapter five discussed the main findings of the study. Among some of the major findings of the study were the following: there were more male AMMs in PHEIs than females; most AMMs were middle aged; the work environment in PHEIs was highly regulated and as a result of the restrictive nature of the environment, AMMs faced many challenges in the planning and implementation of curriculum change; biographical characteristics of AMMs such as gender, educational levels, and years of experience had an effect on how AMMs planned and implemented curriculum change, while age and department size did not have any influence. Another finding was that AMMs were lacking in the following AMM job requirements: adequate knowledge of curriculum change; adequate experience in curriculum change; detailed job descriptions at the start of their roles; had conditions in PHEIs that acted as enablers of AMM role in the planning and implementation of curriculum change. Because of the above deficiencies and challenges, overall, AMMs proved to be less effective in the planning and implementation of curriculum change in PHEIs.

6.2. Restating the Problem Statement

The problem statement below set the foundation for the carrying out of this study. While literature attested to the importance of the role of academic middle managers in curriculum change particularly their role in translating institutional policies and strategies into practices and actions as well in generating creative solutions to curriculum challenges facing both their institutions and departments, their role in academic research in general and in curriculum change in particular has largely remained unexplored (Boyko & Jones, 2008). This assertion is also confirmed by Briggs (2003) who draws attention to the fact that the role of academic middle managers in higher education institutions in general, and in curriculum change in particular has largely remained a grey area in research literature.

In the context of Botswana, AMMs operate in a highly regulated private higher education environment. Externally, the government regulatory agencies created a rigid and strict regulatory framework for the accreditation of programmes as well as the implementation of curriculum and curriculum change by AMMs. Internally private higher education institutions are owner-managed and these owner-managers created strict operating procedures in which they run the

institutions as family entities rather than as professional institutions. Such a highly controlled environment potentially impacted negatively on the role of academic middle managers in the planning and implementation of curriculum change.

Despite the above facts, there no study known to the researcher that has been conducted in the context of private higher education in Botswana to determine how academic middle managers operating in such highly controlled work environment plan and implement curriculum change. Researches reviewed on higher education also indicate that there is very limited substantiated body of literature on the role of the academic middle manager in curriculum change in private higher education institutions (Clegg & McAuley, 2005; Lavarda & Canet-Giner, 2009). The above is further corroborated by other researches which indicate that little is known about the actual roles and practices of academic middle managers (Raes, Heijltjes, Glunk & Roe, 2011) and how their activities are facilitated in higher education (Balogun, 2007) yet academic middle managers play an important role on whether a change is achieved or not (Kallenberg, 2007). This study therefore, was an attempt at bridging both the research and literature gaps. Results of the study were used to develop a model to enhance the planning and implementation of curriculum change by AMMs in PHEIs.

6.3. Summary of findings

This section provides a summary of the research findings specifically concentrating on the findings in the four broad themes that constituted the study. The study themes included AMMs' views on their role in leading curriculum change, the influence of biographic characteristics on AMMs role, strategies AMMs used in the planning and implementation of curriculum change and enablers of AMMs role in curriculum change.

6.3.1. AMMs views on their role in the Planning and implementation of curriculum change

AMMs views on how they led curriculum change related to their views of the challenges they faced, their ability to plan curriculum change, their leadership role in curriculum change as well as whether they were able to satisfy their role requirements during the process of planning and implementation of curriculum change. Overall, the findings showed that AMMs believed that they were not able to effectively plan and implement curriculum change in PHEIs owing to myriad challenges they faced as a result of institutional variables beyond their control. These

included operating in a highly regulated and strict work environment, high workloads, role strain, role ambiguity, and the effect of managerialism which included AMMs being made to perform more of administrative tasks rather than academic tasks among others.

AMMs were also of the view that they were unable to effectively plan curriculum change in their institutions as a result of lack of formal training on curriculum change as well as lack of adequate experience on the planning and implementation of curriculum change. In terms of effectively playing their leadership role, AMMs believed that the restrictive nature of their work environment coupled with centralised decision making made it difficult for them to be innovative and effectively play their leadership role due to lack of authority. With regards to AMMs job requirements, AMMs felt that they were overall, unable to meet the requirements because they were not given detailed job descriptions at the beginning of their roles as AMMs, they lacked authority to carry out their mandated responsibilities, most of them did not have formal training on curriculum change and that most of them lacked adequate experience in curriculum change. Failure to satisfy these job requirements meant that AMMs could not effectively play their role in the planning and implementation of curriculum change in PHEIs.

6.3.2. Influence of biographic characteristics on AMM role in curriculum change

Results of the study showed that overall, biographic characteristics of AMMs influenced the way AMMs planned and implemented curriculum change in their institutions. More specifically, biographic characteristics that included level of education, years of work experience and gender had an effect on the manner in which AMMs planned and implemented curriculum change while age and department size did not have an effect.

6.3.3. Strategies for implementing curriculum change

As a result of a highly restrictive work environment, AMMs did not have leverage or options for many strategies they could deploy to effectively plan and implement curriculum change in their institutions. However, among the strategies they could effectively deploy during the implementation of curriculum change were the following: promoting teamwork in my department as a means of ensuring collaboration during the implementation of curriculum change, making sure that there are effective channels of communication between senior management and my department through meetings and other communication strategies during

the implementing curriculum change, and disseminating evidence of good practice to all department staff during curriculum change so that all members can learn from best practices and improve their implementation of curriculum change.

6.3.4. Enablers of effective AMM role in curriculum change

As a result of the prevalence of challenges affecting AMM role in the planning and implementation of curriculum change, there were not many conditions that acted as enablers of AMM role in the planning and implementation of curriculum change in PHEIs. There were only few enablers of AMM role during curriculum change and these had a moderate influence on AMMs role in curriculum change.

6.4. Conclusions

Conclusions of this study are based on answers to the five research questions as shown below:

6.4.1. What are the views of AMMs about the role they play in leading the planning and implementation of curriculum change in their disciplines?

AMMs do not play a significant and effective role in leading the planning and implementation of curriculum change in PHEIs owing to a number of challenges they face. Major challenges or factors that contributed to this ineffectiveness were identified in the study as a highly regulated and restrictive work environment in PHEIs where decision making was highly centralised making effective leadership of curriculum change by AMMs in departments a very difficult and tenuous task. This environment did not allow AMMs to be innovative. High workloads also left AMMs drained and with little to no time to interact with, and guide subordinates during curriculum change. Other factors that militated against effective AMM role in leading curriculum change included lack of authority over the curriculum change process, lack of formal training, and inadequate experience in the planning and implementation of curriculum change.

The above is despite the fact that effective leadership especially distributed leadership was viewed as very critical for optimal performance by all members in a department especially in the time of change. Literature has shown that department members become more committed to the institution or department and show improved performance when the school or department leaders were highly accessible and when the leaders encouraged all members' participation in decision making.

6.4.2. What is the influence of biographic characteristics on the role of AMMs in the planning and implementation of curriculum change in PHEIs?

Based on the results of the study, it could be concluded that biographic characteristics of AMMs which included levels of education, gender and years of experience had a significant influence on how AMMs enacted their role in the planning and implementation of curriculum change in PHEIs. Based on the results of the study also, it is also concluded the age of the AMMs and the size of their departments did not have an influence the role of AMMs in the planning and implementation of curriculum change in PHEIs.

6.4.2.1. The influence of levels of education on AMM role in curriculum change

Levels of education had an effect on how AMMs in PHEIs enacted their role during the planning and implementation of curriculum change. This conclusion confirmed results of previous studies which showed that higher educational levels were associated with high capacity for information processing and ability to discriminate among a variety of alternative change choices by managers and also that highly educated individuals were more likely to engage in boundary spanning change activities, tolerate ambiguity and show ability for integrative complexity during the period of change than the less educated managers.

6.4.2.2. The influence of gender on AMM role in curriculum change

The gender of an AMM had a significant influence on how AMMs planned and implemented curriculum change in PHEIs. This conclusion confirmed conclusions from earlier studies that also showed that differences in gender influenced how managers perceived and participated in a change process especially with regards to leadership styles the two different genders exhibited during periods of change. on one hand, earlier studies showed that male AMMs use masculine leadership styles and are more robust and effective in pushing forward their agendas than female AMMs who are more feminine in their approach. On the other hand, other studies showed that by using transformative leadership style, female AMMs tended to perform better than male AMMs in motivating and ensuring team work among members during change.

6.4.2.3. Influence of years of experience on AMM role in curriculum change

Years of experience had an influence on how AMMs enacted their role during the planning and implementation of curriculum change in PHEIs. This conclusion confirmed earlier findings on

the effect of years of experience on how managers participated in change which showed that experienced teachers and managers operated from a deeper and more sophisticated knowledge base than the less experienced ones and hence had a better sense of change than the less experienced managers. It also emerged that having long years of experience gave managers superior knowledge of the curriculum and its pedagogical issues and hence helped them to demonstrate deeper and sound knowledge of curriculum change.

6.4.3. What strategies do AMMs use during the planning and implementation of curriculum change in PHEIs?

It was established in this study that AMMs did employ many strategies but were not effective in ensuring successful planning and implementation of curriculum change owing to the multiplicity of challenges they faced. The major challenges they faced was a restrictive work environment, lack of authority and heavy workloads that affected the ability of AMMs to innovate and come up with creative strategies for planning and implementing curriculum change.

6.4.4. What are the enablers of AMM involvement in the planning and implementation of curriculum change in private higher education institutions?

This study also concludes that there were very few conditions in PHEIs which acted as enablers of effective AMM role in the planning and implementation of curriculum change in PHEIs. Results of the study showed that the prevalence of many factors that acted as barriers to AMM role in curriculum change limited the availability of enablers AMM could have taken advantage of in curriculum planning and implementation. Results of the study further showed that there were no major enabling conditions contributed to effective AMM role in curriculum change. This situation helped to amplify the position that AMMs in PHEIs operated in a harsh environment that made their role in the planning and implementation of curriculum change challenging and untenable.

6.4.5. What model can be developed to ensure enhance the role of AMMs in the implementation and management of curriculum change in private higher education institutions?

The outcome of this study was the development of a model for enhancing the planning and implementation of curriculum change by AMMs operating in a highly regulated PHE environment. This model can be adopted by institutions operating under similar conditions as PHEIs in Botswana. The model suggests that for effective planning and implementation of

curriculum change, top management in the PHEIs needed to ensure that challenges affecting AMMs role were minimized or eliminated while enabling conditions were created, optimized and supported.

6.5. Recommendations

Based on the above findings and conclusions, the following recommendations are made:

- Top management in PHEIs need to open up the management of the institutions by decentralizing decision making and so as to allow for more sharing of decision. This will allow not only AMMs to collaborate, but also the generality of staff. This will be an important milestone in removing tight controls and a spirit of fear that has for long characterised PHEIs and retarded effective knowledge sharing.
- PHEIs need to prioritise human resources development through training so as to capacitate not only the AMMs with adequate knowledge and skills for effective planning and implementation of curriculum change but also the generality of staff members in the institutions. It was noted in the study that most of the AMMs in PHEIs lack formal training in both curriculum development and change. Opportunities for either in-house training or external training for AMMs in both curriculum development and change will therefore boost their knowledge and skills in the area.
- As a recommendation, PHEIs need to decentralize authority through distributed leadership to ensure that AMMs have an internal locus of control over activities and events in their departments. Having authority and hence autonomy in one's area is a means of empowerment and currently AMMs do not have authority over activities in their departments. Having control over department activities and events will also inspire AMMs to even perform even better during the planning and implementation of curriculum change.
- PHEIs need to have AMMs with more experience in curriculum change. This then means that PHEIs need to deliberately promote academics with enough experience to be able to effectively plan and implement curriculum change in the institutions. In the absence of such experienced academics in the institutions, PHEIs can engage in a process of deliberately ensuring that any new hires have the needed experience in their areas of specialisation.

- It has been shown in the study that AMM positions are mostly occupied by male AMMs at the expense of female AMMs. There is indeed no justification for there not been gender parity in the AMM positions in these institutions as studies have shown that female AMMs can perform as much as male AMMs and in some areas as inspiring performance and building collaborative teams female AMMs have been found to perform better than male AMMs. It is therefore recommended that there should be gender parity in AMM positions in PHEIs as female AMMs have also some important contributions to curriculum change which male AMMs have been found to lack.
- Providing detailed and clearly articulated job descriptions to AMMs is very important at the start of the roles since job description acts as important guides to how AMMs perform their roles. It is therefore recommended that AMMs be given detailed job descriptions at the start of their roles and if possible they should also have these job descriptions clearly explained to them by their supervisors so that they are very clear on what is expected of their roles as AMMs.
- It is also recommended that the workload of AMMs in PHEIs be reduced to ensure that they are able to give more of their time and energy to academic activities such as curriculum development, change and implementation as well as research and community service. AMMs play a very important academic role in their departments hence will require enough time to concentrate on this role. A number of AMMs complained during interviews that they do not have time to perform these vital academic activities due to high workloads. Administrative duties such as checking admissions, checking the payment of school fees by students in the department, distributing textbooks, student counseling, among others, need to be taken off the duty list of AMMs.

6.6. Study's contribution to knowledge

The development of the model (see chapter 4, section 4.10.6) that institutions operating within highly regulated conditions can adopt and use is viewed as a milestone in advancing new knowledge in the discipline of curriculum change. The model shows that variables that include levels of education, years of experience, curriculum leadership, enablers of AMMs role in curriculum change and AMM job requirements are important predictors of effective AMM role in the planning and implementation of curriculum change in PHEIs while variables such as challenges faced by AMMs in the implementation of curriculum change, age of AMMs and size

of departments are not predictors of effective AMM role in the planning and implementation of curriculum change.

The model shows that level of education is the highest predictor of effective AMM role in the planning and implementation of curriculum change in PHEIs, contributing 59.1% of the variation in the planning and implementation of curriculum change in PHEIs. This means that level of education of AMMs contributes more positively than any other variables in the way AMMs play their role in the planning and implementation of curriculum change in PHEIs. With regards to the level of education therefore, for the model to effectively support AMM role in the planning and implementation of curriculum change, first and foremost, the appointment of people to AMM positions in PHEIs needs to be based on academic or professional merit. This means that people with higher educational qualifications need to be given preference for the AMM role before those with less educational qualifications. Highly qualified people already possess superior knowledge of their curriculum area to be able to effectively and successfully plan and implement curriculum change in their departments.

Where an institution has AMMs whose levels of education are low (some PHEIs have AMMs with bachelor's degrees), it is proposed that a robust staff development programme be put in place so that these AMMs are helped to acquire higher levels of educational qualifications and knowledge in their curriculum areas. Such a plan could include funding AMMs for higher studies up to doctoral level. Recruitment of staff from outside the institution needs to target those with higher levels of educational qualifications in their curriculum areas to ensure that a wide base of highly qualified staff to tap from when appointing people to AMM position is available.

Level of work experience is viewed in the model as the second most important predictor of effective AMM role in the planning and implementation of curriculum change in PHEIs, contributing 34.2 % of variation. This means that work experience contributes positively to how AMMs perform their role on curriculum change in PHEIs. For the model to be effectively applied in PHEIs and other similar institutions therefore, top management need to promote people with adequate and relevant years of work experience, that is, people who have been engaged in both the teaching and review of programmes in their curriculum areas for fairly longer periods like ten years. Such a fairly long period of time gives a person enough time to

understand the rudimentary approaches to curriculum change in terms of the processes, challenges and strategies for ensuring effective and successful curriculum change. Understudying could also be used as a tool of ensuring that those who eventually become appointable into AMMs positions have heard years of internship experience under an experienced AMM.

In the model, curriculum leadership is also viewed as one of the predictors of, and positive contributor (13.3%) to effective AMM role in the planning and implementation of curriculum change. This then means that for the above model to be effectively and successfully implemented, top management in PHEIs should ensure that AMMs have authority not only to engage in curriculum change but also to carry out their mandates unhindered by controls. The working environment in the PHEIs should be flexible enough and characterised by decentralised decision making through distributed leadership to enable AMMs to innovate and be creative in their leadership styles during curriculum change. If AMMs are empowered with decision making opportunities and authority, they become more committed and more motivated to perform their roles in curriculum change.

The model further shows that enablers of AMM role in curriculum change are important predictors of effective AMM role in the planning and implementation of curriculum change in PHEIs as they contribute 11.2 % of variation to effective AMM role. The creation of conditions for effective AMM role in curriculum change such as ensuring that AMMs have adequate knowledge through relevant in-service training and/or further studies, providing AMMs with adequate human and material resources, ensuring that AMMs participate in decision making by decentralizing operations among other enablers, will make the implementation of the model successful and will enhance the role of AMMs in the planning and implementation of curriculum change.

The model also shows that AMM job requirements that include among others being provided with detailed job descriptions, having opportunities to participate in training programmes to improve their knowledge and skills for effectively planning and implementing curriculum change, getting more opportunities to participate in curriculum change so that they improve their experience, and being given adequate authority over the planning and implementation of

curriculum change, are important predictors of AMMs success in their role of planning and implementing curriculum change in PHEIs as they contribute 27.5%. With regards to AMMs job requirements, it is therefore recommended that for the above model to be effectively implemented in PHEIs, top management in PHEIs needs to create conditions that enable AMMs to satisfy all the AMMs job requirements. Such conditions include ensuring that AMMs are given detailed job descriptions at the start of their role, using distributed leadership to give more authority to AMMs to lead curriculum change, and providing more opportunities for AMM training to enhance their knowledge, skills and ultimately ability to effectively and successfully plan and implement curriculum change.

The model also shows that challenges that militate against effective AMMs role in curriculum change and these challenges need to be minimized or eliminated if the model is to be successfully implemented. Such challenges include a highly restrictive work environment, high workloads and lack of AMMs authority over the planning and implementation of curriculum change among others. These challenges contribute negatively (-16.9%) to effective AMM role in the planning and implementation of curriculum change. It is recommended that the above challenges be minimized or eliminated completely by ensuring a flexible work environment characterised by decentralization of decision making.

The model further shows that age (-29.3%), gender (-29.5%) as well as the size of departments in PHEIs (-42.6%) have a discernible influence on how AMMs plan and implement curriculum change in PHEIs though they contribute negatively to AMM role. This means ensuring more diversity in the ages and gender of AMMs could ensure the harnessing of different experiences and leadership styles that could auger well for effective curriculum change. With regards to department size, it was noted from results of the study that academic departments in PHEIs are small and easy to manage during the planning and implementation of curriculum change hence could be left like that since they contribute very little to the way AMMs plan and implement curriculum change. Where resources allow, the size of the departments may be slightly improved to capture more talent and knowledge needed during curriculum change.

6.7. Recommendations for further research

The current study has been carried out on one component of the higher education system in Botswana namely PHEIs. It is therefore, recommended that a similar study be carried out on public higher education institutions in Botswana to determine whether the model developed in the current study is applicable in these institutions as well in the planning and implementation of curriculum change. Since the current study focused on PHEIs, that is, degree offering private higher education institutions, a similar study could also be carried out on non-degree offering private tertiary institutions (PTEIs) to establish whether circumstances related to the planning and implementation of curriculum change in these institutions are similar to those in PHEIs and what model could be developed to enhance the role of AMMs in the planning and implementation of curriculum change in the PTEIs.

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APPENDIX 1

RESEARCH QUESTIONNAIRE BY

NORMAN RUDHUMBU PHD STUDENT (UNIVERSITY OF FORT HARE, SOUTH AFRICA)

The questionnaire below is part of the PhD study to investigate the role of the academic middle manager in the planning and implementation of curriculum change in private higher education institutions (PHEIs) in Botswana

A. INSTRUCTIONS:

1. You are kindly requested to take 20 minutes of your time to complete the questionnaire by putting an **X** in the appropriate box bearing your response. Your responses will be treated in utmost confidence.
2. Using the scale below, please indicate how you agree or disagree with the statements from section B to section E with regards to your planning and implementation of curriculum change:
(5 – *Strongly Agree*, 4 – *Agree*, 3 – *Neutral*, 2 – *Disagree*, 1 – *Strongly Disagree*)

B. IMPORTANT DEFINITIONS:

1. *Curriculum change is the process that involves changes in either the educational systems, programme structure (aims, content, evaluation, methodology and/or objectives), leading to changes in approaches to teaching and learning as well as changes to students' learning outcomes (Chan & Luk, 2013).*
2. *Academic middle manager: A person occupying a position of module leader, Assistant Head of Department, Head of Department, Assistant dean or Dean of faculty.*

C. RESEARCH QUESTIONS

1. How do academic middle managers view the role they play in the planning and implementation of curriculum change in their disciplines?
2. To what extent do biographic characteristics influence the role of AMMs in the planning and implementation of curriculum change in PHEIs?
3. Which strategies do AMMs employ for effective planning and implementation of curriculum change in PHEIs?
4. What are the enablers of AMMs role in the planning and implementation of curriculum change in PHEIs?
5. Which model can be developed to improve the planning and implementation of curriculum change by academic middle managers in private higher education institutions?

SECTION A: BIOGRAPHIC CHARACTERISTICS

Please put an X in the box to indicate your response

1) Age (in years):	☐ Less than 25	☐ 25 – 30	☐ 31 - 35	
	☐ 36 – 40	☐ 41- 50	☐ More than 50	
2) Gender:	☐ Male	☐ Female		
3) Education:	☐ Undergraduate Diploma	☐ Bachelor's Degree	☐ Master's Degree	
	☐ Doctoral Degree	☐ If others, please specify _____		
4) Experience (in years):	☐ Less than 5	☐ 5 - 10	☐ 11 – 15	
as middle manager	☐ 16 - 20	☐ More than 20 years		
5) The number of members in my department:	☐ at most10	☐ 11-15	☐ 16-20	☐ 21-25
	☐ More then 25			

SECTION B: AMM JOB REQUIREMENTS

6) I was given a detailed job description at the start of my role as middle manager:	☐ Yes ☐ No
7) Overall, I have full authority on the planning and implementation of curriculum change at my institution	☐ Yes ☐ No
8) I received adequate training on the planning and implementation of curriculum change	☐ Yes ☐ No
9) I possess adequate knowledge and skills to effectively plan and implement curriculum change in PHEIs	☐ Yes ☐ No
10) I am able to effectively plan and implement curriculum change in PHEIs	☐ Yes ☐ No
11)I have experience in the planning and implementation of curriculum change in PHEIs	☐ Yes ☐ No

SECTION C: PLANNING CURRICULUM CHANGE

SN		SA	A	N	DA	SDA
	<i>I perform the following roles in the planning of curriculum change at my institution:</i>	5	4	3	2	1
12	Evaluating together with department staff, the current curriculum to identify its strengths and weaknesses so as to note which curricula component(s) require (s) change	☐	☐	☐	☐	☐
13	Assessing together with department staff, skills the department wants all learners to develop and whether these skills can be developed adequately through the current or a revised curriculum	☐	☐	☐	☐	☐
14	Seeking the views of academics from comparable institutions about the need to review the department curriculum	☐	☐	☐	☐	☐
15	Seeking the views of industry about the need to review the department curriculum	☐	☐	☐	☐	☐
16	Seeking the views of staff about the impact curriculum changes will have on them in terms of the expertise needed of them to plan and implement the curriculum changes effectively	☐	☐	☐	☐	☐
17	Evaluating whether additional resources might be needed to support curriculum changes and whether meeting these resource	☐	☐	☐	☐	☐

	needs will not negatively impact other key department areas and if so how this will be managed					
18	Appointing a department team to take responsibility for coordinating the planning of curriculum change	☐	☐	☐	☐	☐
19	Articulating to department staff the benefits of curriculum change for students	☐	☐	☐	☐	☐
20	Ensuring that all department staff are always involved in decisions about curriculum change.	☐	☐	☐	☐	☐
21	Informing learners about the curriculum changes by explaining the rationale for any changes, and also reporting progress and successes to them once the changes begin	☐	☐	☐	☐	☐
22	Setting realistic deadlines for the planning of curriculum change	☐	☐	☐	☐	☐
23	Coming up with a budget dedicated to staff development on curriculum issues.	☐	☐	☐	☐	☐
24	Costing the demands on resources realistically (such as materials, specialist equipment, facilities, additional staff, etc) to ensure that senior management is aware of the impact on the budget of the curriculum change process and support the curriculum change.	☐	☐	☐	☐	☐
25	Setting up clear and effective communication procedures to ensure smooth flow of information during curriculum change.	☐	☐	☐	☐	☐
SN	SECTION D: STRATEGIES FOR EFFECTIVELY IMPLEMENTING AND MANAGING CURRICULUM CHANGE					
<i>I use the following strategies to ensure effective implementation of curriculum change at my institution:</i>		SA 5	A 4	N 3	DA 2	SDA 1
26	I make curriculum change a high priority by placing curriculum change issues at the top of the agenda in meetings, and by making curriculum change a standing item in all department discussions	☐	☐	☐	☐	☐
27	I identify the strengths, talents, experience and abilities of staff in order to be able to effectively deploy them into positions to effectively implement curriculum change	☐	☐	☐	☐	☐
28	I promote teamwork in my department as a means of ensuring collaboration during the implementation of curriculum change	☐	☐	☐	☐	☐
29	I disseminate evidence of good practice to all department staff during curriculum change so that all members can learn from best practices and improve performance	☐	☐	☐	☐	☐
30	I provide on-going in-service training to meet the professional development needs of the staff during the implementation of curriculum change	☐	☐	☐	☐	☐
31	I selected a senior member of staff in the department to be visibly available to advise and lead department staff during the implementation of curriculum change	☐	☐	☐	☐	☐
32	I hold regular department meetings to ensure all department staff, not just those directly involved in implementing or managing the implementation of curriculum change, are kept informed of any relevant developments on curriculum change	☐	☐	☐	☐	☐
33	I channel department resources to where they are most needed during the implementation of curriculum change	☐	☐	☐	☐	☐
34	I make sure that there are effective channels of communication	☐	☐	☐	☐	☐

	between senior management and my department through meetings and other communication strategies during the implementing curriculum change					
SN	SECTION E: CURRICULUM LEADERSHIP					
<i>I lead the implementation of curriculum change at my institution by:</i>		SA 5	A 4	N 3	DA 2	SDA 1
35	Providing a clear vision to the department and communicating it in a clear and inspirational way to all department staff members	☐	☐	☐	☐	☐
36	Explaining what curriculum change means for department staff and, most importantly, for learners, in positive terms	☐	☐	☐	☐	☐
37	Arranging regular department meetings as a means of updating all department staff on the progress of curriculum change	☐	☐	☐	☐	☐
38	Having a clear rationale for change that is grounded on detailed facts and accurate research about curriculum change in the department	☐	☐	☐	☐	☐
39	Motivating individual department staff member to contribute to the curriculum change process	☐	☐	☐	☐	☐
40	Having a clear communication plan at the outset and keeping to it during both the planning and implementation of curriculum change	☐	☐	☐	☐	☐
41	Creating opportunities to talk to individuals, teams and the whole department about the curriculum change and its progress during both the planning and implementation stages	☐	☐	☐	☐	☐
42	Mentoring and coaching department members during both the planning and implementation stages of curriculum change	☐	☐	☐	☐	☐
43	Being clear and firm about what is negotiable and what is fixed, so that energies are maximised, conflict is reduced and the direction is clear during the curriculum change process	☐	☐	☐	☐	☐
44	Ensuring that the senior management is continually updated about the progress in the planning and implementation of curriculum change to ensure continued top management support	☐	☐	☐	☐	☐
SN	SECTION F: CHALLENGES FACED BY AMM IN THE IMPLEMENTATION OF CURRICULUM CHANGE					
<i>I face the following challenges to effective curriculum change at the institution:</i>		SA 5	A 4	N 3	DA 2	SDA 1
45	A highly strict and controlled work environment at my institution	☐	☐	☐	☐	☐
46	Role conflict (Pressure to perform in two or more incompatible roles)	☐	☐	☐	☐	☐
47	Role strain (pressure due to role overload, ie, being expected to perform an AMM role which is loaded with many other responsibilities)	☐	☐	☐	☐	☐
48	Role mismatch (Being deployed as a AMM to lead a department in which I do not have relevant knowledge or skills)	☐	☐	☐	☐	☐
49	Role ambiguity (A lack of a clear and specific description of my job at my institution)	☐	☐	☐	☐	☐
50	A highly regulated higher education environment that slows down the pace of curriculum change in PHEIs.	☐	☐	☐	☐	☐
51	Institutional culture that does not foster collaboration and is	☐	☐	☐	☐	☐

	characterised by a silo approach to performing responsibilities					
52	Lack of adequate resources to effectively support the planning and implementation of curriculum change	☐	☐	☐	☐	☐
53	Lack of institutional opportunities for on-going and relevant professional training and development for staff on the planning and implementation of curriculum change	☐	☐	☐	☐	☐
54	Lack of knowledge of how to plan and implement curriculum change	☐	☐	☐	☐	☐
55	Negative attitudes and lack of commitment towards curriculum change by department staff	☐	☐	☐	☐	☐
56	High workloads as academic middle managers have to teach and also do other administrative work in the department	☐	☐	☐	☐	☐
57	Pressure to perform many other institution-wide administrative functions outside department responsibilities	☐	☐	☐	☐	☐
58	Lack of support of academic middle managers from top management during curriculum change	☐	☐	☐	☐	☐
59	I lack effective leadership skills to effectively drive curriculum change	☐	☐	☐	☐	☐
60	Top management of the institution resist curriculum change because of status quo comfort, ie, they are always comfortable with the way things are and fear the unknown.	☐	☐	☐	☐	☐
61	Lack of adequate time allowed for by the institutional management for AMMs to effectively plan and implement curriculum change	☐	☐	☐	☐	☐
62	Having to satisfy at the same time the curriculum change demands of two competing groups namely top management and staff members in the department who may have different and conflicting agendas about curriculum change	☐	☐	☐	☐	☐
63	Poor team spirit in the department	☐	☐	☐	☐	☐
64	Staff shortage in the department that increases staff workloads	☐	☐	☐	☐	☐
SN	SECTION G: ENABLERS OF AMM ROLE IN CURRICULUM CHANGE					
<i>The following enable me as AMM to effectively play my role of planning and implementing curriculum change at my institution:</i>		SA 5	A 4	N 3	DA 2	SDA 1
65	Adequate equipment, facilities and general resources required to effectively plan and implement curriculum change are provided by top management of the institution	☐	☐	☐	☐	☐
66	Adequate time is provided by top management for the planning and implementation of curriculum change	☐	☐	☐	☐	☐
67	School ethos, ie, overall school beliefs at my institution view curriculum change as important	☐	☐	☐	☐	☐
68	Professional support, ie, the institution provides opportunities for coaching and mentoring of staff members to empower them on effective ways of planning and implementing of curriculum change	☐	☐	☐	☐	☐
69	Professional adequacy, ie, department staff are able and competent enough to effectively plan and implement curriculum change	☐	☐	☐	☐	☐
70	Professional knowledge, ie, department staff members possess the knowledge and understandings regarding effective planning and implementation of curriculum change	☐	☐	☐	☐	☐
71	Professional attitude and interest, ie, department staff members show positive attitudes and interest towards the planning and	☐	☐	☐	☐	☐

	implementation of curriculum change					
72	There is smooth and effective communication between top management and departments in the institution that promotes effective information flow during curriculum change	☐	☐	☐	☐	☐
73	Department members are given incentives by the institution for successfully planning and implementing curriculum change	☐	☐	☐	☐	☐
74	There is a history of successful curriculum change in my department which acts as a stepping stone for future successes in curriculum change	☐	☐	☐	☐	☐
75	The institution provides opportunities for on-going and relevant professional training and development of department staff by curriculum specialists to ensure any curriculum change in the institution is carried out successfully	☐	☐	☐	☐	☐
76	I ensure access by all department staff to critical curriculum change information when needed	☐	☐	☐	☐	☐
77	As a way of motivating department staff, I regularly provide them with positive feedback that recognises and acknowledges progress in the planning and implementation of curriculum change	☐	☐	☐	☐	☐
78	I am always provided with necessary and required resources by the institution during the planning and implementation of curriculum change	☐	☐	☐	☐	☐
79	The working climate at my institution allows for the development of a culture of collaboration in the department to ensure all department members work as a team during curriculum change	☐	☐	☐	☐	☐
80	The working climate at my institution enables me to ensure a high degree of formal and informal interaction to build trust between AMMs as curriculum leaders and department members for effective curriculum change	☐	☐	☐	☐	☐
81	There is a culture of collaboration in the institution in general	☐	☐	☐	☐	☐

THANK YOU FOR ANSWERING THE QUESTIONNAIRE

APPENDIX 2

SEMI-STRUCTURED INTERVIEW GUIDE

NORMAN RUDHUMBU

PHD STUDENT (201402239)

1. Administration of interview guide

- *The interview guide comprises of 7 sections.*
- *In section A up to section G, the researcher asks the respondents pre-planned questions and allows the respondents to expand on their responses.*
- *The researcher asks the respondents probing questions to assist them in clarifying and expanding on their responses. An audio gadget is used to record all the responses.*

2. Research Questions:

Research questions

- How do AMMs view the role they play in leading the planning and implementation of curriculum change in their disciplines?
- To what extent do biographic characteristics influence the role of AMMs in the planning and implementation of curriculum change in PHEIs?
- Which strategies do AMMs employ for effective planning and implementation of curriculum change in PHEIs
- What are the enablers of AMMs role in the planning and implementation of curriculum change in PHEIs?
- Which model can be developed to improve the planning and implementation of curriculum change by academic middle managers in private higher education institutions?

SN	SECTION A: AMM JOB REQUIREMENTS
01	Were you given detailed job descriptions at the start of your role as AMM? If not what do you think was the reason for top management not to give you?
02	Do you have full authority over curriculum issues including curriculum change in your department? If you have please explain the nature of authority you have. If not please explain why you do not have that authority and how this affect your role in the planning and implementation of curriculum change.
03	Have you received adequate or any training on the planning and implementation of curriculum change at the institutions where you are currently working. If not what is the reason why you have not or are not receiving this training and how does this affect your role in the planning and implementation of curriculum change?
04	What is your comment about the extent of your knowledge and skills to effectively plan and implement curriculum change? Do you think it is adequate for you to be able to effectively plan and implement curriculum change?
05	Overall would you say you are able to effectively plan and implement curriculum change at your institution? Please explain further your answer.
06	Do you feel you have adequate experience to effectively plan and implement curriculum change? Please explain your answer further.
SN	SECTION B: INFLUENCE OF BIOGRAPHIC CHARACTERISTICS
01	Do you think the following biographic characteristics of AMMs: age, gender, level of education, years of experience and department size have an influence on how AMMs plan and implement curriculum change? Please explain your answer further for each characteristic.
SN	SECTION C: PLANNING CURRICULUM CHANGE
	How do you ensure effective planning of curriculum change? Please explain your answer.
SN	SECTION D: CHALLENGES FACED BY AMMS DURING CURRICULUM CHANGE
01	What challenges do you face during the planning and implementation of curriculum change in PHEIs? How do these challenges affect your AMM role in the planning and implementation of curriculum change?
SN	SECTION E: STRATEGIES FOR EFFECTIVE PLANNING AND IMPLEMENTATION OF CURRICULUM CHANGE
03	What strategies do you use to ensure that your role in the planning and implementation of curriculum change is successful?
SN	SECTION F: LEADERSHIP OF CURRICULUM CHANGE
01	How do you ensure effective leadership of curriculum change at your institution?
SN	SECTION G: ENABLERS OF AMM ROLE IN CURRICULUM CHANGE
01	Can you identify some of the factors or conditions that act as enablers of your role in the planning and implementation of curriculum change? Please explain your answer further.

APPENDIX 3

Ethical clearance



University of Fort Hare
Together in Excellence

ETHICAL CLEARANCE CERTIFICATE **REC-270710-028-RA Level 01**

Certificate Reference Number: MAP011SRUD01

Project title: **The role of the academic middle manager in the planning and implementation of curriculum change in the private higher education institutions in Botswana**

Nature of Project: PhD

Principal Researcher: Norman Rudhumbu

Supervisor: Prof C Maphosa

Co-supervisor:

On behalf of the University of Fort Hare's Research Ethics Committee, (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research.

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

Special conditions: Research that includes children as per the official regulations of the act must take the following into account:

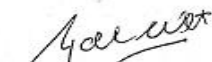
Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected
 - Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely



Professor Gideon de Wet
Dean of Research

05 August 2014

APPENDIX 4



University of Fort Hare
Together in Excellence

Ethics Research Confidentiality and Informed Consent Form

Please note:

This form is to be completed by the researcher(s) as well as by the interviewee before the commencement of the research. Copies of the signed form must be filed and kept on record

(To be adapted for individual circumstances/needs)

Our University of Fort Hare / Department is asking people from your community / sample / group to answer some questions, which we hope will benefit your community and possibly other communities in the future.

The University of Fort Hare / Department/ organization is conducting research regarding **the role of the academic middle manager in the planning and implementation of curriculum change in private higher education in Botswana**. I am interested in finding out more about how academic middle managers plan and implement curriculum change in private higher education institutions. I am carrying out this research to help private higher education effectively plan and implement curriculum change. (*adapt for individual projects*)

Please understand that you are not being forced to take part in this study and the choice whether to participate or not is yours alone. However, we would really appreciate it if you do share your thoughts with us. If you choose not take part in answering these questions, you will not be affected in any way. If you agree to participate, you may stop me at any time and tell me that you don't want to go on with the interview. If you do this there will also be no penalties and you will NOT be prejudiced in ANY way. Confidentiality will be observed professionally.

I will not be recording your name anywhere on the questionnaire and no one will be able to link you to the answers you give. Only the researchers will have access to the unlinked information. The information will remain confidential and there will be no "come-backs" from the answers you give.

The interview will last around 45 minutes (*this is to be tested through a pilot*). I will be asking you a questions and ask that you are as open and honest as possible in answering these questions. Some questions may be of a personal and/or sensitive nature. I will be asking some questions that you may not have thought about before, and which also involve thinking about

the past or the future. I know that you cannot be absolutely certain about the answers to these questions but I ask that you try to think about these questions. When it comes to answering questions there are no right and wrong answers. When I ask questions about the future I am not interested in what you think the best thing would be to do, but what you think would actually happen. (*adapt for individual circumstances*)

If possible, my organisation would like to come back to this area once I have completed my study to inform you and your community of what the results are and discuss my findings and proposals around the research and what this means for people in this area.

INFORMED CONSENT

I hereby agree to participate in research regarding **the role of the academic middle manager in the planning and implementation of curriculum change in private higher education in Botswana**. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop this interview at any point should I not want to continue and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need to speak about any issues which may arise in this interview.

I understand that this consent form will not be linked to the questionnaire, and that my answers will remain confidential.

I understand that if at all possible, feedback will be given to my community on the results of the completed research.

.....
Signature of participant

Date:.....

I hereby agree to the tape recording of my participation in the study

.....
Signature of participant

Date:.....

APPENDIX 5

Letter of seeking permission to carry out research

Faculty of Education

*Cnr Fleet & Cambridge Street
East London*

PABX 7220 | Fax: 043- 7047113



Dear Participant/Institution

You are invited to participate in an academic research study conducted by NORMAN RUDHUMBU a **Doctoral student** from the **Graduate School of Education** at the Fort Hare University, Alice Campus, Eastern Cape, South Africa.

The purpose of the study is to “**investigate the role of academic middle managers in the planning and implementation of curriculum change in private higher education institutions in Botswana**”

Please note the following:

- This is an anonymous study survey as your name will not appear on the questionnaire. The answers you give will be treated as strictly confidential as you cannot be identified in person based on the answers you give.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- We will request of you to answer questions in a questionnaire, to be delivered at a later date, as completely and honestly as possible. We also will request for your time answering some questions on an interview to be held after the questionnaires (interviews will be held on few selected organisations only). The interview and questionnaire should not take more than 45 minutes of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my supervisor, Professor C. Maphosa on cmaphosa@ufh.ac.za if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis and by so doing give the researcher permission to conduct research at your institution. (Please tick)

YES

Participant's signature

Date

Institution stamp_____

APPENDIX 6

Letter of permission

GABORONE CAMPUS:
Botho Education Park, Kgale,
Gaborone
P.O. Box 001564, Gaborone
Tel: +267 391 9999 / 391 9666
Fax: +267 318 7895

FRANCISTOWN CAMPUS:
Barclays Plaza, Blue Jacket Street,
Francistown
P/Bag 4451, Francistown
Tel: +267 244 0886
Fax: +267 244 0885

MAUN CAMPUS:
Opp. Maun Technical College,
Boseja, Maun
P.O. Box 20157, Boseja, Maun
Tel: +267 686 5404
Fax: +267 686 5035

www.bothouniversity.ac.bw

BOS ISO 9001:2008 CERTIFIED ORGANIZATION



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Ref: 0186/GBE/ORQM/2015

8 September 2014

TO WHOM IT MAY CONCERN

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

The Department of Research and Consultancy under the Office of Student, Research and Outreach at Botho University would like to confirm that Mr. Norman Rudhumbu, a Botho University lecturer and Fort Hare University student under the PHD programme is carrying out a research on "The role of Academic Middle managers in the Planning and Implementation of Curriculum Change in private Higher education Institutions in Botswana," which will be shared with the department upon completion of the study.

The department of Research and Consultancy has given him approval and would like to request you to kindly assist him with the information that he needs to carry out the above mentioned project.

Should you need any further information, please do not hesitate to contact me.

Regards

Dr. Morgen Chawawa
Research & consultancy Department manager
Botho University
Tel: 3919999
Email: morgenchawawa@bothouniversity.ac.bw

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APPENDIX 7

Certificate of language editing



**SOL PLAATJE
UNIVERSITY**

Dr. J. Sibanda (Senior Lecturer: English)
Department of Education
Private Bag X 5008, Kimberley, 8300
North Campus, Chapel Street, Kimberley
E-mail: Jabulani.Sibanda@spu.ac.za
Website: www.spu.ac.za
Tel: 27873105390
Cell: 0845282087
01 June 2015

TO WHOM IT MAY CONCERN

I hereby confirm that I have proof read and edited the following PhD Thesis using Windows 'Tracking' System to reflect my comments and suggested corrections for the student to action:

THE ROLE OF ACADEMIC MIDDLE MANAGERS IN THE PLANNING AND IMPLEMENTATION OF CURRICULUM CHANGE IN PRIVATE HIGHER EDUCATION INSTITUTIONS IN BOTSWANA BY NORMAN RUDHUMBU

A Thesis Submitted in Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY (Education) In the Faculty of Education at the UNIVERSITY OF FORT HARE.

Although the greatest care was taken in the editing of this document, the final responsibility for the product rests with the author.

Sincerely

01. 06. 2015

SIGNATURE

DATE